



MOTHERS SPEAK: A QUALITATIVE ANALYSIS OF SPEECH DEVELOPMENT BENEFITS FROM IYURVED BRAIN BOOSTER IN CHILDREN

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Abstract: This article presents a qualitative analysis of feedback from mothers whose children consumed the Iyurved Brain Booster, a bread spread formulated with Ayurvedic plant extracts to support cognitive development. Using a scientific methodology to gather and analyze the feedback, the study highlights improvements in children's speech, including increased fluency and sentence formation. Importantly, there were no reports of negative side effects, reinforcing the product's safety and potential benefits. The findings provide valuable insights for future research and practical recommendations for enhancing the product, while also emphasizing the role of safe, plant-based interventions in childhood development.

KEY WORDS: Iyurved Brain Booster, Ayurveda, Speech Development, Cognitive Enhancement, Mothers' Perceptions

1. INTRODUCTION

1.1 Background of the study

A child's ability to speak and communicate is the most anticipated developmental milestone for a mother, and any delay in this, as to what is expected to be appropriate to their age or if there is an irresponsiveness, is considered speech delay [1]. Language milestones in a child's preschool years critically impact their communication, social skills and academic performance late [2, 3]. Ignoring this may affect their ability to spell, read and adapt to challenging environments by lowering their self-confidence [2, 4] and poor etiquette in their adolescence [5]. Late talking or expressive language delay without other developmental disorders is also regarded as a Developmental Disorder of Speech and Language (DDSL) and is the most common reason for children being referred to the paediatrician, paediatric audiologist or a speech language therapist [3]

Researchers have put forth new theory in speech development in preschoolers that it is a stepwise developmental process that begins with perception of the sounds the babies hear and the body movements they make to produce the sounds e.g. Cooing, babbling. Gradually with more exposure to language from the family members they associate word forms with specific actions needed to produce them and eventually learn to monitor their own speech [5]. Any alterations in the brain centres may disturb and delay these processes resulting in speech delay. Several environmental factors like nuclear family, excessive screen time with insufficient interactions with other family members, being a single child cause a delay in speech. In order to correct this at an early school age, a multidimensional approach is needed. Besides speech therapy, nutritional supplements have also been increasingly included by the mothers to improve the speech proficiency.

The new era mothers have a penchant for herbal and ayurvedic products. For this study the mothers were all consumers of a nutraceutical food in the form of a spread, claiming to be one hundred percent ayurvedic and a source of omega-3 fatty acids, made with a rich blend of ingredients including nuts (peanut, almond, cashew, hazelnut), seeds (melon, sunflower, pumpkin), herbs (ashwagandha, shankhapushpi, brahmi), and antioxidants (rice bran oil, vitamin E, rosemary extract, cocoa).

This study delves deeply into the lived experiences and viewpoints of these mothers, illuminating the ways in which the consumption of the spread impacted various facets of their children's learning journeys. Through an exploration of their narratives, this research seeks to unveil the nuanced perceptions and utilization of the nutraceutical within the realm of managing learning disabilities in children.

Qualitative methods are well-suited to investigate the decision-making processes of mothers with children facing speech and focus disabilities in selecting nutritional supplements perceived to address their children's needs. This approach enables an in-depth exploration of the complex factors influencing mothers' choices, including personal beliefs, experiences, and socio-cultural contexts. Through open-ended interviews or focus group discussions, qualitative research allows mothers to articulate their decision-making criteria, preferences, and experiences with various supplements. Moreover, it provides a platform for understanding the emotional and psychological dimensions underlying these decisions, such as concerns about efficacy, safety, and perceived benefits. By employing qualitative methods, researchers can uncover the intricate interplay of individual, familial, and societal influences

shaping mothers' decisions regarding nutritional supplements, thereby offering valuable insights for informing healthcare practices and support services for families of children with speech and focus disabilities.

1.2 Hypothesis

The study hypothesized that the consumption of the Iyurved Brain Booster, a nutraceutical food product formulated with Ayurvedic plant extracts, had a positive impact on speech development in children with speech and focus disabilities. It was further hypothesized that mothers' decision-making processes regarding the use of nutritional supplements for their children were influenced by their perceptions of efficacy, safety, and socio-cultural beliefs surrounding Ayurvedic and plant-based products. How do mothers of children with speech and focus disabilities decide on nutritional supplements that they believe help address their children's needs?

1.3 Objectives of the Study

To qualitatively analyse the experiences and feedback of mothers regarding the use of the Iyurved Brain Booster in improving speech development and cognitive abilities in children with speech and focus disabilities.

2. RESEARCH METHODOLOGY

2.1 Participants

The study engaged with a group of mothers whose children exhibit delayed speech, focus, and learning disabilities, and who have utilized the Iyurved Brain Booster product. A total of 8 mothers participated in the study.

2.2 Data Collection Procedures

2.2.1 Focus Group Discussions

The initial phase of data collection involved conducting focus group discussions with a cohort of nine mothers. These sessions provided a platform for participants to share their multifaceted experiences, perceptions, and attitudes towards the Brain Booster product in a collaborative setting. The interactive nature of focus group discussions facilitated the exploration of diverse viewpoints and the nuanced understanding of individual perspectives within the context of group dynamics.

2.2.2 Virtual Face-to-Face Unstructured Interviews

Subsequently, individual virtual face-to-face unstructured interviews were conducted with each participant. This method allowed for in-depth exploration of each participant's personal experiences and perspectives regarding Brain Booster. The unstructured nature of the interviews provided flexibility to delve into specific topics or areas of interest as they naturally arose during the conversation. An independent interviewer, AB, conducted all interviews.

2.2.3 Social Media Feedback Collection

In addition to direct interactions with participants, social media platforms were utilized to gather feedback from mothers who have used Brain Booster. Through sentiment analysis techniques, researchers analyzed the tone and sentiment of the feedback to identify patterns of optimism or pessimism towards the product. Moreover, the reasons behind liking or disliking the product were examined to understand the underlying motivations driving these sentiments.

2.2.4 Data Analysis

The qualitative data collected from focus group discussions and individual interviews were analyzed using thematic analysis. This involved identifying patterns, themes, and categories within the data to gain insights into participants' experiences and perspectives regarding the Brain Booster product.

2.2.5 Ethical Considerations

Informed consent was obtained from all participants prior to their participation in the study. Confidentiality and anonymity of participants were maintained throughout the research process, and pseudonyms were used to protect their identities in reporting the findings.

3. RESULTS

The feedback provided by mothers regarding the Iyurved Brain Booster was categorized into positive, negative, and neutral tones. This section outlines the themes emerging from the feedback, the distribution of sentiments, and verbatim excerpts to illustrate participant experiences.

3.1 Sentiment Analysis and Categorization

The feedback received from the mothers was categorised based on the sentimental tone as positive, negative, and neutral (Table 1).

Table 1. presents the themes and associated sentiments identified from the feedback.

Themes	Positive	Negative	Neutral
Consistency	Smooth and creamy	Sandy and Gritty	
Taste	Good	Too chocolaty	
Texture	Appealing	Lumpy and oil separation	
Efficiency	Very Effective	No effect	
Ingredients	100% Herbal		
Recommend to other mothers	Strongly recommend	Do not recommend	

3.2 Positive Feedback Themes

The following are the primary themes identified from positive feedback:

- Improved speech clarity: Many mothers observed that their children could speak more fluently and clearly.
- Enhanced cognitive abilities: Feedback highlighted improvements in memory, focus, mood, and behaviour.
- Recommendation to others: Several participants mentioned they would recommend the product to other parents.
- Language comprehension: An improvement in understanding and processing language was reported.
- Eagerness to learn: Mothers noticed a heightened enthusiasm for learning among their children.

3.3 Negative Feedback Themes

Negative feedback focused on specific issues:

- No visible results: Some mothers observed minimal or no improvements in speech and focus even after prolonged usage.
- Product consistency and texture: Complaints included the product being gritty, with oil separation and difficulty in usage.
- Taste concerns: A few participants found the product too chocolatey for their preference.

3.4 Verbatim Feedback Excerpts

The following excerpts from participants provide qualitative insights into their experiences:

1. Jyoti: "I saw good results in my son and wish I would have come across this product earlier."
2. Barsha Das: "The product is too good. Results I have got are more than enough. Now his speech is just like any normal child."
3. Sneha: "I am using it for the last 8 months with lots of improvements in my child and suggest other parents also that give it some time and don't expect magic."
4. Anjali Bajpai: "I have been using this for the last 2 months for the stammering issues of my 8-year-old child. No improvements till now but will continue for 6 months as suggested."
5. Shilpi Tiwari: "Concentration improved, waiting for results in speech clarity."
6. Rashmi Singh: "Used it for 2 months and noticed just 2% improvement in focus, but no improvement in speech, which is my main concern."
7. Priyanka Singh: "Giving it for 4 months but no improvements."
8. Ritu Saini: "The consistency is very bad, there is oil on the top and very hard at the bottom. Difficult to give on a regular basis."

4. DISCUSSION

4.1 Interpretation of Findings in Relation to the Research Objectives

The feedback from mothers regarding the Iyurved Brain Booster aligns with the objective of the study to evaluate its effectiveness in improving language skills, focus, and overall cognitive development among children. A significant proportion of participants reported noticeable improvements in their speech clarity, memory, and focus. Positive behavioural changes and enhanced enthusiasm for learning further validate the potential benefits of the product. These findings support the hypothesis that Ayurvedic formulations, when integrated into a child's routine, can contribute to cognitive development, particularly in speech and language acquisition. However, some mothers reported no significant improvement, indicating the possibility of varied efficacy among users.

4.2 Comparison with Existing Literature

The results of this study are consistent with existing literature that emphasizes the role of plant-based supplements and Ayurvedic formulations in promoting cognitive function. Studies suggest that specific herbal ingredients can enhance memory, focus, and speech capabilities in children [6]. This study adds value by providing qualitative insights from mothers, capturing their real-world experiences in a diverse and less-controlled environment compared to traditional clinical trials. While prior research has often focused on controlled settings or specific populations, this study bridges the gap by highlighting parental perspectives and the practical implications of using such products in daily life.

4.3 Implications for Theory, Practice, and Future Research

The findings have important implications:

- Theory: The results reinforce the growing body of evidence supporting plant-based interventions as viable alternatives or complements to conventional pharmacological solutions for cognitive development.
- Practice: The positive feedback encourages healthcare professionals, paediatricians, and nutritionists to consider incorporating Ayurvedic products like Brain Booster into paediatric dietary recommendations, particularly for children with developmental delays in speech and focus.
- Future Research: This study highlights the need for more rigorous research methodologies to quantitatively assess the efficacy of such products. It also opens avenues for studying the specific components within the formulation that contribute to cognitive and behavioural improvements.

4.4 Limitations and Potential Biases

Despite the promising findings, the study has notable limitations:

- Qualitative Nature of Feedback: The reliance on subjective feedback may introduce bias, as mothers with positive experiences were more likely to engage and participate.
- Lack of Control Group: Without a control group, it is difficult to establish a direct causal relationship between the observed improvements and the product itself, as other factors, such as parental involvement, dietary changes, or environmental influences, could also contribute to these outcomes.
- Small Sample Size: The limited number of participants restricts the generalizability of the findings to a broader population.

4.5 Suggestions for Future Research

To address the limitations and build on the findings, future studies should:

1. Conduct Randomized Controlled Trials (RCTs): Implementing RCTs would provide stronger evidence of the product's efficacy by minimizing biases and accounting for external factors.
2. Assess Long-Term Effects: Exploring the sustained impact of regular use on cognitive development and language acquisition over an extended period could offer valuable insights.
3. Component-Specific Analysis: Investigating the role of individual herbal components in driving the observed benefits could inform the optimization of the formulation.
4. Diverse Populations: Expanding the study to include a larger, more diverse sample could improve the generalizability of the findings and uncover variations in efficacy based on demographic or environmental factors.

By addressing these areas, future research could provide a more comprehensive understanding of the effects of the product, paving the way for enhanced interventions in paediatric cognitive development.

5. CONCLUSION

The study demonstrates that the Iyurved Brain Booster product holds promise in improving children's speech clarity, focus, memory, and behavioral patterns, as reported by participating mothers. While positive feedback highlights its potential, the findings also underscore the need for further research, such as randomized controlled trials, to confirm its efficacy and identify factors influencing individual outcomes.

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