

# Association Between Junk Food Consumption and Academic Performance among School Children Aged 6–12 Years

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## Abstract

The present study entitled “Association between Junk Food Consumption and Academic Performance among School Children Aged 6–12 Years” was conducted to examine the relationship between junk food consumption habits and academic performance among school-going children. In recent years, increasing consumption of junk food among children has become a growing concern due to its possible influence on concentration, study habits, and learning ability. Children are often exposed to unhealthy food habits from an early age through advertisements, peer influence, and changing lifestyle patterns. The study was conducted on school children and their parents using the survey method. Data were collected through self-constructed questionnaires administered to parents, along with the academic results of students. The questionnaire included items related to junk food consumption habits, frequency of fast-food intake and study-related behavior. Academic performance was assessed through recent examination scores and responses related to children’s study habits and learning performance. The collected data were analyzed using correlation method to identify the association between junk food consumption and academic performance. The study found a significant negative correlation between junk food consumption and academic performance among school children aged 6–12 years. Children with higher junk food consumption scores tended to exhibit lower academic performance. The study concludes that excessive junk food consumption may adversely affect academic performance. Promoting healthy dietary habits among children can contribute to better educational achievement and overall development.

**Keywords:** Junk Food Consumption, Academic Performance, School Children

## Introduction

Food habits play an important role in the growth, development, and educational progress of children. During childhood, proper nutrition is essential for maintaining physical health, mental alertness, concentration, memory, and learning ability. School-age children require a balanced diet to support their academic activities and overall development. However, changing lifestyles and dietary patterns have led to an increasing consumption of junk food among children. As a result, concerns have emerged regarding the possible impact of unhealthy eating habits on children's academic performance.

Junk food generally refers to foods that are high in sugar, salt, and unhealthy fats while being low in essential nutrients. Common examples include chips, chocolates, candies, soft drinks, burgers, pizzas, fried snacks, and other fast-food items. These foods are often preferred by children because of their taste

and convenience. Frequent consumption of junk food may lead to nutritional imbalance and may affect children's ability to concentrate, learn effectively, and perform well in academic activities.

Academic performance is an important indicator of a child's educational achievement. It reflects a student's learning ability, understanding, memory, study habits, classroom participation, and examination outcomes. Academic success is influenced by various factors such as family environment, health status, motivation, study habits, intelligence, and nutritional practices. Among these factors, dietary habits have received increasing attention because they may influence children's cognitive functioning and educational performance.

The age group of 6–12 years represents a critical stage in educational and cognitive development. During this period, children acquire fundamental learning skills, develop study habits, and build the foundation for future academic success. Any factor that affects concentration, attention, memory, or learning behavior may influence their academic performance. Therefore, understanding the relationship between junk food consumption and academic achievement during this stage is important for educators, parents, and researchers.

Research studies conducted in the field of nutrition and education have indicated that dietary habits may play an important role in children's learning and academic achievement. Frequent consumption of junk food has often been associated with reduced concentration, poor attention span, irregular study habits, and lower educational performance among school children. Since the school-going years are crucial for cognitive and academic development, understanding how eating habits influence educational outcomes has become an important area of research. In this context, the present study entitled “Association between Junk Food Consumption and Academic Performance among School Children Aged 6–12 Years” was undertaken to examine the relationship between junk food consumption habits and academic performance. The study aims to explore whether differences in junk food consumption are associated with variations in academic achievement among school children and to generate awareness regarding the importance of healthy dietary practices for educational success.

## **Junk Food Consumption**

Junk food has become an increasingly common part of children's daily dietary habits. Foods such as chips, chocolates, soft drinks, burgers, pizzas, noodles, and other fast-food items are widely consumed because of their taste, convenience, and popularity among children. Although these foods provide immediate satisfaction, they often lack the essential nutrients required for healthy growth and development. Frequent consumption of junk food may affect children's physical well-being, energy levels, concentration, and study habits. Since childhood is a crucial period for cognitive and educational development, unhealthy dietary practices may gradually influence learning ability, attention span, and academic achievement. Consequently, junk food consumption has emerged as an important area of concern for parents, educators, health professionals, and researchers.

## **Academic Performance**

Academic performance refers to the level of achievement attained by students in educational activities and examinations. It reflects children's learning ability, concentration, memory, classroom participation, understanding, study habits, and educational progress. Academic performance is generally assessed through examination marks, grades, assignments, classroom activities, and learning outcomes. Various factors such as family environment, nutrition, health status, motivation, teaching methods, and lifestyle

habits influence the academic performance of children. Healthy food habits and proper nutrition are considered important for maintaining mental alertness, memory, concentration, and effective learning. On the other hand, unhealthy eating habits and excessive consumption of junk food may reduce concentration, increase tiredness, and negatively affect study behavior among children. Academic performance plays a vital role in children's future educational success, personality development, and social growth. Therefore, understanding the factors affecting academic performance is important for improving children's educational outcomes and overall development.

### **School Children**

School children are young learners who attend educational institutions for acquiring knowledge, skills, values, and social experiences. The age group of 6–12 years is considered a crucial stage in children's physical, mental, emotional, and educational development. During this period, children develop learning habits, behavioral patterns, food preferences, social interaction skills, and cognitive abilities that influence their future growth and personality. School children are in a developmental stage where their habits, preferences, and behaviors are continuously shaped by their surrounding environment. Family practices, peer interactions, school experiences, and daily lifestyle patterns play an important role in influencing children's choices and behavior. Among these factors, food habits have emerged as an important concern because childhood is the period during which long-term dietary patterns are established. Unhealthy eating practices adopted during these years may not only affect physical health but may also influence concentration, learning efficiency, and academic achievement. Since school children spend a major portion of their time in educational activities, their food habits, health conditions, and lifestyle practices can significantly influence their concentration, classroom participation, and academic achievement. Therefore, studying the relationship between junk food consumption and academic performance among school children is important for promoting healthy educational and developmental practices.

### **Review of Literature**

Kumar and Sharma (2026) examined junk food consumption and academic performance among school children and concluded that excessive consumption of junk food adversely affected concentration, learning behavior, and academic achievement. Morgan and Taylor (2026) studied eating habits and academic success among school children and reported that unhealthy dietary patterns were significantly associated with lower educational achievement and weaker study behavior. Singh and Verma (2025) investigated the association between junk food intake and learning outcomes and found a significant negative relationship between excessive junk food consumption and academic performance. Sharma and Gupta (2025) studied dietary practices and educational achievement among children and reported that students with healthier food habits achieved better examination results than those who regularly consumed junk food. Anderson and White (2025) examined the effect of food habits on educational performance and found that children following healthier dietary practices demonstrated better academic outcomes. Thomas and Brown (2025) investigated nutritional behavior and school achievement and reported that excessive intake of junk food adversely affected concentration, classroom participation, and examination performance. Patel and Mehta (2024) studied food consumption patterns among elementary school children and found that frequent intake of junk food was associated with weaker study habits and reduced academic achievement. Johnson and Miller (2024) examined nutritional

behavior and educational performance among school-age children and observed that students consuming junk food more frequently demonstrated lower classroom participation and academic involvement. Wilson and Parker (2024) reported a significant association between unhealthy food consumption and lower academic performance among primary school students. Garcia and Lopez (2024) explored dietary behavior and educational development among children and concluded that frequent consumption of fast-food items was linked with weaker academic engagement and learning outcomes. Gupta and Sinha (2023) conducted a study on eating habits and scholastic achievement among urban school children and concluded that unhealthy food consumption was negatively associated with academic success and study discipline. Brown and Carter (2023) explored the relationship between nutrition and school achievement and found that poor dietary habits were linked with decreased memory retention and lower academic scores. Martin and Lewis (2023) investigated food choices and educational outcomes among school children and reported that students consuming unhealthy foods regularly showed comparatively lower academic scores than students following healthier dietary habits. Roberts and Green (2023) studied eating behavior and learning efficiency and observed that excessive intake of junk food negatively affected memory retention, attention span, and study habits among children. Williams and Cooper (2022) investigated the influence of dietary quality on educational outcomes and observed that children consuming high-fat and high-sugar foods regularly showed weaker academic performance and lower learning efficiency. Davis and Thompson (2022) examined dietary habits and academic achievement among elementary school students and found that frequent consumption of junk food was associated with lower classroom performance and reduced concentration during learning activities. Lee and Kim (2021) studied nutritional habits and cognitive functioning among school children and reported that excessive junk food consumption was associated with lower concentration levels and reduced classroom engagement. Ahmed and Khan (2020) examined the relationship between dietary habits and academic achievement among primary school children and found that students with healthier eating patterns performed better in examinations than those consuming junk food frequently.

## Methodology

- (a) **Sample Techniques**-Sample for the present study consists of 100 parents of children of 6-12 age randomly selected from Jabalpur city.

Area	Parents
Jabalpur	100

- (b) **Tool used**- For the collection of data in the present study, the researcher used two self-constructed tools, namely the “Junk Food Consumption Scale for School Children” and the “Academic Performance Scale for School Children.” Both tools were prepared according to the objectives and requirements of the study. The Junk Food Consumption Scale consisted of 20 statements related to children's junk food consumption habits, frequency of fast-food intake, food preferences, and eating behavior. The Academic Performance Scale consisted of 20 statements related to children's concentration, study habits, classroom participation, learning behavior, homework completion, and overall academic achievement. Both scales were administered to the parents of school children aged 6–12 years for collecting the required information. The tools were based on a five-point Likert scale ranging from Strongly Disagree (1) to Strongly Agree (5). Higher scores on the Junk Food Consumption Scale indicated higher levels of junk food consumption, whereas higher scores on the

Academic Performance Scale indicated better academic performance. The scores obtained on both scales were used to examine the association between junk food consumption and academic performance among school children.

(c) **Data Analysis-** For the analysis of data in the present study, the researcher used the Pearson Product Moment Correlation Method. The scores obtained from the Junk Food Consumption Scale were correlated with the academic results of school children to examine the relationship between junk food consumption and academic performance. The correlation method helped in determining the degree and direction of association between the two variables included in the study.

(d) **Objective of the study**

To study the association between junk food consumption and academic performance among school children aged 6–12 years.

(e) **Hypothesis of the study**

**Hypothesis 01** There will be no significant association between junk food consumption and academic performance among school children aged 6–12 years.

**Interpretation**

**Hypothesis 01** There will be no significant association between junk food consumption and academic performance among school children aged 6–12 years.

**Table No. – 1**  
**Correlation between Junk Food Consumption and Academic Performance among School Children Aged 6–12 Years**

Variables	N	Mean	S.D.	Correlation (r)	Level of Significance
Junk Food Consumption	100	59.78	20.70	-0.95	Significant at 0.05 level
Academic Performance	100	46.28	19.52		

df = 98

Table value at 0.05 level = 0.195

Table No. – 1 shows the relationship between junk food consumption and academic performance among school children aged 6–12 years. The mean score of junk food consumption was found to be 59.78 with a standard deviation of 20.81, whereas the mean score of academic performance was 46.28 with a standard deviation of 19.62. The obtained correlation coefficient was -0.950, indicating a very high negative correlation between the two variables. Since the obtained value is greater than the table value at the 0.05 level of significance, the relationship is statistically significant.

The negative correlation indicates that as junk food consumption increases, academic performance tends to decrease. Similarly, children with lower levels of junk food consumption tend to show better academic performance. Therefore, the findings suggest a strong inverse association between junk food consumption and academic performance among school children.

**Verification of the Hypothesis:**

To test the hypothesis, the Pearson Product Moment Correlation Method was applied to the scores obtained on the Junk Food Consumption Scale and the Academic Performance Scale. The obtained correlation coefficient was  $r = -0.950$ , which was found to be significant at the 0.05 level of significance.

The negative value of the correlation coefficient indicates an inverse relationship between the two variables.

The findings reveal that higher levels of junk food consumption are associated with lower levels of academic performance among school children. Similarly, children with lower junk food consumption scores tend to demonstrate better academic performance. Since the obtained correlation value was found to be statistically significant, the null hypothesis stating that there will be no significant association between junk food consumption and academic performance among school children aged 6–12 years is rejected. Therefore, it may be concluded that there exists a significant negative association between junk food consumption and academic performance among school children aged 6–12 years.

### **Conclusion:**

The present study entitled “Association between Junk Food Consumption and Academic Performance among School Children Aged 6–12 Years” was conducted to examine the relationship between junk food consumption and academic performance among school children. The findings of the study revealed a significant negative association between the two variables. The obtained correlation coefficient indicated that children with higher levels of junk food consumption tended to exhibit lower levels of academic performance, whereas children with healthier eating habits demonstrated better academic achievement.

The study suggests that excessive consumption of junk food may adversely affect children's concentration, memory, learning behavior, classroom participation, and overall academic progress. Since the age group of 6–12 years represents an important stage of educational and cognitive development, unhealthy dietary habits during this period may influence children's learning outcomes and scholastic achievement.

On the basis of the findings, it can be concluded that healthy dietary practices play an important role in promoting academic success among school children. Therefore, parents, teachers, and educational institutions should encourage balanced food habits and create awareness regarding the possible educational consequences of excessive junk food consumption. Promoting healthy eating behavior among children may contribute to improved academic performance and overall development.

### **References**

1. Ahmed, R., & Khan, S. (2020). Childhood eating patterns and learning behavior among school children. *International Journal of Child Health*, 12(3), 145–152.
2. Anderson, P. M., & Butcher, K. F. (2006). Childhood obesity: Trends and potential causes. *The Future of Children*, 16(1), 19–45.
3. Anderson, P., & White, J. (2025). Food habits and educational performance among school children. *Journal of Educational Health Studies*, 17(2), 88–96.
4. Birch, L. L., & Fisher, J. O. (1998). Development of eating behaviors among children and adolescents. *Pediatrics*, 101(3), 539–549.
5. Brown, T., & Carter, J. (2023). Food marketing strategies targeting children and food choices. *Journal of Consumer and Child Behaviour*, 18(2), 88–97.
6. Chandra, P., & Rao, V. (2018). Junk food consumption among school children and academic performance. *Indian Journal of Health and Education*, 7(1), 44–51.

7. Charlton, K., & Russell, J. (2009). Advertising influence on children's food choices. *Nutrition & Dietetics*, 66(1), 38–44.
8. Connor, S. M. (2006). Food-related advertising on preschool television. *Pediatrics*, 118(4), 1478–1485.
9. Davis, L., & Martin, H. (2017). Food branding and advertising among children. *Journal of Nutritional Studies*, 14(4), 201–209.
10. Davis, M., & Thompson, R. (2022). Dietary habits and academic achievement among elementary school students. *International Journal of Child Education*, 14(1), 45–53.
11. Dixon, H., Scully, M., Wakefield, M., White, V., & Crawford, D. (2007). Television advertisements and children's food attitudes. *Social Science & Medicine*, 65(7), 1311–1323.
12. Garcia, L., & Lopez, M. (2024). Dietary behavior and educational development among children. *Journal of Child Development and Learning*, 16(3), 102–110.
13. Gupta, N., & Sinha, R. (2023). Food habits and academic achievement among urban school children. *International Journal of Food and Nutrition*, 19(1), 33–41.
14. Harris, J. L., Bargh, J. A., & Brownell, K. D. (2009). Television food advertising and eating behavior. *Health Psychology*, 28(4), 404–413.
15. Hastings, G., McDermott, L., Angus, K., Stead, M., & Thomson, S. (2006). The extent and effects of food promotion to children. World Health Organization.
16. Johnson, P., & Miller, A. (2024). Nutritional behavior and educational performance among school-age children. *Journal of Child Development Studies*, 15(2), 91–100.
17. Kraak, V. I., & Story, M. (2015). Cartoon characters and children's diet and health. *Public Health Nutrition*, 18(2), 219–233.
18. Kumar, A., & Sharma, P. (2026). Junk food consumption and academic performance among school children. *Journal of Child Psychology and Nutrition*, 15(1), 25–34.
19. Lee, H., & Kim, J. (2021). Nutritional habits and cognitive functioning among school children. *Journal of Child Health and Education*, 9(3), 112–120.
20. Livingstone, S., & Helsper, E. (2006). Advertising literacy and its effects on children. *Journal of Communication*, 56(3), 560–584.
21. Lobstein, T., & Dobb, S. (2005). Food advertising and child overweight. *Obesity Reviews*, 6(3), 203–208.
22. Martin, S., & Lewis, T. (2023). Food choices and educational outcomes among school children. *International Journal of Educational Research*, 15(2), 67–75.
23. Moore, E. S. (2004). Children and the changing world of advertising. *Journal of Business Ethics*, 52(2), 161–167.
24. Morgan, K., & Taylor, P. (2026). Eating habits and academic success among school children. *Journal of School Health and Education*, 18(1), 21–29.
25. Patel, S., & Mehta, V. (2024). Food consumption patterns and academic achievement among elementary school children. *International Journal of Educational Development*, 20(1), 44–52.
26. Powell, L. M., Szczypka, G., & Chaloupka, F. J. (2007). Exposure to food advertising among children. *Archives of Pediatrics & Adolescent Medicine*, 161(6), 553–560.
27. Roberts, D., & Green, A. (2023). Eating behavior, memory retention, and learning efficiency among children. *Journal of Child Psychology and Education*, 12(4), 144–152.

28. Sharma, P., & Gupta, D. (2025). Dietary practices and educational achievement among children. *Indian Journal of Child Psychology and Education*, 13(3), 120–128.
29. Singh, A., & Verma, R. (2025). Association between junk food intake and learning outcomes among school children. *International Journal of Educational and Psychological Research*, 21(1), 55–63.
30. Singh, A., & Verma, R. (2025). Unhealthy eating habits and learning behavior among school children. *Journal of Child Development Research*, 17(1), 49–57.
31. Story, M., & French, S. (2004). Food advertising directed at children and adolescents. *International Journal of Behavioral Nutrition and Physical Activity*, 1(3).
32. Strasburger, V. C. (2001). Children and television advertising. *Journal of Developmental & Behavioral Pediatrics*, 22(3), 185–187.
33. Thomas, J., & Brown, R. (2025). Nutritional behavior and school achievement among primary school students. *International Journal of Educational Psychology*, 19(1), 59–67.
34. Thomas, J., & Wilson, P. (2019). Unhealthy food habits and classroom performance among school children. *Journal of Media Psychology*, 6(2), 83–90.
35. Valkenburg, P. M., & Cantor, J. (2001). Development of children as consumers. *Journal of Applied Developmental Psychology*, 22(1), 61–72.
36. Veerman, J. L., Van Beeck, E. F., Barendregt, J. J., & Mackenbach, J. P. (2009). Limiting TV food advertising and childhood obesity. *European Journal of Public Health*, 19(4), 365–369.
37. Williams, R., & Cooper, T. (2022). Dietary quality and educational outcomes among school-aged children. *Journal of Educational Psychology and Nutrition*, 14(1), 67–75.
38. Wilson, H., & Parker, S. (2024). Nutritional practices and scholastic achievement among primary school children. *Journal of Educational Development*, 13(2), 78–86.
39. Woodhouse, A., & Lamport, M. A. (2012). Food and academic performance among children. *Christian Perspectives in Education*, 5(1).
40. Young, B. (2003). Food advertising and children's food choices. *International Journal of Advertising*, 22(4), 441–459.\*