

# School Professional and Caregiver Understanding of Causes of Children Mental Health Concerns in Rural Darjeeling, India

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## ABSTRACT

**Objectives:** The mental health needs of children in low-and-middle income countries (LMICs) such as India often go unmet due to the scarcity of mental health professionals. Pilot trials in Darjeeling, India have illustrated the potential of *Tealeaf* (Teachers Leading the Frontlines), a task-shifting model with teachers as lay counselors, to improve child mental health symptoms within an LMIC context. Understanding the cultural context in which *Tealeaf* has shown signals of efficacy has not yet been studied but is key to understanding *Tealeaf*'s efficacy results (trial ongoing). This study aims to specifically explore school professional and caregiver culturally held beliefs about causes of child mental health concerns.

**Methods:** Twelve semi-structured interviews (SSIs) were conducted March-April 2022 with purposively selected principals, teachers, and caregivers. With the goal of qualitative description, SSIs were coded using deductive content analysis to understand stakeholder perceptions of causes of mental health concerns, with codes fitted to The Culturally-Infused Engagement (CIE) model.

**Results:** Participants believed that major determinants of children's behavior are biological and the home environment, with guidance from parents and peer influences leading to different outcomes. Younger children are perceived to be capable of feeling stress and sadness only related to academics. Participants also believe that children have a developing ability to feel these emotions and express their thoughts.

**Conclusions:** Exploring communities culturally held beliefs about causes of children's mental health concerns is the first step in understanding how stakeholders think *Tealeaf* can improve children's mental health. The findings provide insight into a key facet underlying a task-shifted system of care in which *Tealeaf* can engage with the specific cultural context of Darjeeling, India more sustainably.

## INTRODUCTION

Almost 15% of the world's child and adolescent population experiences a mental health disorder of some form, with most lacking access to mental health care [1]. India, a country with the largest child and adolescent population in the world, significantly contributes to the global burden of mental disorders. However, most of these children do not receive access to appropriate care. This treatment gap results from inadequate coverage of mental health services and under-utilization by the community.

A growing body of research indicates that task-shifting interventions may have the potential to address this gap

in India and other low-and middle income-countries by increasing the quantity of human resources qualified to provide mental health services [2]. Task shifting is meant to ease the heavy workload of specialists and ensure that those with access to specialists can access some level of mental health services. However, mental health service delivery is highly context-specific with culturally defined interpretations of stigma, trust, and utility affecting success and impact [4]. India is a diverse country with numerous ethnicities, languages, religions, and social customs. Each cultural group has its unique beliefs, values, and practices regarding mental health. Understanding the cultural context of these communities is crucial for mental health professionals to

ensure that treatment is relevant and meaningful, increasing the chances of successful outcomes.

Here, we studied beliefs of communities in rural Darjeeling, India about causes of children's mental health concerns. This analysis is a key facet of *Tealeaf*, a task-shifting intervention piloted in Darjeeling, India, in which teachers deliver evidence based mental health services to school-aged students whom they nominate to receive mental health services after training [5]. We hypothesized that because children are primarily dependent on their caregivers to seek, obtain, and participate in mental health services, adult community members explanatory models of mental health and illness are likely to be critical determinants in shaping the trajectory of treatment engagement for children in Darjeeling.

We conducted semi-structured interviews with purposively selected principals, teachers, and caregivers in Darjeeling. With the goal of qualitative description, we used deductive content analysis to understand these stakeholder perceptions of causes of children's mental health concerns. We used the framework of The Culturally-Infused Engagement (CIE) model [6] to categorize how these individuals conceptualize mental disorders in children, including their understanding of the illness cause (i.e.: biological, psychological, supernatural), beliefs about internal traits of children with mental illness, and the expected outcomes of mental illness. Finally, we explored how to incorporate these findings into a task-shifting model of mental health services to improve engagement with the specific cultural context of Darjeeling, India and ultimately provide more sustainable care.

## METHODS

### Participants

This study took place in rural Darjeeling Himalayas, West Bengal India. Darjeeling is home to a population of around 800,000 people, the majority of whom are minority ethnic Nepali and situated mostly in rural villages in the Himalayan mountains (Gorkhaland Territorial Administration, 2018). Like other regions in rural India, economic conditions are poor; most of the residents earn daily wages of around 120 INR (approximately 1.39 USD). Many children in these rural villages attend low-cost private schools run by the government that tend to be overlooked and face resource constraints, including a lack of infrastructure, teaching staff, and educational materials. There is currently no data available on Darjeeling specific prevalence of child mental illness.

Co-authors from Darjeeling Ladenla Road Prerna

(DLRP) facilitated the recruitment of community members to participate in individual semi-structured interviews (SSI). With the goal of qualitative description, between March and April 2022, 12 adult participants in Darjeeling, India, were purposively recruited.

### Semi-structured interviews

Interview guides for the semi-structured interviews were developed through an iterative process. The principal investigators first created a database of questions that correlated with broad evaluation themes of mental illness understanding, cause, and expression. Following the creation of the database, the principal investigators selected targeted questions from the broader set and created draft interview guides. The interview guides underwent a process of iterative review and revision with the entire research team prior to finalization, with separate guides created for teachers and parents. Trained qualitative research assistants based in Darjeeling then conducted the interviews in Nepali with caregivers and teachers. While the interview guides were used to focus interviews on the study aims, questions were open-ended, and participants were given freedom to direct the course of the conversations. Field notes were taken to supplement the transcripts during analysis. All interviews were recorded and transcribed verbatim into English by an independent translator fluent in Nepali and loaded onto a shared drive for quality assurance checks.

### Culturally Infused Engagement (CIE) Model

Two independent analysts used a deductive content analysis approach to code SSIs, allowing for emergent codes, with discrepancies resolved by consensus. We grouped codes according to categories of The Culturally-Infused Engagement (CIE) model [6] and sought key illustrative quotes to highlight coding findings. The CIE model was developed by Yasui et al., to address the lack of integration of culturally specific factors into existing measures of engagement in mental health services. The model was initially used by Yasui to evaluate mental health interventions involving ethnic minority and immigrant children and families. For this study, we extended this model as a conceptual framework to assess cultural approaches to illness recognition, help seeking, and treatment participation in Darjeeling, India. SSI's were coded with a focus on the domain from the CIE model that illustrates the individual's conceptualization of distress, which involves their understanding of the cause and illness experience of children's mental health issues. Coders categorized items according to the following subcategories: biological/hereditary, psychological, social, and spiritual/supernatural.

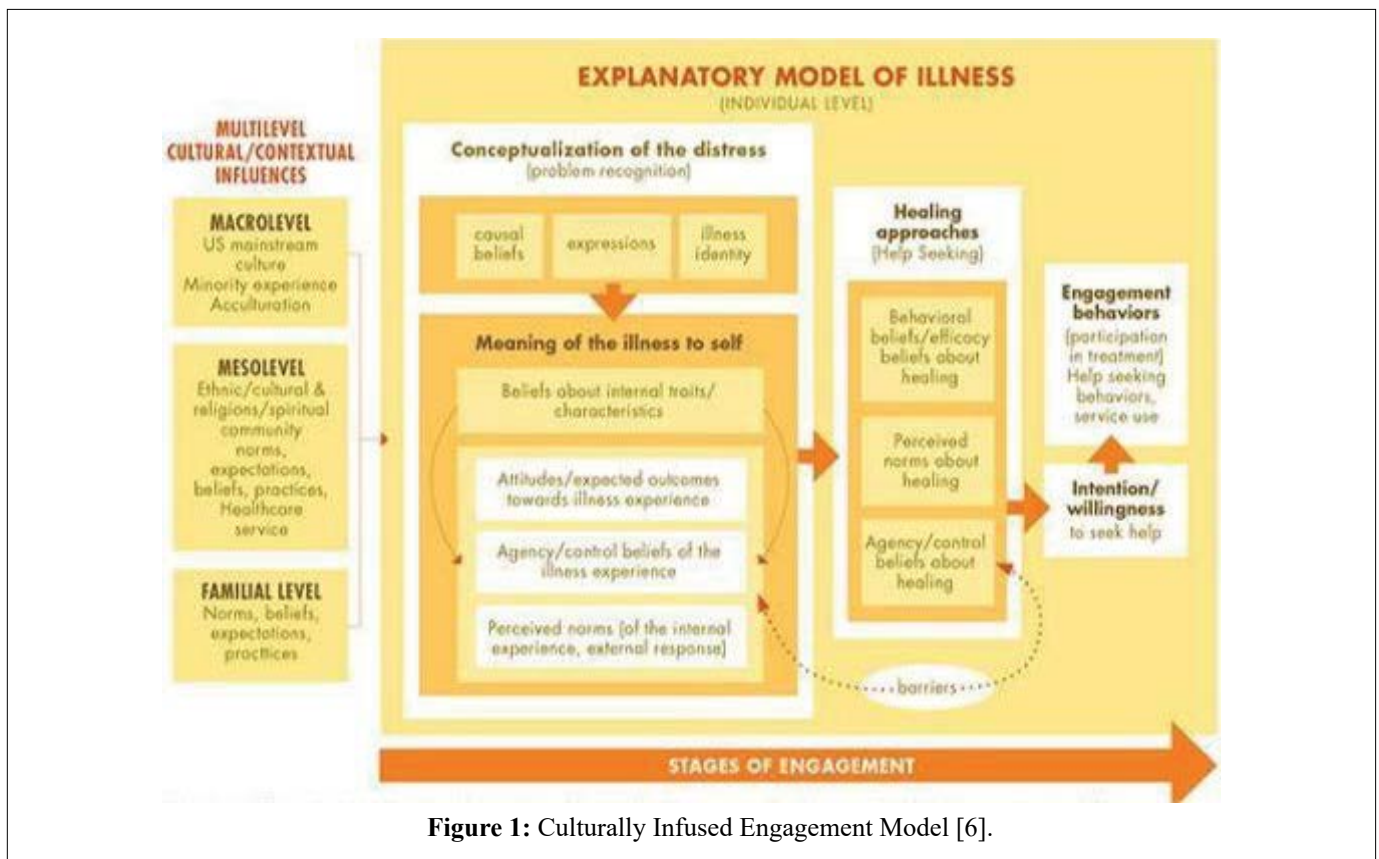


Figure 1: Culturally Infused Engagement Model [6].

## RESULTS

Twelve adult participants—comprising four teachers, four caregivers, and four workers (shopkeepers, healthcare workers, etc.)—took part in the semi-structured interviews. The participants were evenly split by gender (50% male, 50% female), with an average age of 38 years. Informed consent was obtained in Nepali on the day of the interviews.

The analysis revealed several key themes related to the cultural context of Darjeeling in conceptualizing the causes of children's mental health concerns. Participants identified a variety of causes, with six participants citing biological or hereditary factors, three mentioning psychological factors, and nine highlighting social factors. Notably, while one participant discussed spiritual causes for adult mental illness, no participants mentioned spiritual factors in the context of children's mental health.

Overall, teachers and caregivers identified biological/hereditary factors and family environment as the primary determinants of children's behavior. They emphasized that children's ability to feel stress and sadness is linked primarily to academic pressures, with some suggesting that as children age, their emotional development, including the ability to express these feelings, becomes more pronounced.

The following results provide a detailed breakdown of these beliefs, supported by representative quotes from the participants, to offer a more nuanced understanding of how the community views children's mental health in Darjeeling. Table 1 lists all identified themes:

### Biological Causal Beliefs of Children's Mental Illness

Seven participants believed mental illness in children is hereditary or genetic, and that it often improves with age. Some also saw the community as a key factor in children's recovery.

*"The whole school would give him protection. Not only I (me), but the whole school. Not only all of the teachers, but all the other children too would also lookout for him."* (Participant 6)

A few participants stated that younger children don't experience stress, which usually appears in teenage years.

*"The small ones who aren't mature yet will not have it but for the matured ones it happens to them."* (Participant 4)

### Family Environment and Parental Model

Nine participants highlighted that the family environment significantly impacts children's mental health. Children's behavior was seen as shaped by parental actions, including interactions between parents.

**Table 1:** Causal belief themes and representative quotes from school professional and caregiver semi-structured interviews.

	Theme	Sample Quote
<b>Biological Causes</b>	Mental illness in kids is perceived to be biological.	“I think they’re born that way. We don’t tell them to be that way. They do it themselves; if we tell them to sit quietly, they can’t. Their nature is like that. They are like that from birth.”
	Mental health concerns in children may resolve on their own.	“I feel that’s hereditary. When they grow older it becomes alright. I was also like that when I was small, I couldn’t face people and if I had to my body would automatically start to shiver, I wouldn’t be able to talk. So I think its genetics. I remember till now that I was that way till I finished my class 12. But now I am alright.”
	Age dictates ability to feel stress and sadness	“I don’t think stress and worry happens to children. In my opinion, maybe from a certain age. From 16, 17, 18 years.....maybe.”
<b>Family Environment and Parental Model</b>	Children learn from their parents’ behavior.	“If the parents teach a child good things from when they are small they’ll be good. But if they’re taught bad things they’ll follow the bad road. maybe the parents talk rubbish and whatever comes to their mind. In this case the child will become someone who’s talkative”.
	Lack of parental guidance impacts children’s development.	“The parents would setup shop and when they did that they would mostly not bring the children. They’d lock the house and keep them there. They’d tell them, ‘watch TV, be doing this or that’... they would cook and leave food for them. Because of that, they got spoilt like that. Spoilt meaning, their nature turned out like that. They weren’t like that before.”
	The family environment influences children’s behavior.	“Some children have mothers and fathers who take alcohol. If there are fights in the house, the child gets disturbed. When those things happen, children might go astray. It depends on the environment of the person’s home.”
<b>Other Social Causes</b>	Peer influences and social media can have negative impacts on children’s emotional regulation.	“Children behave naughty and misbehave because of the circle of friends that they have. Or it’s social media for them; that’s how it came to their knowledge. In the past there was nothing like this, right? They’ve learnt it from Facebook, YouTube; that’s where they learnt all of this. The first thing I will blame is the phone.”
	Academic Pressures can cause children to be stressed and anxious.	“The only time that they get stressed is exams coming up. “You’ve seen their books, how big they are; we also went through that, so we know. I think that’ll be their mental stress.... They’ll have to study, prepare for tests. I think that’s it, they feel the stress of exams and all.” “They feel anxious about school related issues. That’s what I feel, they’re a bit afraid of their academics.”
	Lower socioeconomic status can negatively impact children’s mental health.	“They go to schools where there are children of well settled families. They feel stressed from this, that they’re from the (tea) gardens and that they don’t have the things that their peers have.”
<b>Psychological</b>	Children have a developing ability to expressing their thoughts.	“There are some who can’t share what’s inside of them, that’s why there are so many who commit suicide.”
		“I can’t understand the children.....it’s really hard to know what they’re feeling and all. They’ll say one thing now and something else after a while.”

“Hearing parents argue makes child frustrated and disobedient in school.” (Participant 1)

“Some children have mothers and fathers who take alcohol. If there are fights in the house, the child gets disturbed. When those things happen, children might go astray.” (Participant 7)

Participants further state that without guidance from parents, children’s development is impacted.

“The parents would setup shop and when they did that they would mostly not bring the children. They’d lock the house and keep them there. They’d tell them, ‘watch TV, be doing this



or that'... they would cook and leave food for them. Because of that, they got spoilt like that. Spoilt meaning, their nature turned out like that. They weren't like that before."

Suggestions for improving children's mental health varied, from guiding children as friends to instilling some fear. Some also noted that genetic factors could still play a role in mental health despite a supportive family environment.

### **Other Social Causal Beliefs of Children's Mental Illness**

Participants identified socioeconomic status (n=2), academic pressures (n=6), peer influence and social media (n=1) as factors contributing to children's mental health issues.

*"They go to schools where there are children of well settled families. They might feel stressed, that they're from the gardens and that they don't have the things that their peers have. (Participant 8)*

Academic pressures were seen as a major stressor, with some participants noting that limited economic resources hindered children from exploring interests outside academics.

*"Because of the education system we have; that child might only be weak in academics but he might be an expert in another skill set. We just forcefully focus him towards academics. The child has to study even if he/she has other skills." (Participant 10)*

### **Psychological Causal Beliefs of Children's Mental Illness**

Participants (n=2) cited that mental illness in children could be related to children's inability to express their inner thoughts. They believe the lack of emotional expression contributes to the high incidence of suicide among them.

*"There are some who can't share what's inside of them, that's why there are so many who commit suicide." (Participant 2)*

## **DISCUSSION**

This study provides valuable insights into how adults in Darjeeling perceive children's mental health, shaped by cultural norms and social contexts. Interviews with twelve participants—teachers, caregivers, and community workers—offer a rich exploration of beliefs about the causes of mental health issues in children. The themes that emerged highlight the complex mix of biological, psychological, and social factors influencing these perceptions.

The influence of the family environment and parental behavior on children's mental health is a key theme that aligns with existing research. A nurturing, supportive

family environment contributes significantly to positive mental health outcomes in children, fostering resilience and emotional stability [7]. The quality of parent-child interactions and the parenting style adopted are also crucial in shaping children's emotional and psychological development [8].

Socioeconomic status (SES) is another factor impacting children's mental health, as noted by participants in this study. Research has consistently shown that SES is linked to a range of health, cognitive, and socioemotional outcomes, with effects starting before birth and extending into adulthood [9]. The disparities in access to material and social resources are key mechanisms connecting SES to child well-being.

Academic pressure was also identified as a stressor for children in this study. Studies in India have found that academic stress and parental pressure are strongly associated with psychiatric issues, particularly anxiety related to examinations [10]. This stress has been shown to negatively impact both academic performance and adolescents' mental health.

Participants expressed optimism about recovery from mental illness, with many believing that children can overcome mental health challenges. This contrasts with findings in other regions, where negative perceptions of mental illness can hinder help-seeking behavior [11]. The positive outlook in Darjeeling suggests a supportive community ethos that may improve access to mental health resources.

The importance of emotional expression in children's mental health emerged as another key theme. Participants noted that many children struggle to express their feelings, which has been linked to higher rates of anxiety and suicidal thoughts [12]. This finding emphasizes the need for safe spaces where children can share their emotions without fear of judgment. Programs that enhance emotional intelligence and resilience in both children and caregivers could help improve mental health outcomes.

Finally, this study finds that, unlike adults, spiritual or supernatural explanations are absent for children's mental health. This may be because children are seen as needing tangible support, such as parental care and educational resources, which leads to a focus on observable, intervention-based factors. In contrast, adults facing more complex stressors may turn to spiritual explanations when medical or psychological support is limited. This shift reflects broader societal trends, with children's mental health increasingly addressed through evidence-based practices, while adult mental health remains influenced by traditional beliefs. Further exploration could reveal how cultural attitudes toward mental health evolve across the lifespan [13].

## Practical Applications

Overall, this research emphasizes the need for a comprehensive approach to understanding and addressing children's mental health in Darjeeling. While biological and familial factors are undeniably influential, the social and economic contexts in which children live must also be considered. Interventions that engage families, schools, and communities in fostering supportive environments can significantly improve children's emotional well-being.

Promoting awareness of mental health issues and reducing stigma through community outreach could encourage families to seek help and support when needed. In particular, interventions like *Tealeaf* could play a pivotal role in shifting perceptions and breaking down barriers to mental health care. By engaging not only children but also their families and local communities, *Tealeaf* could help challenge traditional beliefs while providing practical tools for managing mental health. However, any intervention must consider the cultural and socioeconomic challenges highlighted in this study, such as the varying access to resources and the deeply embedded role of the family in emotional support.

As this study illustrates, integrating cultural understandings with evidence-based practices can create a more robust framework for addressing children's mental health in Darjeeling and similar contexts. Interventions like *Tealeaf*, if designed to be culturally sensitive and community-focused, could help bridge the gap between traditional beliefs and modern mental health practices, encouraging more families to engage with available resources.

Future research should explore the effectiveness of specific interventions and the role of community support systems in promoting mental well-being among children. By focusing on the intersection of cultural beliefs, family dynamics, and mental health resources, future studies could help pave the way for a healthier future generation, where mental health is seen as integral to a child's overall development.

## Limitations

We followed a careful process for data collection and analysis to ensure validity. However, since this research is exploratory, it has some limitations. To minimize interviewer bias, we employed local research assistants who spoke the participants' language and understood the local context. Still, the involvement of an expatriate researcher in some interviews and the coding process may have introduced bias. This was mitigated by having co-authors from Darjeeling review the findings, ensuring a local perspective in the analysis.

We also acknowledged that participants might have

been hesitant to be fully honest with a local interviewer due to potential power dynamics. To address this, we focused on building rapport and used open-ended questions to encourage more candid responses. Local research assistants helped reduce power imbalances, making participants feel more at ease. Despite these efforts, power dynamics may have still influenced responses, which is a limitation of the study.

Lastly, participants' understanding of "mental health" often didn't align with the Western definition. They were more comfortable discussing specific behaviors like stress and depression than mental health itself. This discrepancy was especially apparent when asking about community views on mental health, where disagreement was more common than in other areas. This may be due to a lack of shared understanding of mental health concepts outside the Western framework.

To address these discrepancies, we adjusted our approach by providing more context and framing questions in a way that aligned better with participants' cultural understanding. We also relied on local research assistants to clarify terms and ensure that participants' responses were accurately captured within their own conceptual framework. This helped bridge the gap between Western and local definitions of mental health, ensuring that participants' views were fully represented.

## CONCLUSION

With its extensive population and diverse demographics, India grapples with a considerable mental health challenge. Understanding cultural context is essential for developing and delivering mental health interventions that are effective, accessible, and respectful of diverse populations' needs and experiences. This study contributes to the growing literature exploring the cultural dimensions of child mental health care in India. It helps understand barriers to care, fosters trust and engagement, and promotes holistic approaches that address the complex interplay of cultural, social, and psychological factors influencing mental well-being.

Exploring communities culturally held beliefs about causes of children's mental health concerns is the first step in understanding how stakeholders think a task-shifted model (such as *Tealeaf*) can improve children's mental health. The findings of this study provide insight into a key facet underlying a task-shifted system of care in which *Tealeaf* can engage with the specific cultural context of Darjeeling more sustainably. A Type 1 Hybrid effectiveness-implementation trial of *Tealeaf* is ongoing to definitively examine whether children receiving *Tealeaf* care from their teachers results in improved mental health symptoms. An implementation

trial is currently being designed to test a package of implementation strategies. Results from this study will help inform implementation strategies to improve *Tealeaf* uptake and sustainment.

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