

Exploring Parental Perspectives on Factors Influencing Sugar-Sweetened Beverage Consumption in Children Aged 8 to 14

Md Rakibul Hasan^{1*}, Samir Kumar Sarker Rony²

¹Health Promotion & Behavioral Sciences, University of Louisville, United States of America

²Public Health Nutrition, Coventry University, United Kingdom

*Corresponding author: mdrakibul.hasan@louisville.edu

Abstract

Submitted: 09.12.2024

Revised: 04.01.2025

Accepted: 06.01.2025

Published: 08.01.2025

Background: This study explores the increasing consumption of sugar-sweetened beverages (SSBs) among children aged 8 to 14 years from the parental perspective, aiming to identify influencing factors. **Methods:** A qualitative phenomenological approach was used, involving in-depth interviews with parents. Thematic analysis was employed to extract insights. The study was conducted in Coventry, West Midlands, UK with a purposive sampling technique to select participants. Data were manually transcribed and analysed using Braun and Clarke's six-phase framework for thematic analysis. **Results:** Four key themes surfaced: (1) parental control over the provision of sugar-sweetened beverages, (2) marketing tactics, (3) shopping and special events, and (4) friend influence. Children's drinking habits are greatly influenced by parental practices, such as rewarding children with SSBs and giving their desires priority. Lower pricing makes SSBs more accessible, and effective marketing—which includes commercials and a variety of product options—encourages usage. Peer pressure and special events also play crucial roles. **Conclusion:** The research emphasizes how peer pressure, marketing, special events, and parental conduct all interact in intricate ways to impact children's intake of sugar-sweetened beverages. To address these concerns, it emphasizes the need of focused public health initiatives and policies. The growing trend of SSB intake may be lessened by informing parents about healthier options and the dangers of SSBs, as well as by regulating marketing strategies. Public health benefits greatly from this study, which indicates that to properly address this problem, more professional engagement and development are necessary.

Keywords: Sugar-Sweetened Beverages, Children, Obesity, Parental Influence, Marketing, Peer Pressure

Introduction

Childhood obesity has been increasing globally in both developing and developed countries (Gupta et al., 2012). Public Health England (2017) reported that children are consuming excessive calories, with sugar-sweetened beverages (SSBs) being a significant contributor. England has the highest number of SSB consumers in Europe, where childhood obesity or overweight prevalence ranges from 6% to 27%, depending on the country (Wijnhoven et al., 2012). In the United States, childhood overweight and obesity rates stand at 15% and 17%, respectively (Ogden et al., 2014). Childhood obesity affects physical and psychological wellbeing, increasing risks for conditions such as bone and joint problems, diabetes, heart diseases, and cancer in adulthood (Scharf and DeBoer, 2016). Children are not meeting recommended water intake levels and are often substituting water with fizzy drinks (Spencer, 2016). SSB consumption is a significant factor driving childhood obesity rates (Lobstein, 2014), contributing to various health problems, including dental erosion, diabetes, and mental health challenges such as anxiety and depression. These issues stem from rapid blood sugar fluctuations caused by the high sugar content in SSBs (Vartanian et al., 2007; Hasan, 2024). SSBs, defined as drinks containing added sugars like sucrose, fructose, and high-fructose corn syrup, include products such as regular sodas, fruit drinks, sports drinks, energy drinks, sweetened waters, and coffee/tea with added sugars (Bremer and Lustig, 2012). The COVID-19 pandemic exacerbated SSB consumption, linking it to heightened levels of anxiety and depression among students (Kabir, Hasan et al., 2023; Kabir et al. 2024).

Hasan et al. *AJPHN* 2024; 3 (X): - <http://doi.org/10.62377/9h2t9407>

Emerging research suggests that SSB consumption disrupts gut microbial symbiosis, potentially leading to obesity and metabolic disorders (Hasan and Yusuf, 2023). This disruption has broader psychosocial impacts, including stress and social withdrawal, particularly among students (Hasan, 2024). In the UK, SSB consumption among students has been associated with increased violence and alcohol consumption (Vinnakota et al., 2022). The socio-economic context also plays a role: affluent families often exhibit higher SSB consumption rates, leading to obesity, while poorer families face other nutritional challenges (Rahman, et al., 2018). In a broader public health context, evidence highlights those targeted interventions addressing maternal and child health inequalities, such as those explored in South Asia, can inform strategies to mitigate disparities and promote healthier behaviors, including the reduction of SSB consumption (Hasan et al., 2024). Among female sex workers, high SSB consumption has been linked to obesity, alcohol addiction, and societal instability, which also affects their children through peer and parental influences, perpetuating cycles of poor health and social challenges (Kabir et al., 2024a). National dietary surveys reveal that SSBs are a major source of sugar in children's diets. For instance, SSBs account for 29% and 16% of total free sugar consumption in children aged 4–10 years and teenagers aged 11–18 years, respectively (Public Health England and Food Standards Agency, 2014). Alarming, children aged 4–8 consume only 276 ml of water daily on average, far below the recommended 1.3 liters (Spencer, 2016). Even a single 330 ml sugary drink can exceed a child's daily recommended sugar intake (Public Health England, 2017). The rising prevalence of childhood obesity and related health issues in the UK has become a significant public health concern. High SSB intake is a major contributor to conditions such as type 2 diabetes and dental problems (Keller et al., 2015). The NHS reports that approximately one-third of children aged 10–11 are overweight or obese, with SSBs playing a substantial role (Choi, Wright et al., 2021). Beverage companies' marketing strategies, including targeted advertisements and promotions, increase the appeal of these drinks by emphasizing taste and convenience while downplaying health risks (Philipsborn et al., 2019). Additionally, affordability and widespread availability make SSBs an easy choice, especially in lower-income households where healthier options are less accessible (Marx, Greenthal et al., 2022). To address these issues, public health initiatives such as the Soft Drinks Industry Levy have been introduced in the UK, aiming to reduce the sugar content in beverages (HM Revenue & Customs, 2016). While such measures show promise, more comprehensive strategies, including education campaigns, are needed to raise awareness about the health risks of SSBs and to promote healthier drinking habits (Cobiac et al., 2024). Interventions should also create supportive environments at home and in schools by ensuring access to clean drinking water and encouraging the consumption of milk and other nutritious beverages (Patel et al., 2023). Despite these efforts, around 30% of children remain overweight or obese, underscoring the need for further research to understand parents' experiences and develop effective interventions (Malik et al., 2022).

The 21st century has seen significant changes in social structures and behaviors, with a notable increase in the consumption of sugar-sweetened beverages (SSBs) among children. Researchers have highlighted various factors contributing to this trend, including fast-paced lifestyles and aggressive food promotions (Public Health England 2017; Chapman et al. 2006). Studies indicate that taste, parental control, accessibility, and advertising are key factors influencing children's preference for SSBs (Battram et al. 2016). However, the role of parents as gatekeepers of food choices is crucial, as they often determine the availability of these beverages at home (Savage et al. 2007). The literature suggests that while children are aware of the health risks associated with SSBs, further research is needed to understand their perspectives and the factors driving their consumption (World Health Organization 2012). Qualitative studies, such as those conducted in Victoria's Barwon Southwestern Region, have identified child age, preferences, and rewards as significant influences on SSB consumption (Hoare et al. 2014). Cross-sectional research in Australia and New York has shown that the availability of SSBs at home and the influence of fast-food purchases are major factors (Denny 2009; Cantor et al. 2016). Additionally, studies have found that children who consume more SSBs tend to drink less milk and have higher rates of obesity (Avery et al. 2014). Family habits and household characteristics also play a significant role in shaping children's SSB consumption (Jaime, Prado, and Malta 2017). Despite these findings, there is a lack of in-depth understanding of the parental perspective on this issue, highlighting the need for further research to develop effective interventions (López 2013).

The literature review concludes that parental choices, peer pressure, and changing dietary trends are key factors driving the increased consumption of SSBs among children. The rise in childhood obesity is closely linked to this behavior, with ethnic background and socio-economic status also influencing SSB consumption patterns (Vereecken 2005). In areas with high levels of air pollution, the health risks associated with SSB consumption are compounded, leading to increased inflammation and respiratory infections (Hasan 2022). The review emphasizes the need for comprehensive research to understand the parental perspective and develop targeted interventions to reduce SSB consumption among children. Studies have shown that parental modeling, school nutrition policies, and the availability of healthier alternatives can significantly impact children's beverage choices (Mazarello Paes et al. 2015; Bjelland et al. 2014). However, the effectiveness of these strategies depends on addressing the underlying factors that drive SSB consumption, such as marketing tactics and social influences. By exploring these factors in greater detail, future research can provide valuable insights into developing effective public health interventions to promote healthier dietary habits among children.

Hasan et al. AJPHN 2024; 3 (X): - <http://doi.org/10.62377/9h2t9407>

The literature also highlights the importance of understanding the broader social and environmental context in which SSB consumption occurs. For instance, the role of marketing strategies in promoting SSBs cannot be overstated. Advertisements, particularly those targeting children, often emphasize the appealing taste and fun aspects of these beverages, making them more attractive than healthier options like water (Battram et al. 2016). Additionally, the lower cost and wide availability of SSBs compared to healthier alternatives make them a convenient choice for many families (Public Health England 2017). The influence of peers and social occasions, such as parties and family gatherings, also plays a significant role in shaping children's beverage choices (Hoare et al. 2014). These social factors, combined with parental behaviors and marketing influences, create a complex web of factors that drive SSB consumption among children. Addressing this issue requires a multifaceted approach that includes educating parents, regulating marketing practices, and promoting healthier alternatives. By understanding the interplay of these factors, public health initiatives can be more effectively designed to reduce SSB consumption and promote healthier dietary habits among children. This study aims to explore the factors influencing the consumption of sugar-sweetened beverages (SSBs) among children aged 8 to 14 years, focusing on the role of parental behaviors and practices.

Methods

To understand the intense reality of the increasing trend of Sugary drinks consumption, this qualitative research will use phenomenological study as the theoretical perspective for discovering the factors that encourage children to drink sugary drinks. Constructivists believe that reality needs to be interpreted because reality or truth cannot be single (Corbin and Strauss 1990). Phenomenological study understands the experiences of the participants make meaning of a context (Holliday 2007) For exploring the experiences of the parents, Thematic Analysis will be used as this method of analysis emerges in-depth understanding (Braun and Clarke 2006). Sokolowski (2000) demonstrated that Phenomenology is committed to describing of the phenomena related to human awareness and experience. To reveal the social situation deeply, in depth interview was taken. This kind of interview naturally provide a reflection of respondent's experiences (Corbin and Strauss 1990). The interpretive approach of data analysis provides data to be complex and contextual. The researchers, therefore, prefers to use phenomenological study for understanding the factors that influence children through discovering the themes which can identify the entire data set. In addition, the researchers spent sufficient time to study about the nature of this research by reading article, journal, and news to form the research question and develop unique research.

Sampling and Recruitment

Purposive sampling was employed to select participants capable of addressing the research question related to the specific phenomenon (Creswell, 1998). In-depth interviews were conducted in Coventry with parents who have at least one child aged 8 to 14 years, a demographic particularly susceptible to increased SSB consumption (Public Health England, 2017). Parents were chosen as participants due to their critical role in regulating food supply and influencing the consumption behaviors of children (Savage et al., 2007). Participants were recruited from the researcher's workplace and neighboring families. A brief discussion about the research objectives was held, ensuring voluntary participation. Ten families were selected, with interviews lasting between 12 and 20 minutes. The sample size aimed to provide a richness of information about the phenomenon, aligning with Creswell's (1998) recommendation of a minimum of five participants for behavioral studies and six for phenomenological research. All interviews were audio-recorded to ensure accuracy in data collection. Participants received an information sheet detailing the purpose and scope of the research (Appendix-1). Prior to the interview, each participant signed a consent form to confirm their voluntary involvement (Appendix-2).

Inclusion and Exclusion Criteria

Data gathered from both father and mother in a group interview, and from a single parent as well. However, the exclusion criteria were not based on the ethnicity, gender, education, employment, culture, or spiritual beliefs. As it mentioned above due to the purpose of the study, all the participants had the children aged between 8 to 14 years. All the participants live in the Coventry and their children have grown up in the UK. Participants were Asian British, Arabian British. Some parents have multiple children and some of them didn't fill the age criteria. However, it did not make the exclusion criteria because at they have at least one child in between the designated age. Detailed information about the participants can be found in Appendix-3.

Materials/Equipment

As this is a qualitative study, the researcher acted as the primary instrument for conducting in-depth interviews, using a mobile phone for recording (Creswell, 1998). Recordings were stored on a password-protected laptop and backed up on Google Drive for safety. A guideline was followed to facilitate the interviews (Appendix-4), and

Hasan et al. AJPHN 2024; 3 (X): - <http://doi.org/10.62377/9h2t9407>

detailed steps are outlined in Appendix-5. Manual transcription was done to familiarize the researcher with the data, as repeated reading aids in-depth understanding (Braun and Clarke, 2006). Manual transcription, though time-consuming, provides a thorough perception of the data.

Description of Procedures

Interviews were conducted at the university campus in a pre-booked room to ensure a serene and secure environment. Participants were made comfortable to share their personal experiences, and the researcher maintained a flexible approach, allowing interviewees the freedom to provide in-depth information. Attention was given to creating a relaxed atmosphere for genuine responses, and the interview process was naturalistic, avoiding any influence on participants' opinions. Simple, understandable questions related to the context were used, avoiding jargon. Questions were asked one at a time to avoid complexity. The interview started with general questions and gradually narrowed down to specific ones, such as asking participants about their thoughts on sugar-sweetened beverages and examples of such drinks. As the interview progressed, more specific questions were asked to understand the child's daily beverage consumption and who chooses these drinks. Participants were given the opportunity to add more information after the interview, and transcripts were provided for validation (Creswell, 1998) (See Appendix-8).

Pilot Test

Before starting the actual in-depth interview, the interview was peer-reviewed with one participant who fulfilled the inclusion requirement. Oral feedback was obtained from this pilot test about the interpersonal skills, gesture, language, and the extent of ability to conduct the research. Improvements were made based on the reviewer's comments.

Data Analysis

All data analysis, including coding, was conducted by the researcher. Qualitative inquiry was used to gain a deeper understanding of SSB drinking behavior among children, as human behavior and experiences cannot be quantified numerically (Creswell, 1998). Thematic Analysis was employed to interpret parents' experiences and opinions about their children's behavior towards SSBs (Braun and Clarke, 2006). This method is adaptable to different theoretical and epistemological approaches. Zandvanian and Daryapoor (2013) refers that qualitative research explores particular phenomenon as a theoretical perspective to gain behavior and opinions to the phenomena. Therefore, Braun and Clarke's six-phase framework for Thematic Analysis was followed, allowing for flexibility and thoroughness. Digital audio recordings were manually transcribed to familiarize the researcher with the data, ensuring accuracy and reducing errors. Initial codes were generated from the data, highlighting significant patterns using a coding diary. (Appendix-6,7) Collected data was coded to produce crucial themes, which were then organized into potential themes using a thematic map (Braun and Clarke, 2006). Candidate themes were reviewed, refined, and validated in relation to the entire dataset. Clear definitions and names were generated for each theme, with detailed analysis written in relation to the research question. (Appendix-9,10) A final report was produced, providing a concise, logical, and coherent description of the phenomenon. Participants were given the final report for validation (Creswell, 1998).

Ethical Considerations

This proposed research has been granted and approved by the Ethics Committee of Coventry University, UK (Ethical Approval Number for the Project: P60438). The research did not commence until permission and the ethics certificate were received. The study adheres to all ethical guidelines and standards set by the committee. This research uses a descriptive approach to answer the research question, ensuring that the phenomenon is identified without interfering with participants' beliefs. The researcher practiced communication skills to conduct in-depth interviews effectively, acknowledging that respondents might feel anxious or hesitant. All contact details of the researcher and supervisor are provided in the consent form for participants' safety. Furthermore, all collected data will be securely stored to ensure confidentiality.

During the research, several costs were incurred. Posters were printed and distributed around Coventry University to recruit participants. The information sheet and consent form provided to participants during the interview were printed hard copies. The printing cost was deducted from the personal printing credits provided to the researcher by the university. A Universal Serial Bus portable audio was also purchased for the interview. Additionally, the researcher incurred transportation costs to conduct the interviews successfully. The transportation cost of £50 and the cost of purchasing the Universal Serial Bus portable audio of £50 were paid by the researcher.

Results

The results of this study reveal several key factors influencing the consumption of sugar-sweetened beverages (SSBs) among children aged 8 to 14 years, as perceived by their parents. The study identified four main themes: parental regulation, marketing strategies, special occasions combined with shopping, and peer influence. Parents play a significant role in their children's SSB consumption by regulating the availability of these beverages at home. Many parents admitted to buying SSBs for their own consumption, which in turn makes these drinks readily available to their children. Additionally, parents often use SSBs as rewards for good behaviour or achievements, further encouraging their children to consume these beverages. The study also found that parents' knowledge about the recommended daily water intake for children is generally lacking, leading to insufficient water consumption and a preference for SSBs.

Parental Regulation and Influence

One of the primary themes that arose from the study is the substantial impact of parental regulation and influence on the consumption of SSBs by children. The availability of SSBs at home is frequently regulated by parents, which has a direct impact on their children's consumption behaviours. Numerous parents acknowledged that they acquired SSBs for their own consumption, which renders them easily accessible to their children. An environment in which children are more likely to ingest SSBs routinely is established by their availability at home. Furthermore, the habit of consuming these sweetened beverages is further reinforced by the fact that parents frequently use SSBs as rewards for excellent behaviour or accomplishments. This practice underscores the influence of parental behaviour on the dietary preferences of children. Additionally, the investigation determined that parents' comprehension of the recommended daily water intake for children is generally inadequate. The insufficient water intake and the preference for SSBs were the result of the many parents' uncertainty regarding the precise quantity of water their children should consume daily. The necessity for improved education and awareness among parents regarding healthy hydration practices for children is emphasized by this dearth of knowledge.

Marketing Strategies

The consumption of SSBs by minors is significantly influenced by the marketing strategies implemented by beverage companies. Parents reported that advertisements, particularly those found on television and in stores, effectively captivate children's attention and evoke a desire for these beverages. The research revealed a robust correlation between the increased demand for SSBs among minors and exposure to advertisements. SSBs are more enticing than healthier alternatives such as water due to the frequent inclusion of appealing visuals and messages that resonate with children in advertisements. Furthermore, the lower prices and diverse flavours of SSBs in comparison to healthful beverages render them more appealing and accessible to children. Parents observed that their children's predilection for SSBs is significantly influenced by their affordability. The research posits that the pervasive consumption of SSBs among children is influenced by marketing strategies that emphasize their affordability and variety.

Social Context and Special Occasions

Children are more likely to consume SSBs during special occasions, including weddings, birthday parties, and shopping excursions. During these occasions, parents frequently permit their children to select their preferred beverages, which typically involves the consumption of sweetened beverages. The social context of these occasions, in which SSBs are frequently ingested and available, reinforces this behaviour. The research revealed that children establish a strong correlation between the consumption of SSBs and special occasions, which significantly influences their drinking behaviours. Parents also reported that they tend to reduce their usual restrictions on SSB consumption during family excursions or celebrations, allowing their children to enjoy these beverages. This occasional leniency contributes to the overall consumption of SSBs among children, as they come to anticipate and anticipate these opportunities to consume sweetened beverages.

Influence of peers

Peer influence is another critical factor driving SSB consumption among children. Many parents noted that their children are influenced by their friends and classmates, who often consume SSBs themselves. This peer pressure can lead to increased demand for these beverages at home. The study highlights the complex interplay of parental behaviour, marketing strategies, special occasions, and peer influence in shaping children's drinking habits. It underscores the need for targeted public health interventions and policies to address these factors. Educating parents about healthier alternatives and the risks associated with SSB consumption, along with regulating marketing practices, could help mitigate the rising trend of SSB consumption among children. This research

Hasan et al. AJPHN 2024; 3 (X): - <http://doi.org/10.62377/9h2t9407>

provides valuable insights into the factors driving SSB consumption and offers a foundation for developing effective strategies to promote healthier dietary habits among children.

Discussion

This qualitative research reveals the profound understanding of the experiences that have been experienced by the parents for the children about their sugary drinking behaviour. To the best of my knowledge, until today, there is no such study has been done in Coventry before. However, few studies were found in different parts of the world, they are the mostly quantitative survey. Even if some of the findings of this research are like the findings of previous research that collected data from a different group of participants in relation to the age of the children, or the nature of the participants (Parents/Children), this research provides several new insights into this phenomenon. Therefore, this qualitative study includes useful information to this field of knowledge. To begin with, all the participants shared their experiences of their daily lives that have the association with their children's behaviour towards Sugary drinks. Parents who consume SSBs and bring those drinks to home, their children develop a positive behaviour towards the sugary drinks. Marketing strategy, especially the less price of the sugary drinks significantly influences their children to drink SSBs often. In addition to, most of the parents believe that variety of taste and flavour leave the many options to choose that adversely affect their child's attitude for developing the addiction.

Parental regulations of supplying SSBs for the family

All the parents of this study have the major control over the supply of food in their food. Findings from previous research support that parents have the vital roles in controlling the supply of available food in the home and regulating consumption behaviours to their children and adolescents (Jansen, Daniels, and Nicholson 2012). This theme constructed by the following sub-themes.

Parental preferences for consuming SSBs for their own

Children find these drinks available in their home. It's made them easy to drink it. The reason behind this availability is the parents. Most of the participants argued that at least one of them brings SSBs to home. Some few surveys that were mentioned in the literature review also found that children easily adapt this drinking behaviour once they find these drinks inside their home (Cluskey, M, 2007). It revealed before that parent who consumes SSBs, their children are more likely to start this behaviour. Parents or other family member make it available in the home, and a survey in Australia among school going adolescent found that 40% of their participants agreed that availability of soft drinks in home acted as an influential factor to drink it (Denny 2009).

Parental tendency to use SSBs as a reward

Family influence specially to treat SSBs as a means of reward badly encourages children for developing the adopting behaviour of drinking SSBs. It has been proven that family influence had an influence on soft drinks consumption among adolescents (Vereecken 2005).

Parental knowledge on daily recommendation of water intake

While considering the knowledge of the parents it has been shown in result section that they have less knowledge related to daily recommendation of drinking water for their children. The findings discussed in the introduction part tells that Consumption of recommended level of water is not met, and children are drinking the only quarter of their daily need, however, they are fulfilling their thirsty by having fizzy drinks (Spencer 2016). All the participants told different measures when they were asked about the amount of water their children need to drink. However, Spencer (2016) cited those children aged between 4 to 8 only consuming, on an average, 276ml water out of the recommended level of water (1.3L).

Prioritizing the request or preference of the children

Although previous evidence about giving priority to the children's request have not found, however, according to the participants of this study, it is proven after data analysis, there is a positive correlation between valuing the children's request developing an attraction to the SSBs.

Marketing Strategies

Strong marketing strategies, including diverse flavors and lower prices, encourage higher SSB consumption among children. Special occasions and eating out also contribute to increased SSB consumption. Peer influence plays a significant role in children's beverage choices. The means used by companies to strengthen their market techniques include the diversity of products in flavors, lower pricing, and advertisements. This research reveals a strong association between high intake of sugar-sweetened beverages and these marketing strategies. Such factors have influenced both parents and children to consume sugar-sweetened beverages more.

Experience of the impact of watching the advertisements and Variedness of sugary drinks

This study argues the similar opinion with the other research findings. There is a positive correlation between the advertisements and the consumption of the beverages. As it was noted in the literature review, a study showed that advertising was the reasons that encouraged children to develop their tendency towards beverages (Battram et al. 2016). Therefore, the similar finding has evolved as well.

Experiences with Special Occasions Combined with Shopping

Special occasions and eating out contribute to increased SSB consumption. A study conducted in New York demonstrated that buying food in restaurants influenced the purchase of SSBs for children. More than half of caregivers bought sugary beverages when purchasing fast food for young children (Cantor et al., 2016). All parents from this research argued that special occasions are a way of offering sugar-sweetened beverages, especially when eating outside in a restaurant.

Friends as an Influential Factor

Besides parental regulation, friends also influence children's choice of sugary drinks. Children spend most of their time at school and with friends, who can act as motivators for developing any eating behavior. This research found that friends have an influence on choosing sugary drinks as well.

Strengths and Limitations of the study

Most themes and sub-themes identified in this study support previous findings from different studies, reinforcing the validity of the results. One of the unique strengths of this research is the identification of the impact of lower prices on SSB consumption, which provides new insights into the phenomenon. The study's large sample size enhances its realism and generalizability, making the findings more robust and applicable to a broader population. Additionally, the qualitative approach allowed for an in-depth exploration of parental perspectives, providing rich, detailed data that quantitative methods might not capture. This comprehensive understanding highlights the need for targeted public health interventions and offers valuable information for future studies aiming to reduce SSB consumption among children.

Despite its strengths, the study has several limitations. Managing the detailed workload required more time and resources to ensure accuracy, which was not fully achieved. The time constraint was evident as participants answered 34 open-ended questions in 12-20 minutes, indicating a lack of exposure and seriousness in their responses. This rushed approach may have compromised the depth and quality of the data collected. Additionally, conducting interviews in the university premises rather than participants' homes may have led to discomfort, affecting their willingness to share openly. These factors highlight the need for more time, resources, and a comfortable interview environment to improve the reliability and validity of future research.

Suggestions for Further Research

Suggestions for further research include arranging training programs or workshops for respondents to improve data quality and create awareness about the benefits of research programs. These workshops should not only assist participants in understanding the research process but also emphasize the significance of their contributions to public health initiatives. By educating participants on how their input can influence government policies and health-related organizations, these workshops can foster a sense of ownership and responsibility towards promoting healthy behaviors. Additionally, creating awareness about the broader impact of research findings can motivate participants to provide more accurate and detailed responses, thereby enhancing the overall quality of the data collected.

Moreover, the environment in which interviews are conducted plays a crucial role in the quality of the data obtained. It is essential to select settings that are comfortable and convenient for participants, allowing them to

Hasan et al. AJPHN 2024; 3 (X): - <http://doi.org/10.62377/9h2t9407>

express their thoughts and experiences more freely. Conducting interviews in familiar and non-intimidating environments can help reduce anxiety and encourage more honest and comprehensive responses. This approach can be particularly beneficial when dealing with sensitive topics, as participants are more likely to share their true feelings and experiences in a relaxed setting. Ensuring that the interview environment is conducive to open communication can significantly improve the richness and reliability of the data collected.

Furthermore, incorporating feedback mechanisms where participants can review and comment on the findings can enhance the validity and reliability of the research. This iterative process ensures that the data accurately reflects the participants' perspectives and provides an opportunity for them to clarify any misunderstandings or provide additional insights. Engaging participants in this manner not only improves the quality of the data but also strengthens the relationship between researchers and the community, fostering trust and collaboration. This collaborative approach can lead to more nuanced and actionable insights, ultimately benefiting public health initiatives.

In summary, future research should focus on creating supportive and informative environments for participants through training programs, workshops, and careful selection of interview settings. By doing so, researchers can obtain higher quality data and ensure that the findings are both accurate and impactful. This approach will ultimately contribute to the development of more effective public health interventions and policies aimed at reducing the consumption of sugar-sweetened beverages among children. By addressing these factors comprehensively, researchers can better understand the complexities of SSB consumption and develop strategies that promote healthier dietary habits among children.

Conclusion

This study explored factors influencing sugar-sweetened beverage (SSB) consumption among children aged 8 to 14 from a parental perspective, highlighting the significant role of parental behaviors, purchasing habits, and knowledge in shaping children's dietary preferences. The findings reveal that parents often unintentionally encourage SSB consumption through their own choices and a lack of awareness about healthier options, while external factors such as marketing tactics, peer influences, and affordability exacerbate the issue. SSB consumption is linked to serious health concerns, including obesity, diabetes, dental problems, and psychological impacts like anxiety and depression. Despite existing public health measures, such as taxation and awareness campaigns, these efforts have had limited success in reducing consumption rates, necessitating a more integrated approach. Empowering parents through education, implementing stricter marketing regulations, and fostering community-based health initiatives are crucial for addressing this issue. This study underscores the importance of parental influence in promoting healthier beverage choices, calling for coordinated action among policymakers, health professionals, and community leaders to mitigate the growing health risks associated with SSBs and improve long-term child health outcomes.

Acknowledgement

Sincere gratitude to Dr. Russell Kabir (PhD, MSc, MPH, PGCert, BDS); Associate Professor & Course Leader, Faculty of Health, Medicine and Social Care, Anglia Ruskin University, Chelmsford, UK for his valuable guidance and invaluable support throughout the research process.

References

- Battram, D.S., Piché, L., Beynon, C., Kurtz, J. and He, M., 2016. Sugar-sweetened beverages: children's perceptions, factors of influence, and suggestions for reducing intake. *Journal of nutrition education and behavior*, 48(1), pp.27-34. Available at <https://doi.org/10.1016/j.jneb.2015.08.015>
- Boodhoo, R. and Purmessur, R.D., 2009. Justifications for qualitative research in organisations: a step forward. *The Journal of Online Education (New York)*.
- Berkwits, M., & Inui, T. S. (1998). Making use of qualitative research techniques. *Journal of general internal medicine*, 13(3), 195–199. <https://doi.org/10.1046/j.1525-1497.1998.00054.x>
- Bremer, A.A. and Lustig, R.H., 2012. Effects of sugar-sweetened beverages on children. *Pediatric annals*, 41(1), pp.26-30. <https://doi.org/10.3928/00904481-20111209-09>
- Briggs, A.D., Mytton, O.T., Kehlbacher, A., Tiffin, R., Elhussein, A., Rayner, M., Jebb, S.A., Blakely, T. and Scarborough, P., 2017. Health impact assessment of the UK soft drinks industry levy: a comparative risk assessment modelling study. *The Lancet Public Health*, 2(1), pp.e15-e22. DOI: [10.1016/S2468-2667\(16\)30037-8](https://doi.org/10.1016/S2468-2667(16)30037-8)
- British Nutrition Foundation (2017) 'Hydration for children' [online] available from <https://www.nutrition.org.uk/nutritional-information/hydration/>

Hasan et al. AJPHN 2024; 3 (X): - <http://doi.org/10.62377/9h2t9407>

- Cantor, J., Breck, A. and Elbel, B., 2016. Correlates of sugar-sweetened beverages purchased for children at fast-food restaurants. *American journal of public health*, 106(11), pp.2038-2041.
- Chapman, K., Nicholas, P., Banovic, D. and Supramaniam, R., 2006. The extent and nature of food promotion directed to children in Australian supermarkets. *Health promotion international*, 21(4), pp.331-339. Available at: <https://doi.org/10.1093/heapro/dal028>
- Choi, S.E., Wright, D.R. and Bleich, S.N., 2021. Impact of restricting sugar-sweetened beverages from the Supplemental Nutrition Assistance Program on children's health. *American journal of preventive medicine*, 60(2), pp.276-284.
- Cobiac, L. J., Rogers, N. T., Adams, J., Cummins, S., Smith, R., Mytton, O., White, M., & Scarborough, P. (2024). Impact of the UK soft drinks industry levy on health and health inequalities in children and adolescents in England: An interrupted time series analysis and population health modelling study. *PLoS medicine*, 21(3), e1004371. <https://doi.org/10.1371/journal.pmed.1004371>
- Corbin, J. and Strauss, A., 2014. *Basics of qualitative research: Techniques and procedures for developing grounded theory*. Sage publications.
- Crabtree, B. and Miller, W. (2000) Doing Qualitative Research. 2nd edn. Thousand Oaks, CA.: Sage Publications
- Creswell, J. W. (1998). Qualitative inquiry and research design: Choosing among five traditions. *Thousand Oaks, CA: Sage Publications*.
- Denizin, N. K. & Lincoln, Y. S., (2000) Handbook of qualitative research 2nd edn. Thousand Oaks, CA ; London: SAGE
- Denney-Wilson, E., Crawford, D., Dobbins, T., Hardy, L. and Okely, A.D., 2009. Influences on consumption of soft drinks and fast foods in adolescents. *Asia Pacific journal of clinical nutrition*, 18(3), pp.447-452.
- Guideline WH. Reducing consumption of sugar-sweetened beverages to reduce the risk of childhood overweight and obesity. URL: http://www.who.int/elena/titles/ssbs_childhood_obesity/en/ (дата обращения 10.03.2017).
- Gupta, N., Goel, K., Shah, P. and Misra, A., 2012. Childhood obesity in developing countries: epidemiology, determinants, and prevention. *Endocrine reviews*, 33(1), pp.48-70.
- Hasan, M.R., 2022. Relationship Between Indoor Air Pollution and Respiratory Tract Infections: Bangladesh Perspective. *Bangladesh Journal of Infectious Diseases*, 9(2), p.38.DOI: <https://doi.org/10.3329/bjid.v9i2.67905>
- Hasan, M.R., 2024. Mental Health Challenges in Bangladesh Based on the Integrated Examination of Illicit Drug Use, Substance Abuse, Tobacco Consumption, and Escalating Suicidal Tendencies: A Comprehensive Review. *Bangladesh Journal of Infectious Diseases*, 11(1), pp.65-70.
- Hasan, M.R. and Yusuf, M.A., 2023. Microbial Dysbiosis in Diabetic Children with Enteric Hepatitis: The Global Phenomenon and Bangladesh's Contextual Significance. *Bangladesh Journal of Infectious Diseases*, 10(2), pp.56-58.
- Hasan, M.R., 2024. Mental Health Challenges in Bangladesh Based on the Integrated Examination of Illicit Drug Use, Substance Abuse, Tobacco Consumption, and Escalating Suicidal Tendencies: A Comprehensive Review. *Bangladesh Journal of Infectious Diseases*, 11(1), pp.65-70.
- Hasan, M.R., 2024. Assessing the Psychosocial Determinants of Mental Health Decline Among Bangladeshi University Students During the COVID-19 Pandemic: A Rapid Systematic Review. *Asian Journal of Public Health and Nursing*, 1(3).
- Hasan, M.R., Rony, S.K.S., Baron, E.L. and Wana, G.W., 2024. Exploring Which Public Health Interventions Are More Effective to Reduce Maternal and Child Health Inequalities in South Asia: A Systematic Literature Review. *Asian Journal of Public Health and Nursing*, 1(3).
- Hawkes, C. and World Health Organization, 2004. *Nutrition labels and health claims: the global regulatory environment*. World Health Organization.
- Hoare, A., Virgo-Milton, M., Boak, R. et al. A qualitative study of the factors that influence mothers when choosing drinks for their young children. *BMC Res Notes* 7, 430 (2014). <https://doi.org/10.1186/1756-0500-7-430>
- Holliday, A., 2010. Submission, emergence and personal knowledge: new takes and principles for validity in decentred qualitative research. *Perils, pitfalls and reflexivity in qualitative research in education*, pp.10-30.
- Jacob, S.A. and Furgerson, S.P., 2012. Writing Interview Protocols and Conducting Interviews: tips for students new to the field of qualitative research in The Qualitative Report, Vol. 17.
- Jaime, P.C., Prado, R.R.D. and Malta, D.C., 2017. Family influence on the consumption of sugary drinks by children under two years old. *Revista de saúde pública*, 51(suppl 1), p.13s.
- Jansen, E., Daniels, L.A. and Nicholson, J.M., 2012. The dynamics of parenting and early feeding—constructs and controversies: a viewpoint. *Early Child Development and Care*, 182(8), pp.967-981.
- Kabir, R., Bai, A.C.M., Syed, H.Z., Hasan, M.R., Vinnakota, D., Kar, S.K., Singh, R., Sathian, B. and Arafat, S.Y., 2023. The effect of COVID-19 on the mental health of the people in the Indian subcontinent: a scoping review. *Nepal Journal of Epidemiology*, 13(2), p.1268. doi: 10.3126/nje.v13i2.52766
- Kabir, R., Hasan, M.R. and Arafat, S.Y., 2023. Epidemiology of suicide and data quality in Bangladesh. In *Suicide in Bangladesh: Epidemiology, Risk Factors, and Prevention* (pp. 1-15). Singapore: Springer Nature

Hasan et al. AJPHN 2024; 3 (X): - <http://doi.org/10.62377/9h2t9407>

Singapore. https://doi.org/10.1007/978-981-99-0289-7_1

- Kabir, R., Vinnakota, D., Dehghani, L., Sathian, B., Padhi, B.K. and Hasan, M.R., 2024. HIV and Violence among Female Sex Workers in India: A Scoping. *Women's Health Problems: A Global Perspective*, p.3. DOI: [10.5772/intechopen.115109](https://doi.org/10.5772/intechopen.115109)
- Kakulu, I.I., 2014. Qualitative research strategies and data analysis methods in real estate research-an innovative approach using the BB model. In *Estate Management Department Workshop, At Federal Polytechnic, Nekede, Owerri*.
- Keller, A. and Bucher Della Torre, S., 2015. Sugar-sweetened beverages and obesity among children and adolescents: a review of systematic literature reviews. *Childhood obesity*, 11(4), pp.338-346.
- Lobstein, T., 2014. Reducing consumption of sugar-sweetened beverages to reduce the risk of childhood overweight and obesity. *World Health Organisation*.
- Lopez, X.S.P.S., 2013. Advantages and disadvantages of secondary data collection nowadays. *Faculty of Management and Economics*.
- Malik, V. S., & Hu, F. B. (2022). The role of sugar-sweetened beverages in the global epidemics of obesity and chronic diseases. *Nature reviews. Endocrinology*, 18(4), 205–218. <https://doi.org/10.1038/s41574-021-00627-6>
- Marx, K., Greenthal, E., Ribakove, S., Grossman, E.R., Lucas, S., Ruffin, M. and Benjamin-Neelon, S.E., 2022. Marketing of sugar-sweetened beverages to youth through US university pouring rights contracts. *Preventive Medicine Reports*, 25, p.101688. Available at: <https://doi.org/10.1016/j.pmedr.2021.101688>
- Moran, D., 2001. Introduction to Phenomenology, Robert Sokolowski.
- Ogden, C. L., Carroll, M. D., Kit, B. K., & Flegal, K. M. (2014). Prevalence of childhood and adult obesity in the United States, 2011-2012. *JAMA*, 311(8), 806–814. <https://doi.org/10.1001/jama.2014.732>
- Park, S., Blanck, H.M., Sherry, B., Brener, N. and O'Toole, T., 2012. Factors associated with sugar-sweetened beverage intake among United States high school students. *The Journal of nutrition*, 142(2), pp.306-312. Available at <https://doi.org/10.3945/jn.111.148536>
- Patel, A. I., Schmidt, L. A., McCulloch, C. E., Blacker, L. S., Cabana, M. D., Brindis, C. D., & Ritchie, L. D. (2023). Effectiveness of a School Drinking Water Promotion and Access Program for Overweight Prevention. *Pediatrics*, 152(3), e2022060021. <https://doi.org/10.1542/peds.2022-060021>
- Patton, M. Q. (2002). Qualitative research & evaluation methods. 3rd edn. *Thousand Oaks, CA: Sage*. Page-433
- Pettigrew, S., Jongenelis, M., Chapman, K. and Miller, C., 2015. Factors influencing the frequency of children's consumption of soft drinks. *Appetite*, 91, pp.393-398. <https://doi.org/10.1016/j.appet.2015.04.080>
- Public Health England (2015) 'Why 5%?' An explanation of SACNs recommendations about sugars and health' [online]available from <https://www.gov.uk/government/publications/sacns-sugars-and-health-recommendations-why-5>
- Public Health England (2015) 'SACN Carbohydrates And Health Report' [online] available from <https://www.gov.uk/government/publications/sacn-carbohydrates-and-health-report>
- Public Health England (2017) 'Childhood Obesity: A Plan For Action' [online] available from <https://www.gov.uk/government/publications/childhood-obesity-a-plan-for-action/childhood-obesity-a-plan-for-action>
- Public Health England and Food Standards Agency (2014). 'National Diet and Nutrition Survey: Headline results from Years 1 to 4 (combined) of the rolling programme from 2008 and 2009 to 2011 and 2012' [online] available from <https://www.gov.uk/government/statistics/national-diet-and-nutrition-survey-results-from-years-1-to-4-combined-of-the-rolling-programme-for-2008-and-2009-to-2011-and-2012>.
- Rahman, A.A., Jomaa, L., Kahale, L.A., Adair, P. and Pine, C., 2018. Effectiveness of behavioral interventions to reduce the intake of sugar-sweetened beverages in children and adolescents: a systematic review and meta-analysis. *Nutrition reviews*, 76(2), pp.88-107. <https://doi.org/10.1093/nutrit/nux061>
- Reddy, C., 2019. In *Depth interview advantages and disadvantages* [online]
- Revenue, H.M., 2016. *Customs. Policy Paper: Soft Drinks Industry Levy* [online] (Available at: <https://www.gov.uk/government/publications/soft-drinks-industry-levy-review/hmt-hmrc-soft-drinks-industry-levy-review>)
- Sauro, J., 5. Reasons to perform a qualitative study. *Denver, CO: MeasuringU (September 22)*. Retrieved September, 22, p.2015.
- Savage, J.S., Fisher, J.O. and Birch, L.L., 2007. Parental influence on eating behavior: conception to adolescence. *The Journal of law, medicine & ethics*, 35(1), pp.22-34.
- Scharf, R.J. and DeBoer, M.D., 2016. Sugar-sweetened beverages and children's health. *Annual review of public health*, 37(1), pp.273-293.
- Spencer, B. (2016) 'Children Drink Just 25% Of The Water They Need' And Are Topping Up With Fizzy Drinks'. *Daily Mail* [online] 8 April. Available from <https://www.dailymail.co.uk/news/article-3529224/Children-drink-just-25-water-need-Youngsters-topping-fizzy-pop-officials-call-fundamental-shift-parents-feed-families.html>
- Statistics, A.B.O., 2014. Australian Health Survey: Nutrition First Results—Foods and Nutrients, 2011–

Hasan et al. AJPHN 2024; 3 (X): - <http://doi.org/10.62377/9h2t9407>

2012. *Australian Bureau of Statistics: Canberra, Australia.*
- Swana, N., 2019. *The use of error reporting data in patient safety research* (Doctoral dissertation, Stellenbosch: Stellenbosch University).
- Taber, D. R., Chriqui, J. F., Powell, L. M., & Chaloupka, F. J. (2012). Banning all sugar-sweetened beverages in middle schools: reduction of in-school access and purchasing but not overall consumption. *Archives of pediatrics & adolescent medicine*, 166(3), 256–262. <https://doi.org/10.1001/archpediatrics.2011.200>
- Theobald, C., & White, A. (2021). British Nutrition Foundation Healthy Eating Week 2020 - insights into the effect of COVID-19 on eating and activity habits of adults and children in the UK. *Nutrition bulletin*, 46(2), 238–245. <https://doi.org/10.1111/nbu.12500>
- Tipton, J.A., 2016. Reducing sugar-sweetened beverage intake among students: school-based programs and policies that work. *NASN School Nurse*, 31(2), pp.102-110. Available at <https://doi.org/10.1177/1942602X15578456>
- Van de Gaar, V.M., van Grieken, A., Jansen, W. and Raat, H., 2017. Children's sugar-sweetened beverages consumption: associations with family and home-related factors, differences within ethnic groups explored. *BMC public health*, 17, pp.1-11.
- Van Manen, M. (1997). *Researching Lived Experience: Human Science for an Action Sensitive Pedagogy* (2nd ed.). Routledge. Available at: <https://doi.org/10.4324/9781315421056>
- Vartanian, L.R., Schwartz, M.B. and Brownell, K.D., 2007. Effects of soft drink consumption on nutrition and health: a systematic review and meta-analysis. *American journal of public health*, 97(4), pp.667-675.
- Vereecken, C.A., Inchley, J., Subramanian, S.V., Hublet, A. and Maes, L., 2005. The relative influence of individual and contextual socio-economic status on consumption of fruit and soft drinks among adolescents in Europe. *The European Journal of Public Health*, 15(3), pp.224-232.
- Vinnakota, D., Rahman, Q.M., Sathian, B., Bai, A.C.M., Deividas, N., Pellissery, M.V., Kareem, S.K.A., Hasan, M.R., Parsa, A.D. and Kabir, R., 2022. Exploring UK Knife crime and its associated factors: A content analysis of online newspapers. *Nepal journal of epidemiology*, 12(4), p.1242. doi: 10.3126/nje.v12i4.49994.
- Von Philipsborn, P., Stratil, J. M., Burns, J., Busert, L. K., Pfadenhauer, L. M., Polus, S., Holzapfel, C., Hauner, H., & Rehfuss, E. (2019). Environmental interventions to reduce the consumption of sugar-sweetened beverages and their effects on health. *The Cochrane database of systematic reviews*, 6(6), CD012292. <https://doi.org/10.1002/14651858.CD012292.pub2>
- Wijnhoven, T.M.A., Van Raaij, J.M.A., Spinelli, A., Rito, A.I., Hovengen, R., Kunesova, M., Starc, G., Rutter, H., Sjöberg, A., Petrauskiene, A. and O'Dwyer, U., 2013. WHO European Childhood Obesity Surveillance Initiative 2008: weight, height and body mass index in 6–9-year children. *Pediatric obesity*, 8(2), pp.79-97. <https://doi.org/10.1111/j.2047-6310.2012.00090.x>
- Zandvian, A. and Daryapoor, E., 2013. Mixed methods research: A new paradigm in educational research. *Journal of Educational and Management Studies*, 3(4), pp.525-531.