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## Building Responsive and Gender-Sensitive Learning Environments in Day Care Centers: Insights from Structured Observations

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### ABSTRACT

Early Childhood Care and Education (ECCE) is foundational to children's lifelong learning, emotional security, and social identity formation. Early childhood is also a sensitive period during which gender norms and expectations begin to take shape, often as early as age two. This study examines how gender-responsive, inclusive, and context-sensitive ECCE practices can transform early learning experiences and influence broader social norms. Drawing on structured observations from 13 Day Care Centres (DCCs) operated by CHETNA in Gujarat, the research explores how thoughtfully designed environments, responsive caregiving, and low-cost pedagogical innovations contribute to holistic development for children aged 1.6 to 6 years. Using a qualitative observational design, the study employed a modified version of the Tamil Nadu Early Childhood Education Rating Scale (TECERS), expanded to include culturally rooted materials, home-language use, and social and emotional learning (SEL). Data were generated through field notes, classroom recordings, observation checklists, and reviews of gender-related displays. The findings demonstrate that the **physical environment across centres plays a decisive role** in promoting equitable participation. Child-height shelves, open access to materials, and floor seating encouraged free movement and reduced gender-based hierarchies in play. The

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introduction of low-cost innovations such as the Gender Wall visually reinforced shared domestic responsibilities and provided educators with a tool to challenge traditional gender roles during daily conversations. Displaying children's artwork at eye level strengthened feelings of belonging and ensured equal recognition for contributions by all genders. **Learning corners** emerged as dynamic spaces where gender stereotypes were actively disrupted. Dramatic play, block building, market role-play, and puzzle areas were intentionally designed to be gender neutral. Boys engaged confidently in caregiving and cooking roles, while girls participated enthusiastically in construction and problem-solving tasks. This shift in play behaviour reflected the strategic structuring of space, rotation systems that prevented monopolization, and teacher facilitation encouraging freedom of choice. **Teacher-child interactions** further illustrated a conscious movement toward gender-fair pedagogy. Teachers used inclusive language, distributed talk time equitably, and avoided gendered expectations associated with emotions or behaviour. In multilingual settings, teachers scaffolded communication for children from tribal or migrant backgrounds, preventing language from becoming a barrier to participation. Emotional expression practices during circle time supported boys in expressing vulnerability and helped girls practice assertiveness—moving beyond culturally imposed emotional patterns. **Hygiene routines and caregiving practices** were also child-centred and gender-neutral. Assistance during toileting and cleaning was provided sensitively and based on individual needs rather than gendered assumptions. These routines reinforced values of dignity, autonomy, and respect, reflecting SEL principles embedded in everyday care. Motor development activities—such as tyre rolling, rope walking, obstacle courses, and fine-motor craft tasks—were equally accessible to all children. The use of recycled and locally sourced materials made these learning experiences sustainable and culturally relevant. **Family engagement practices** extended gender-

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equitable messages into the home environment. Through parent–teacher meetings, home visits, and online communication, families were encouraged to reflect on shared responsibilities and inclusive caregiving. These interactions positioned DCCs as catalysts for community-level change, influencing both childhood development and women’s workforce participation. Overall, the findings show that low-cost, community-based innovations—combined with gender-responsive pedagogy—can meaningfully shift early gender norms, enrich learning environments, and support women’s livelihood opportunities. The CHETNA DCC model offers a scalable approach for strengthening ECCE systems and advancing gender-equitable development.

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## 1. Introduction

ECCE form the bedrock of children’s developmental pathways, particularly during the years from birth to six, when brain development is at its peak. In this period, children rapidly acquire cognitive, linguistic, emotional, and social competencies that influence their learning and behaviour throughout life. A safe, stimulating, and nurturing early learning environment therefore becomes critical, not only for foundational skills but also for fostering emotional resilience, positive relationships, and adaptive social behaviour. These early years are equally significant for the internalization of gender norms. Research shows that even two-year-olds begin forming ideas about what boys and girls are “supposed” to do, learning through interactions with caregivers, peers, media, and their physical environments. ECCE settings thus serve as influential spaces for cultivating values of equality, respect, and inclusion alongside academic readiness.

A high-quality ECCE programme must go beyond routine caregiving to ensure equitable access and opportunities for all children, irrespective of gender, caste, economic background, or cultural identity. Gender-responsive ECCE practices—such as encouraging non-stereotypical play, promoting equitable teacher–child interactions, and creating emotionally supportive spaces—play a key role in disrupting restrictive norms. When children are free to express themselves, explore diverse abilities, and participate in all activities without bias, they develop a broader sense of possibility and fairness. Experiences of equality, shared responsibility, and openness during early childhood can translate into more equitable attitudes and behaviours in adulthood, contributing to long-term social transformation. The relevance of



ECCE extends beyond pedagogical concerns to broader questions of women's economic participation and family well-being.

For many working mothers in India, especially those in low-income, tribal, and marginalized communities, access to childcare determines whether they can pursue employment at all. Without reliable childcare, mothers are often forced to withdraw from paid work, face wage losses, or take their children to unsafe worksites. Studies consistently highlight that access to affordable and quality childcare enhances women's ability to engage in livelihoods, improves household financial stability, and supports mothers' mental well-being. For women engaged in informal work—such as factory labour, agriculture, domestic work, and small trades—childcare is not an optional support but a critical necessity.

Yet, childcare in India continues to be viewed largely as a private responsibility rather than a public good. This perception leads to limited investment, inadequate infrastructure, and uneven access to quality services, particularly for families living in rural or economically disadvantaged contexts. These structural gaps not only limit children's developmental opportunities but also reinforce cycles of poverty and gender inequality by restricting mothers' livelihood choices. Addressing these challenges requires coordinated engagement from government systems, civil society organizations, local communities, and development partners.

Policy frameworks in recent years have begun to recognize the essential role of ECCE and childcare. Mission Shakti, led by the Ministry of Women and Child Development, aims to provide affordable and quality day-care services for children aged 0–6, especially those of working mothers from economically weaker sections. Similarly, the National Livelihood Mission (NRLM) strengthens women's economic empowerment by promoting self-help groups (SHGs), supporting microenterprises, and facilitating wage and self-employment, with childcare emerging as a complementary strategy for women's mobility. Several Indian states have also piloted crèche models, extended Anganwadi timings, and leveraged CSR partnerships, signalling a growing acknowledgement that childcare is integral to gender equity and inclusive development.

Within this evolving landscape, civil society organizations such as the CHETNA play a critical role. With over 40 years of experience in early childhood development in Gujarat and Rajasthan, CHETNA emphasizes responsive caregiving, child health and nutrition, and community participation. The organization currently runs 13 Day Care Centres (DCCs) in tribal areas of Gujarat, located in communities where women's economic activity is high but childcare options are scarce. These centres



provide safe, structured environments for children aged 1–6 while enabling mothers—particularly from low-income families—to engage in stable, productive work.

Insights from CHETNA’s DCCs show that accessible childcare reduces maternal stress, enhances productivity, increases earnings, and strengthens social networks. At the same time, the centres reveal persistent systemic gaps: inadequate government support, insufficient trained childcare workers, societal undervaluing of care work, and infrastructural limitations. These challenges highlight the need for gender-responsive and community-focused ECCE models.

This study draws on structured observations from the 13 DCCs to examine how innovations in physical spaces, pedagogy, materials, community engagement, and gender-responsive practices contribute to holistic child development. By documenting how thoughtfully designed environments promote equality, free expression, and shared responsibilities among young children, the paper adds to the growing discourse on gender-transformative ECCE in India. The findings demonstrate how low-cost, contextual strategies can strengthen childcare services while supporting women’s livelihoods and broader social change

## 2. Literature Review

**The National ECCE curriculum framework (MoWCD 2013)** emphasises that early learning spaces must be safe, inclusive, and stimulating, respect children’s culture and language, and give them varieties of ways to explore and learn. The concept of **Developmentally Appropriate Principles (DAP)** means giving children activities that match their age, stage of growth, and background, while also gently challenging them to learn new things. **The policy brief on Responsive ECCE Models in India (CBPS-UCAM, 2019)** points out the govt. Run Early Childhood program often follows the idea of child development shaped by urban middle-class families. TECERS tools was used

**Bodrova and Leogn (2003)** remind us that **Play is not just about fun**; it is how children learn to control their emotions, solve problems, get along with others, help them see things from other perspectives, and use their imagination- skills that will help them get through life. Research on ECCE highlights:

The observations reflect alignment with ECCE quality frameworks by ensuring **accessible materials for all children, breaking gender stereotypes**, and promoting **equitable participation** through displays, conversations, and daily practices.



### 3. Objectives

1. To assess the physical environment and accessibility of learning materials from a **gender-inclusive perspective**.
2. To examine teacher–child interactions with attention to **language use, inclusion, and support for children of all genders**.

### 3. Methodology

This study employed a qualitative observational design to understand classroom practices, gender responsiveness, and the overall learning environment across 13 DCCs. The centres included NGO-run facilities catering to children aged 1.6 to 6 years. A minimum of three hours was spent in each centre to observe daily routines, interactions, and learning activities.

An analysis tool was developed using the Tamil Nadu Early Childhood Education Rating Scale (TECERS) as the foundation. Modifications were introduced to integrate aspects of social and emotional learning and to respond to the diverse needs of children. Repetitive and overlapping questions from the original tool were removed to make it more concise and user-friendly. Additional questions were incorporated to capture elements of a responsive learning environment, such as the use of local songs and stories, inclusion of culturally relevant materials (pots, clay, leaves, traditional toys), and opportunities for children to communicate in their home language and express their thoughts freely. Insights from Gadular studies and the ECCE Policy Brief (2019) guided these adaptations, emphasizing children’s cultural context, lived experiences, and language diversity.

Data were collected using an observation checklist, field notes, classroom interaction recordings, and reviews of gender-related displays and materials. Observations focused on the physical environment, learning materials, language and reasoning, fine and gross motor development, social and emotional learning, hygiene practices, family involvement, and gender responsiveness.

For analysis, data were coded into themes including accessibility and equity of materials, gender-neutral play opportunities, teacher–child interactions, safety and hygiene, emotional climate, learning environment design, reinforcement of gender-equitable messages, and parental engagement. Emerging patterns were compared against established ECCE gender-responsive quality standards to identify strengths, gaps, and distinctive practices across centres.

**Table 1: Snapshot of Strengths, Gaps, and Unique Practices in CHETNA Day Care Centres (3–6 Years)**

Centre	Age Group	Strengths & Responsive Practices	Weaknesses / Gaps	Uniqueness
CHETNA Day Care Centres (DCC)	3–6 yrs	Welcome chart displayed; daily 45-min free play; four theme-based learning corners (dramatic play, block/puzzle, cognitive, storybook); children supported in hygiene routines; fine/gross motor equipment available; child-level displays; Gujarati and Hindi both used; inclusive cultural celebrations	Limited inclusion of differently-abled children;	Innovative practices like Gender Wall, Jadui Khiso and Nutrition Pockets; strong SEL encouragement

## 6. Findings

The findings from structured observations conducted across 13 CHETNA-operated Day Care Centres (DCCs) illustrate how intentional classroom design, gender-responsive pedagogy, and low-cost innovations together create inclusive, equitable, and contextually grounded early learning environments. The results are presented according to key ECCE domains and aligned with the study objectives.

### A. Physical Environment: Enabling Accessible, Inclusive, and Gender-Responsive Learning

Across all 13 centers, the physical environment demonstrated a deliberate emphasis on accessibility, safety, and gender neutrality. Open shelves, child-height displays, and floor seating arrangements were strategically organized to ensure that both boys and girls could freely access toys, books, manipulatives, and learning aids. The presence of a “Gender Wall”—featuring visuals of shared household work such as cooking, cleaning, childcare, and farming performed by all family members—served as an innovative behavioral nudge to counter entrenched gender stereotypes. Teachers consistently used the wall as a



conversation starter, helping children articulate who does what work at home, and encouraging them to imagine diverse role possibilities.

Classrooms also displayed children's artwork at eye level, ensuring visibility and equal recognition for contributions by all genders. This seemingly simple, low-cost practice enhanced children's sense of belonging and agency, helping reduce hierarchical patterns of visibility where boys often dominate classroom space in traditional settings. The overall physical environment thus acted as a subtle but powerful tool for reinforcing principles of inclusion, respect, and shared participation.

### **B. Learning Materials and Corners: Breaking Stereotypes Through Play-Based Innovation**

Learning corners—dramatic play, block corner, market corner, and puzzle areas—were rich, well-organized, and deliberately gender-neutral. Boys were frequently observed engaging with kitchen sets, dolls, or cooking role-play, while girls confidently participated in construction activities, block towers, and market simulations. This reversal of stereotypical gender roles did not occur spontaneously but was facilitated through the center's intentional design and teacher guidance.

The use of inexpensive, recycled materials—fabric scraps for pretend food, cardboard boxes for shop counters, plastic bottles for sensory activities, and locally available stones for counting—demonstrated a strong commitment to low-cost innovation. Such materials were not only accessible but also culturally familiar, grounding learning in the community's own context and making ECCE economically sustainable.

The structured rotation system ensured equitable access to learning corners, preventing boys from monopolizing high-energy or construction spaces and encouraging girls to explore and take initiative. These practices collectively helped dismantle gender scripts embedded in traditional play patterns.

### **C. Teacher–Child Interactions: Gender-Fair Pedagogy and Inclusive Communication**

Interactions between teachers and children played a critical role in creating a gender-sensitive learning environment. Teachers consciously adopted gender-fair language, addressing children collectively without defaulting to male-centric forms or gendered assumptions. Praise, feedback, and instructions were distributed equitably, ensuring that girls received the same encouragement to participate, question, lead, and problem-solve.

Teachers were mindful about providing equal “talk time” to children across gender lines, prompting quieter girls to speak up and supporting boys in expressing emotions beyond culturally acceptable norms,



such as sadness or fear. These interactions modeled the values of empathy, cooperation, and mutual respect.

In mixed-language contexts, teachers offered linguistic scaffolding to Hindi-speaking or tribal-language-speaking children, thereby ensuring equitable participation and cognitive engagement regardless of language background. The absence of gender-biased admonishments—such as “boys don’t cry” or “girls should sit quietly”—was particularly noteworthy, indicating a conscious departure from traditional caregiving norms.

#### **D. Safety, Hygiene, and Toileting: Child-Centered and Gender-Neutral Care Practices**

Observations of personal care routines revealed an emphasis on dignity, privacy, and child responsiveness. Toileting, cleaning, and hygiene assistance were provided based on individual needs rather than gender-based assumptions. Hygiene kits (including spare clothes, bibs, and towels) were stored in accessible places for all children, reinforcing equity in caregiving.

The respectful, calm manner in which teachers supported children during toileting or spills reflected a strong grounding in Social and Emotional Learning (SEL) principles. Instead of shame or reprimand, teachers offered reassurance, modeling empathy and respect for bodily autonomy. Such gender-neutral caregiving practices help reduce internalized gender differences linked to vulnerability and dependence.

#### **E. Gross and Fine Motor Development: Equitable Opportunities for Movement and Skill-Building**

Innovative motor activities—such as rope walking, tyre rolling, obstacle paths, and jigsaw movement trails—encouraged both boys and girls to participate confidently. Girls were often observed taking leadership in physically active tasks, demonstrating that when given equitable opportunities, children naturally diverge from stereotypical gender behavior.

Fine motor activities, including threading, cutting, clay molding, and craft projects, engaged all children equally. Low-cost locally sourced materials like leaves, pulses, twigs, and recycled paper played an important role in making these tasks accessible, sustainable, and culturally contextualized.

These activities reflect an important innovation: the integration of motor development with gender equity, ensuring all children build physical confidence and independence regardless of gender.

#### **F. Language, Reasoning, and Concept Building: Inclusive Cognitive Engagement**



Teachers facilitated concept-based conversations on themes such as weather, transport, seasons, or markets without gendered assumptions. For instance, when discussing occupations, teachers intentionally highlighted women as drivers, farmers, police officers, and construction workers, subtly challenging children's pre-existing mental categories.

Reasoning tasks and exploratory questions—"Why did this sink?", "What happens when we mix colors?", "How do we help at home?"—were posed equally to all children. This reflects a shift away from gendered expectations about cognitive capabilities and encourages both boys and girls to become active thinkers and problem-solvers.

### **G. Social and Emotional Learning (SEL): Innovative Gender-Transformative Approaches**

SEL was integrated into daily routines through circle time, storytelling, conflict resolution, and emotional expression exercises. Teachers helped boys articulate emotions and asked girls to assert their needs, gradually breaking traditional norms that restrict emotional behavior based on gender.

When conflicts occurred during play, teachers encouraged negotiation and turn-taking rather than assigning blame based on gendered assumptions like "boys always fight" or "girls should compromise." These practices help build empathy, cooperation, and resilience—key components of gender-equitable social identity formation.

### **H. Family Engagement: Strengthening Gender-Equitable Practices at Home**

The DCCs actively engaged families through WhatsApp groups, home visits, and parent-teacher meetings (PTMs). These low-cost communication platforms served as opportunities to encourage parents—especially fathers—to participate in caregiving and early learning tasks.

Recipe demonstrations, learning material exhibitions, and discussions on shared household responsibilities subtly shifted family perceptions around gender roles. Daily interactions between teachers and caregivers reinforced consistent messages about equality, respect, and collaborative parenting.

Through these interactions, DCCs functioned not merely as learning spaces but as community-level catalysts for gender-transformative change.

## **7. Conclusion**



This study highlights how intentional, context-sensitive, and low-cost innovations within ECCE environments can transform not only children’s developmental experiences but also shape gender norms, family practices, and women’s economic participation. Through structured observations across 13 DCCs operated by CHETNA, the findings demonstrate that thoughtfully designed childcare environments—grounded in gender-responsive pedagogy, inclusive play, and responsive caregiving—have the potential to disrupt deeply entrenched social norms and offer a scalable model for equitable early childhood development.

One of the central insights emerging from the study is that **innovation in ECCE does not necessarily require technological sophistication or high financial investment**. Rather, it lies in the strategic use of space, materials, interactions, and routines. The Gender Wall, for example, emerged as a powerful behavioral-nudge tool that visually and verbally communicates shared responsibilities at home. This simple yet transformative display challenged traditional domestic gender roles and provided teachers with a starting point for meaningful discussions with children.

Similarly, **child-accessible materials and open-shelf systems** ensured that all children—girls, boys, and gender-nonconforming—had equal opportunities to explore toys traditionally categorized as “for boys” or “for girls.” The removal of physical and symbolic barriers created fluid play patterns, illustrated by boys comfortably taking cooking roles and girls confidently participating in block building and market play. These shifts challenge the early formation of gender stereotypes and support the development of agency, confidence, and curiosity across all children.

The study also underscores the importance of **innovative pedagogical spaces**, such as thematic learning corners that encourage non-gendered exploration through market play, dramatic play, puzzle-solving, and cognitive challenges. Guided free play rotations ensured equitable access and minimized dominance by any gender group—an innovative classroom management strategy that fosters inclusion without explicit instruction. These practices align with global ECCE frameworks emphasizing play-based, child-led learning as a cornerstone of holistic development.

Beyond pedagogy, **innovations in caregiving routines**—particularly in hygiene, toileting, and emotional support—played a vital role in reinforcing dignity, respect, and gender-neutral treatment. By providing care based on individual needs rather than gender, DCC workers normalized equitable caregiving. This stands in contrast to traditional social norms where girls and boys often receive different messages about cleanliness, modesty, or emotional expression.



A key innovation identified in the DCC model is the **use of low-cost and recycled materials** for conceptual learning. Stones, recycled cardboard, and locally sourced materials encouraged children to engage in problem-solving without promoting gendered notions of cognitive ability. Resourcefulness in material creation also makes this model scalable across low-resource communities where financial constraints often limit access to educational supplies.

**Visibility practices**, such as displaying children's work at eye level and ensuring gender-balanced representation in all displays, supported recognition, belonging, and self-worth among children.

The findings further highlight the vital role of **linguistically and culturally responsive pedagogy**, particularly for children from migrant or multilingual backgrounds. By addressing Hindi-speaking children without bias and ensuring equal talk-time for boys and girls, teachers fostered a warm, inclusive communication climate.

Social and Emotional Learning (SEL) emerged as another powerful domain of innovation. By promoting emotional expression for all genders, validating children's feelings, and teaching conflict-resolution skills, DCCs cultivated essential competencies that extend beyond academic readiness. SEL practices promote gender-equitable behavior, cooperation, respect, and empathy—qualities foundational to building inclusive societies.

Most importantly, the study demonstrates how **family involvement becomes a powerful innovation in community-driven change**. Home visits, WhatsApp communication, and parent–teacher meetings not only strengthened children's learning but also communicated gender-equitable values to households. When families begin to adopt these values, the impact of ECCE innovation extends far beyond the center and into the fabric of community life.

In conclusion, the CHETNA DCC model illustrates a replicable and scalable approach to ECCE innovation that is grounded in gender equity, responsive caregiving, and community participation. By centering children's developmental needs while simultaneously empowering working mothers, the model strengthens the intertwined goals of early childhood development and women's economic empowerment. The evidence presented in this study reinforces that **high-quality, gender-responsive childcare is not a luxury** but a necessity for achieving social justice, economic resilience, and intergenerational equity.

Policymakers, practitioners, and development partners can draw from these insights to design ECCE programs that are inclusive, cost-effective, culturally grounded, and gender-transformative. Investing in such models is essential for promoting holistic childhood development and enabling women—especially



from marginalized communities—to participate fully and equally in the workforce. CHETNA’s DCCs can serve as an inspirational blueprint for strengthening early childhood systems nationwide

## References

*Babies, Toddlers and the Foundation Years*

*Beginnings & Beyond: Foundations in Early Childhood Education*

*Constructive Guidance and Discipline*

*Educating Young Children*

*Guiding Children’s Social Development*

*Policy Brief: Developing ‘Responsive ECCE Models in India’*

*Powerful Children: Understanding How to Teach Using the Reggio Approach*

*Research Notes: Responsive Environments*

*TECERS*

*The Importance of Being Playful*