

Poor Health Habit Factors in Sabon Gari Secondary Schools

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Method Article

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Abstract

This study assessed common poor health habits and the reported influence of peer pressure, family context, and media and technology among students in selected public secondary schools in Sabon Gari Local Government Area, Kaduna State, Nigeria. A descriptive cross-sectional survey was conducted among 380 students drawn from 10 selected government secondary schools. The source project reported a multistage sampling process comprising simple random selection of schools, selection of 38 students per school, and planned stratification by sex. Data were collected with a 20-item structured questionnaire using a four-point Likert response format and analyzed primarily with frequencies and percentages. Females constituted 55.0% of respondents, while the largest age group was 13–15 years (39.7%). The most frequently endorsed poor health habits were frequent consumption of junk food or sugary snacks (76.5% agreement), skipping breakfast before school (73.9%), more than two hours of daily television/video-game use (68.7%), less than seven hours of sleep (68.7%), and low physical activity (58.2%). Peer-related items showed high agreement that fitting in with peers could lead to unhealthy behaviors (73.7%) and that friends influenced food choices (66.0%). Family-related items indicated strong parental support for physical activity (73.7%) and a substantial perceived socioeconomic effect on access to healthy foods (79.4%). Media-related findings included social-media influence on food choices (73.7%), screen time exceeding physical activity (73.9%), and unhealthy-food advertising affecting snacking (73.9%). Because the study reported descriptive statistics rather than inferential tests, the findings should be interpreted as reported perceptions and patterns rather than statistically demonstrated causal effects. The findings support integrated school, family, peer, and digital-environment interventions to strengthen adolescent health promotion.

1.0 INTRODUCTION

Adolescence is a formative stage of life in which physical, cognitive, emotional, and social development interact with the establishment of behaviors that may persist into adulthood (World Health Organization, 2025). Health-related routines involving diet, physical activity, sleep, substance use, and self-care are therefore relevant to both immediate adolescent well-being and longer-term non-communicable disease risk (WHO, 2025; Sahoo et al., 2015). Nutrition transition and the increasing availability of energy-dense foods have been associated with changing dietary patterns and increasing obesity risk in low- and middle-income settings (Popkin et al., 2012). Breakfast consumption is one example of a modifiable dietary behavior, with evidence indicating that habitual breakfast eaters tend to have better overall nutritional profiles than breakfast skippers in children and adolescents, although the strength of associations varies by outcome and study design (Rampersaud et al., 2005).

Physical inactivity is another important adolescent health concern, and WHO indicators define adequate activity in adolescents in terms of accumulating an average of at least 60 minutes of moderate-to-vigorous physical activity per day (WHO, 2026). Sleep is similarly important, with consensus recommendations indicating that teenagers aged 13–18 years should routinely obtain approximately 8–10 hours of sleep per night for optimal health (Paruthi et al., 2016). Social environments may amplify or

buffer these behaviors because adolescents are sensitive to peer norms and social approval, and resistance to peer influence develops across adolescence rather than remaining constant throughout the teenage years (Steinberg & Monahan, 2007).

Experimental and review evidence also indicates that peers can influence young people's eating and physical activity, while peer networks may simultaneously provide opportunities for positive health promotion (Salvy et al., 2012). Family environments are another major context for behavior, because parents can model eating, activity, and other health-related routines that children observe and potentially adopt (Salvy et al., 2011). The digital environment has added a further layer of influence, with evidence linking extensive screen exposure with adolescent well-being and with advertising effects that can prime food consumption (Twenge et al., 2018; Harris et al., 2009).

Systematic-review evidence suggests that greater screen time is associated with several adverse health and well-being outcomes in children and adolescents, although the nature and direction of individual associations vary across studies (Stiglic & Viner, 2019). These interacting influences make adolescent health behaviors a multidimensional public-health issue rather than a problem that can be attributed to individual choice alone (WHO, 2025). Within the study setting, the project reports concerns about breakfast skipping, unhealthy snack intake, physical inactivity, inadequate sleep, excessive screen exposure, peer pressure, family influence, and media exposure among students in public secondary schools in Sabon Gari Local Government Area.

The study therefore aimed to identify common poor health habits and describe how students perceived peer pressure, parental and family context, and media and technology as influences on those behaviors. The objectives were to Identify common poor health habits among students in selected public secondary schools in Sabon Gari Local Government Area; To assess the reported influence of peer pressure on students' health-related behaviors; To assess the reported role of parents and family background in shaping students' health habits, and To assess the reported influence of media and technology on the development of poor health habits among students.

2.0 MATERIALS AND METHODS

2.1 Study design and setting

A descriptive cross-sectional survey design was used to collect standardized self-reported information on health-related habits and perceived social and environmental influences among secondary school students in Sabon Gari Local Government Area (LGA) of Kaduna State, Nigeria, consistent with the design reported in the source project.

The study was restricted to selected public/government secondary schools in Sabon Gari LGA, and the project identified a total student population of approximately 25,288 across government secondary schools in the area. The project document is dated October 2025; exact dates of fieldwork were not reported, so no narrower data-collection period is asserted here.

2.2 Study population

The target population comprised students enrolled in government secondary schools within Sabon Gari LGA, including male and female students across junior and senior secondary classes. The achieved analytical sample comprised 380 respondents, corresponding to the sample size specified in the project for a population of 25,288 students.

2.3 Sample size and sampling procedure

The source project selected a sample of 380 students using the Krejcie and Morgan sample-size approach for a population of 25,288 (Krejcie & Morgan, 1970). Sampling was described as multistage, with three stages: simple random selection of 10 schools, selection of 38 students from each selected school, and planned stratified simple random selection of 19 male and 19 female students at the final stage. The ten selected schools were Government Basic School, Basawa; Government Junior Secondary School Aminu; Government Junior Secondary School Palladan; Government Basic School, Kwangila; Government Junior Secondary School Sakadadi; Government Basic School M/Gwanda; Government Girls Junior Secondary School Samaru; Government Basic School Z/D/Barno; Government Basic School Amina; and Government Basic School Mil Goma.

The achieved sample did not reproduce the planned equal sex allocation, because the final dataset contained 171 male respondents (45.0%) and 209 female respondents (55.0%). This discrepancy is reported explicitly because publication-quality methods should distinguish the intended sampling plan from the achieved sample rather than retrospectively assuming that the planned allocation was fully implemented.

2.4 Eligibility and respondent selection

The project indicates that participants were secondary school students enrolled in the selected government schools and that questionnaires were administered directly during school hours. Specific inclusion and exclusion criteria beyond school enrolment were not separately documented in the source project, so no additional eligibility criteria are introduced in this manuscript.

2.5 Data collection instrument

Data were collected using a structured self-administered questionnaire containing two sections, with Section A covering demographic characteristics and Section B covering health habits and perceived influences from peers, family, and media/technology. Section B comprised 20 statements scored on a four-point Likert scale: Strongly Agree (SA), Agree (A), Disagree (D), and Strongly Disagree (SD). Items 1–5 assessed common poor health habits, items 6–10 assessed peer influence, items 11–15 assessed parents/family and socioeconomic context, and items 16–20 assessed media and technology.

The instrument's face and content validity were assessed by the project supervisor and two health-education experts, whose feedback was used to refine the questionnaire before administration. No pilot-

study statistics or internal-consistency coefficient were reported in the source project, so reliability estimates such as Cronbach's alpha are not reported here.

2.6 Data collection procedure

The source project states that consent was obtained from school authorities and students, the study purpose was explained, confidentiality and anonymity were assured, questionnaires were administered during school hours, and completed questionnaires were collected immediately after completion. These procedures were intended to reduce loss of questionnaires and external influence during completion, but the project does not provide a numerical response rate or the number of questionnaires distributed.

2.7 Ethical considerations

The project reports informed consent procedures and assurances of confidentiality and anonymity for participants. The study included students aged 10–18 years, including participants younger than 18 years. The source project does not document parental or legal guardian informed consent for minors and does not provide a formal institutional research ethics committee approval statement.

2.8 Statistical analysis

The project specified descriptive analysis using frequencies, percentages, mean scores, and standard deviations. The reported Results section, however, presents frequencies and percentages for demographic variables and Likely responses; no inferential test results, confidence intervals, p-values, or regression estimates are provided. Accordingly, the present manuscript reports the available descriptive statistics and does not reinterpret the observed percentages as statistically significant effects or causal associations.

For the purpose of interpretation, agreement for each Likert item was calculated descriptively as the sum of SA and A responses divided by 380, with no additional inferential modelling performed.

3.0 RESULTS

3.1 Participant characteristics

A total of 380 students were included in the reported analysis. Females constituted 55.0% of the respondents and males 45.0% (Table 1), while the largest age group was 13–15 years (39.7%) followed by 16–18 years (36.6%) and 10–12 years (23.7%) (Table 2). Class-level representation was relatively even, ranging from 15.7% in SS3 to 18.4% in JSS2 (Table 3).

3.2 Common poor health habits

Breakfast often skipped before school was endorsed by 281 respondents (73.9% agreement), based on the combination of strongly agree and agree responses. >2 h video games/TV daily was endorsed by 261 respondents (68.7% agreement), based on the combination of strongly agree and agree responses. Physical activity rarely engaged weekly was endorsed by 221 respondents (58.2% agreement), based on

the combination of strongly agree and agree responses. Junk food/sugary snacks frequently consumed was endorsed by 291 respondents (76.6% agreement), based on the combination of strongly agree and agree responses. <7 h sleep most nights was endorsed by 261 respondents (68.7% agreement), based on the combination of strongly agree and agree responses. The highest agreement was observed for frequent consumption of junk food or sugary snacks (76.5%), followed by breakfast skipping (73.9%), more than two hours of daily television or video-game use (68.7%), less than seven hours of sleep most nights (68.7% after rounding from 68.6% in the source), and low physical activity (58.2% after direct calculation from the reported frequencies) (Table 4).

3.3 Peer pressure and social influence

Friends influence food choices was endorsed by 251 respondents (66.1% agreement). Pressure to fit in leads to unhealthy behaviors was endorsed by 280 respondents (73.7% agreement). Friends discuss/encourage healthy habits was endorsed by 210 respondents (55.3% agreement). Peer pressure affects sports/physical activity was endorsed by 251 respondents (66.1% agreement). Unhealthy behaviors adopted because friends do them was endorsed by 261 respondents (68.7% agreement).

The strongest peer-related agreement concerned the perception that pressure to fit in with peers leads to unhealthy behaviors (73.7%), while 68.7% reported that unhealthy behaviors were sometimes adopted because friends were doing them (Table 5). A positive peer influence was also observed, with 55.3% of respondents agreeing that friends discuss and encourage healthy habits (Table 5).

3.4 Parents, family background and socioeconomic context

Parents/guardians encourage a balanced diet was endorsed by 270 respondents (71.1% agreement). Family background influences food preferences was endorsed by 271 respondents (71.3% agreement). Parents/guardians model healthy habits was endorsed by 261 respondents (68.7% agreement). Socioeconomic status affects access to healthy food was endorsed by 302 respondents (79.5% agreement). Parents/guardians support sports/physical activity was endorsed by 280 respondents (73.7% agreement). The highest family-context agreement concerned the perceived effect of socioeconomic status on access to healthy food options (79.5%), followed by parental support for sports or physical activity (73.7%), family background affecting food preferences (71.3%), parental encouragement of a balanced diet (71.1%), and parental modelling of healthy habits (68.7%) (Table 6).

3.5 Media and technology

Social media influences food choices/eating habits was endorsed by 280 respondents (73.7% agreement). Screen time exceeds physical activity time was endorsed by 281 respondents (73.9% agreement). Unhealthy-food advertisements affect snacking was endorsed by 281 respondents (73.9% agreement). Online content promotes unhealthy behaviors was endorsed by 261 respondents (68.7% agreement). Technology used to track physical activity/health was endorsed by 191 respondents (50.3% agreement). Agreement was highest for screen time exceeding physical activity time (73.9%), unhealthy-

food advertising affecting snacking (73.9%), and social media influencing food choices (73.7%) (Table 7). A smaller proportion, 50.3%, agreed that technology was used to track physical activity or health habits, indicating that the digital environment was perceived as both a risk context and a potential health-promotion resource (Table 7).

4.0 TABLES

Table 1
Distribution of respondents by sex

Sex	n	%
Male	171	45.0
Female	209	55.0
Total	380	100.0

Table 2
Distribution of respondents by age

Age (years)	n	%
10–12	90	23.7
13–15	151	39.7
16–18	139	36.6
Total	380	100.0

Table 3
Distribution of respondents by class

Class	n	%
JSS1	61	16.1
JSS2	70	18.4
JSS3	65	17.1
SS1	61	16.1
SS2	63	16.6
SS3	60	15.7
Total	380	100.0

Table 4
Common poor health habits among respondents

Statement	SA n (%)	A n (%)	D n (%)	SD n (%)	Agreement SA + A
Breakfast often skipped before school	160 (42.1%)	121 (31.8%)	60 (15.8%)	39 (10.3%)	281 (73.9%)
> 2 h video games/TV daily	150 (39.5%)	111 (29.2%)	70 (18.4%)	49 (12.9%)	261 (68.7%)
Physical activity rarely engaged weekly	121 (31.8%)	100 (26.3%)	90 (23.7%)	69 (18.2%)	221 (58.2%)
Junk food/sugary snacks frequently consumed	181 (47.6%)	110 (28.9%)	60 (15.8%)	29 (7.6%)	291 (76.6%)
< 7 h sleep most nights	140 (36.8%)	121 (31.8%)	70 (18.4%)	49 (12.9%)	261 (68.7%)

Table 5
Influence of peer pressure on students' health-related behaviours

Statement	SA n (%)	A n (%)	D n (%)	SD n (%)	Agreement SA + A
Friends influence food choices	130 (34.2%)	121 (31.8%)	80 (21.1%)	49 (12.9%)	251 (66.1%)
Pressure to fit in leads to unhealthy behaviours	150 (39.5%)	130 (34.2%)	61 (16.1%)	39 (10.3%)	280 (73.7%)
Friends discuss/encourage healthy habits	100 (26.3%)	110 (28.9%)	101 (26.6%)	69 (18.2%)	210 (55.3%)
Peer pressure affects sports/physical activity	121 (31.8%)	130 (34.2%)	80 (21.1%)	49 (12.9%)	251 (66.1%)
Unhealthy behaviours adopted because friends do them	140 (36.8%)	121 (31.8%)	70 (18.4%)	49 (12.9%)	261 (68.7%)

Table 6
Role of parents and family background in shaping students' health habits

Statement	SA n (%)	A n (%)	D n (%)	SD n (%)	Agreement SA + A
Parents/guardians encourage a balanced diet	160 (42.1%)	110 (28.9%)	71 (18.7%)	39 (10.3%)	270 (71.1%)
Family background influences food preferences	150 (39.5%)	121 (31.8%)	70 (18.4%)	39 (10.3%)	271 (71.3%)
Parents/guardians model healthy habits	140 (36.8%)	121 (31.8%)	80 (21.1%)	39 (10.3%)	261 (68.7%)
Socioeconomic status affects access to healthy food	181 (47.6%)	121 (31.8%)	50 (13.2%)	28 (7.4%)	302 (79.5%)
Parents/guardians support sports/physical activity	150 (39.5%)	130 (34.2%)	71 (18.7%)	29 (7.6%)	280 (73.7%)

Table 7
Influence of media and technology on development of poor health habits

Statement	SA n (%)	A n (%)	D n (%)	SD n (%)	Agreement SA + A
Social media influences food choices/eating habits	150 (39.5%)	130 (34.2%)	70 (18.4%)	30 (7.9%)	280 (73.7%)
Screen time exceeds physical activity time	160 (42.1%)	121 (31.8%)	60 (15.8%)	39 (10.3%)	281 (73.9%)
Unhealthy-food advertisements affect snacking	170 (44.7%)	111 (29.2%)	60 (15.8%)	39 (10.3%)	281 (73.9%)
Online content promotes unhealthy behaviours	140 (36.8%)	121 (31.8%)	80 (21.1%)	39 (10.3%)	261 (68.7%)
Technology used to track physical activity/health	90 (23.7%)	101 (26.6%)	110 (28.9%)	79 (20.8%)	191 (50.3%)

5.0 DISCUSSION

The study demonstrates a high level of reported engagement in several poor health habits among students in the sampled public secondary schools, with the greatest agreement observed for junk food or sugary-snack consumption and breakfast skipping (Table 4).

This pattern is consistent with evidence that adolescent dietary behavior is shaped by food availability, social context, and broader nutrition transition processes, particularly where energy-dense foods are readily accessible (Popkin et al., 2012). The high level of breakfast skipping is important because previous synthesis work has found that regular breakfast consumption is generally associated with better nutritional profiles among children and adolescents, although associations with body weight and academic outcomes are not uniform across studies (Rampersaud et al., 2005).

The study also found that substantial proportions of respondents reported prolonged screen exposure and low physical activity, which is relevant because WHO tracks adolescent physical activity using a benchmark of at least 60 minutes of moderate-to-vigorous activity per day (WHO, 2026). The coexistence of screen exposure and low activity may reflect displacement of time that could otherwise be used for movement, although the cross-sectional design cannot establish that one behavior caused the other (Stiglic & Viner, 2019). Insufficient sleep was also common, and this is concerning because teenagers generally require 8–10 hours of sleep per night, with shorter sleep associated with poorer attention, learning, and other health outcomes (Paruthi et al., 2016). The peer domain showed that social approval and conformity may be important perceived influences on students' behaviors, particularly because 73.7% agreed that pressure to fit in could lead to unhealthy behaviors (Table 5).

This finding is compatible with developmental evidence showing that susceptibility to peer influence changes across adolescence and that social context can shape decisions and behaviour during this period (Steinberg & Monahan, 2007). At the same time, 55.3% of students agreed that friends discuss and encourage healthy habits, reinforcing the possibility that peer networks can operate as both risk and protective contexts (Salvy et al., 2012). The family domain produced a similarly mixed picture because students reported substantial parental support for balanced diets and physical activity while also reporting that socioeconomic status constrained access to healthy food choices (Table 6).

Experimental evidence comparing parents and friends suggests that the source of social influence can differ by developmental stage and by the specific food behavior being considered, supporting the interpretation of family and peer environments as complementary rather than interchangeable influences (Salvy et al., 2011).

The media and technology results showed high agreement that social media and unhealthy-food advertising influenced food choices and snacking, while only about half of respondents reported using technology to track physical activity or health habits (Table 7). This pattern is consistent with experimental evidence that food advertising can stimulate automatic snacking behaviour and with broader evidence that screen exposure may be associated with adverse health and well-being outcomes (Harris et al., 2009; Stiglic & Viner, 2019).

The findings therefore support a multidimensional interpretation in which adolescent health habits emerge from the interaction of individual routines with peer, family, socioeconomic, and digital environments, rather than from a single determinant (WHO, 2025). Importantly, the present data are descriptive and self-reported, so statements such as “peer pressure influences” or “media causes” should be understood as respondents' perceptions rather than demonstrated causal effects.

5.1 Strengths

The study included 380 students across 10 government schools and covered both junior and senior secondary classes, providing broad coverage of the defined school-based population. The questionnaire

addressed multiple domains of adolescent health behaviour, allowing the study to describe dietary, activity, sleep, peer, family, and digital influences within one survey.

The research retains the reported data and distinguishes descriptive findings from causal or inferential claims, which reduces the risk of overstating the evidence.

5.2 Limitations

The cross-sectional design captures perceptions and behaviours at one point in time and cannot establish temporality or causation. All behavioural measures were self-reported, which may introduce recall and social-desirability biases, particularly for sensitive behaviours.

The source project describes a planned equal sex allocation during the final sampling stage, but the achieved sample was 45.0% male and 55.0% female, indicating implementation differed from the stated sampling plan. The project does not report a response rate, pilot reliability statistics, or a formal inferential analysis, limiting assessment of measurement reliability and statistical association. Formal research-ethics committee approval is not documented in the source project and should be clarified before journal submission.

The study is confined to selected public schools in one LGA, so generalisation to all Nigerian adolescents or to private-school populations should be cautious.

6.0 CONCLUSION

Poor health habits were commonly reported among the surveyed secondary school students, particularly frequent junk food or sugary-snack consumption, breakfast skipping, prolonged screen exposure, and inadequate sleep.

Students also reported substantial peer, family, socioeconomic, and media-related influences, demonstrating that adolescent health behavior in the study setting is embedded in multiple social and environmental contexts. The evidence supports integrated health-promotion strategies rather than interventions focused only on individual knowledge or motivation, while the descriptive study design limits causal interpretation.

7.0 RECOMMENDATIONS

1. Schools should strengthen practical health-education content around healthy food choices, breakfast, physical activity, sleep, and responsible screen use, supported by routine health-promotion activities (WHO, 2025).
2. Peer-led health clubs or peer-mentor approaches should be considered because the study found both harmful and protective peer influences (Salvy et al., 2012).
3. Parents and guardians should be engaged through school-family program that reinforce balanced diets, physical activity, sleep routines, and constructive monitoring of digital media (Salvy et al.,

2011).

4. Schools and policymakers should improve access to affordable healthy food options and address socioeconomic barriers identified by students as important determinants of food choice.
5. Media-literacy interventions should help students recognize unhealthy-food marketing and critically evaluate online content, while positive uses of digital tools for health tracking can be encouraged (Harris et al., 2009; Stiglic & Viner, 2019).
6. Future studies should use validated instruments, document response rates and ethics approval, and apply inferential methods such as multivariable regression where appropriate to quantify associations between determinants and composite health-habit outcomes.

Declarations

8.1 Ethics Approval and accordance: The study protocol was reviewed and approved by the Department of Human Kinetics and Health Education, Faculty of Education, Ahmadu Bello University, Zaria, Kaduna State, Nigeria, in accordance with the department's guidelines for research involving human participants. The research was carried out following the ethical principles outlined in the Declaration of Helsinki. Formal institutional research ethics committee approval was obtained prior to data collection. All procedures performed in this study involving human participants were in accordance with the ethical standards of the institutional research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards..

8.2 Consent to participate: Informed consent was obtained from all individual participants included in the study. For participants under 18 years of age, informed consent was obtained from their parents or legal guardians prior to their participation, and assent was also obtained from the minor participants themselves. The study purpose, procedures, risks, and benefits were fully explained to both parents/guardians and participants before obtaining consent. School authorities provided administrative permission for data collection.

8.3 Consent for publication: Not Applicable.

8.4 Data Availability Statement: All data generated or analyzed during this study are included in this published article .

8.5 Competing interests: The authors declare that there was no competing interest.

8.6 Funding: No external funding statement was received.

8.7 Clinical trial number: Not applicable.

8.8 Author contributions

8.9.1 Study concept and design: Abdullahi Usman Ndabata, and Alim Hammawa Hammajam

8.9.2 Data collection: Abdullahi Usman Ndabata, and Alim Hammawa Hammajam

8.9.3 Drafting and revision of paper: Abdullahi Usman Ndabata, and Alim Hammawa Hammajam

All authors have read, edited, and contributed to the content of this manuscript. This work has not been previously published and has not been considered for publication elsewhere.

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Figures

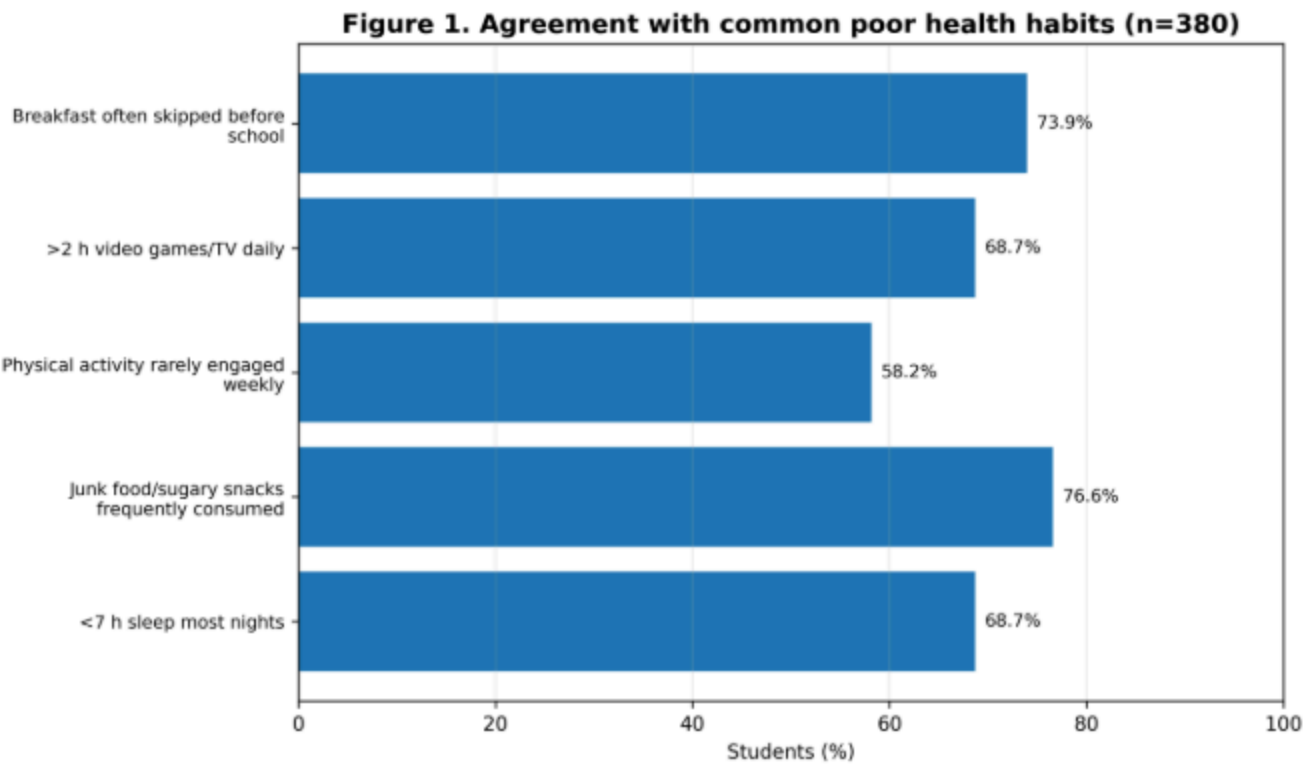


Figure 1

Proportion of respondents agreeing (SA+A) with statements describing common poor health habits (n=380).

Figure 2. Peer-related influences on health behaviours (n=380)

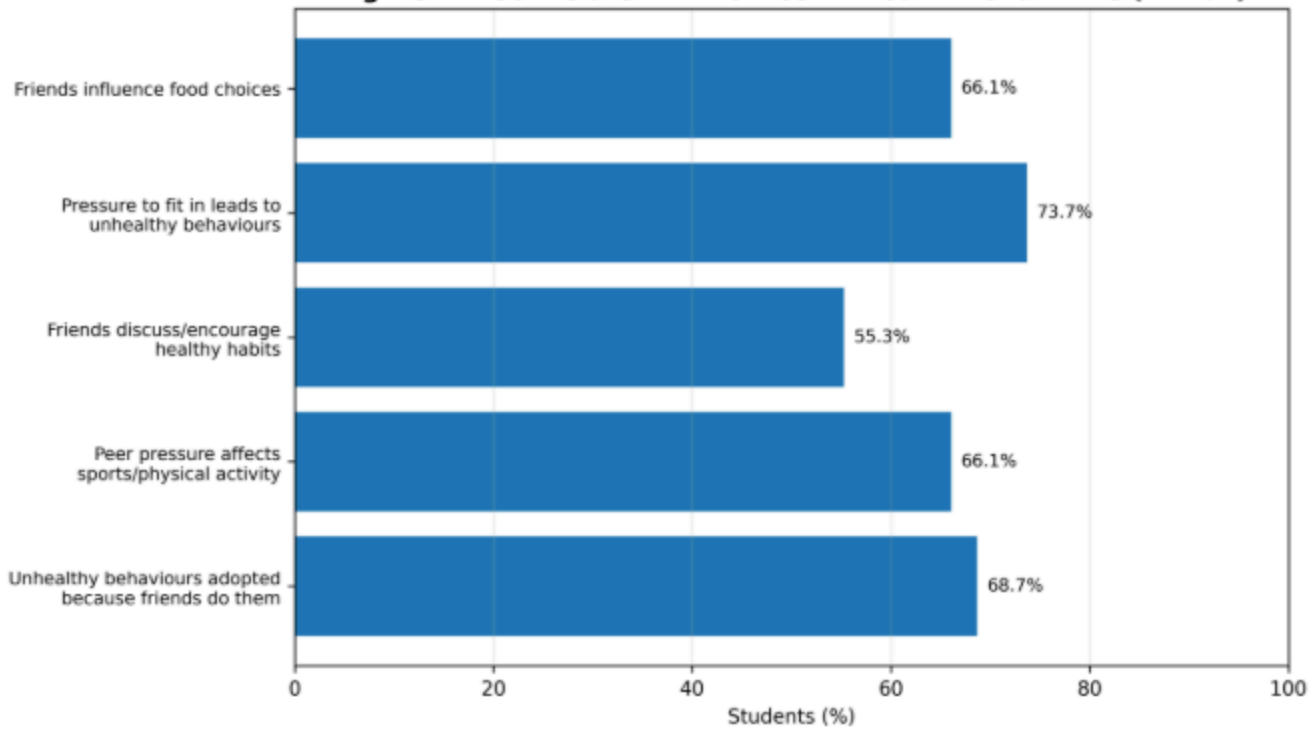


Figure 2

Proportion of respondents agreeing (SA+A) with peer-influence statements (n=380).

Figure 3. Parental, family and socioeconomic influences (n=380)

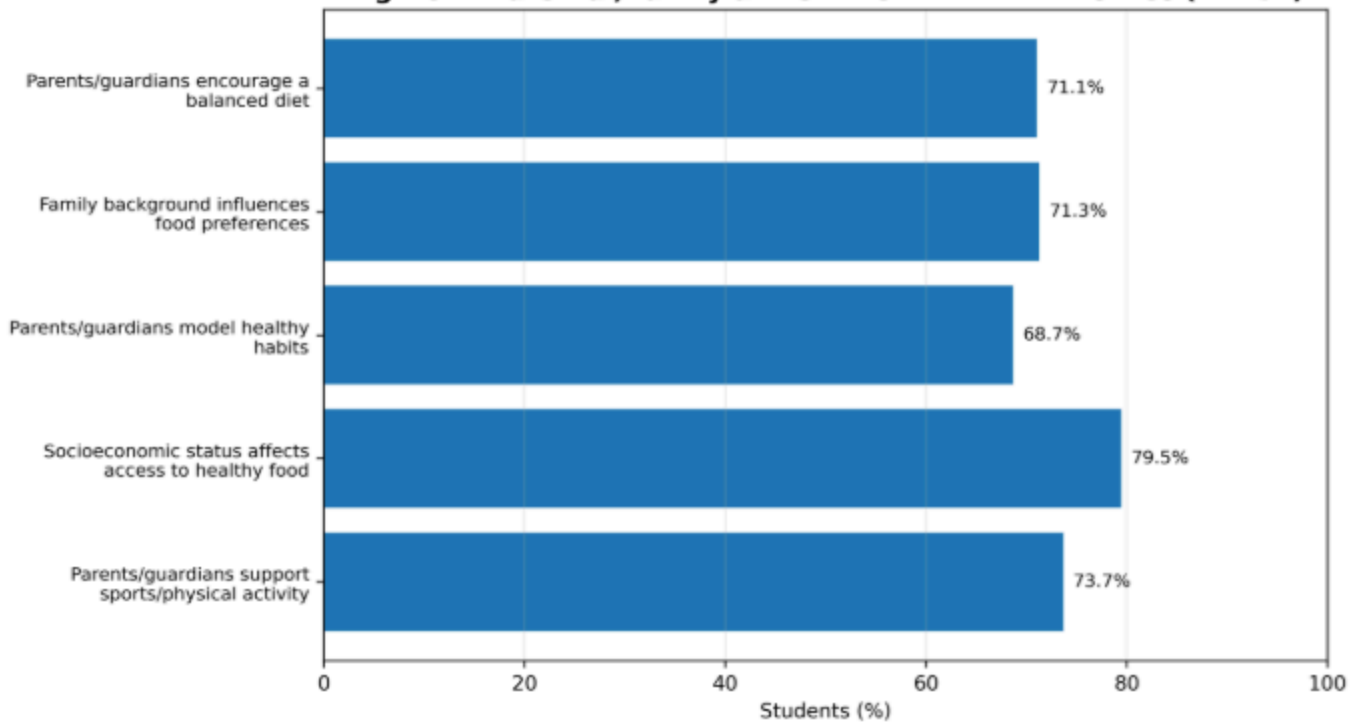


Figure 3

Proportion of respondents agreeing (SA+A) with family and socioeconomic statements (n=380).

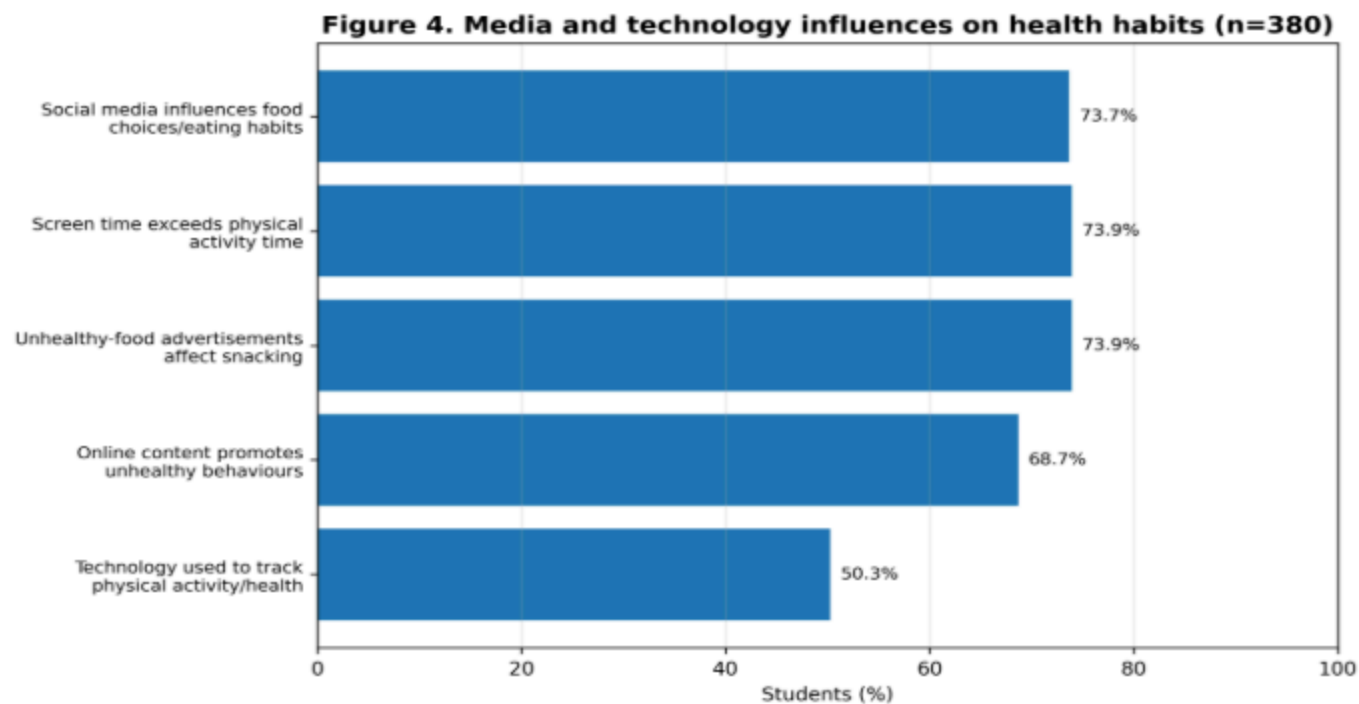


Figure 4

Proportion of respondents agreeing (SA+A) with media and technology statements (n=380).

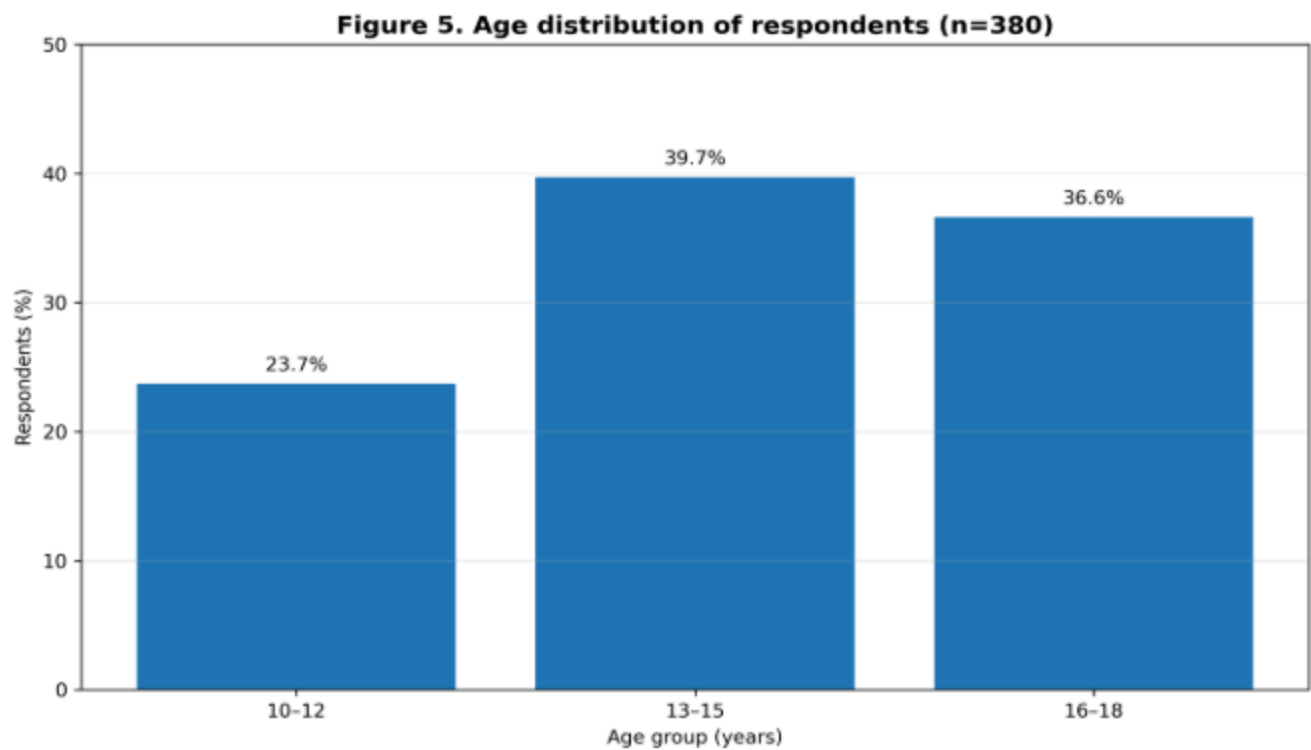


Figure 5

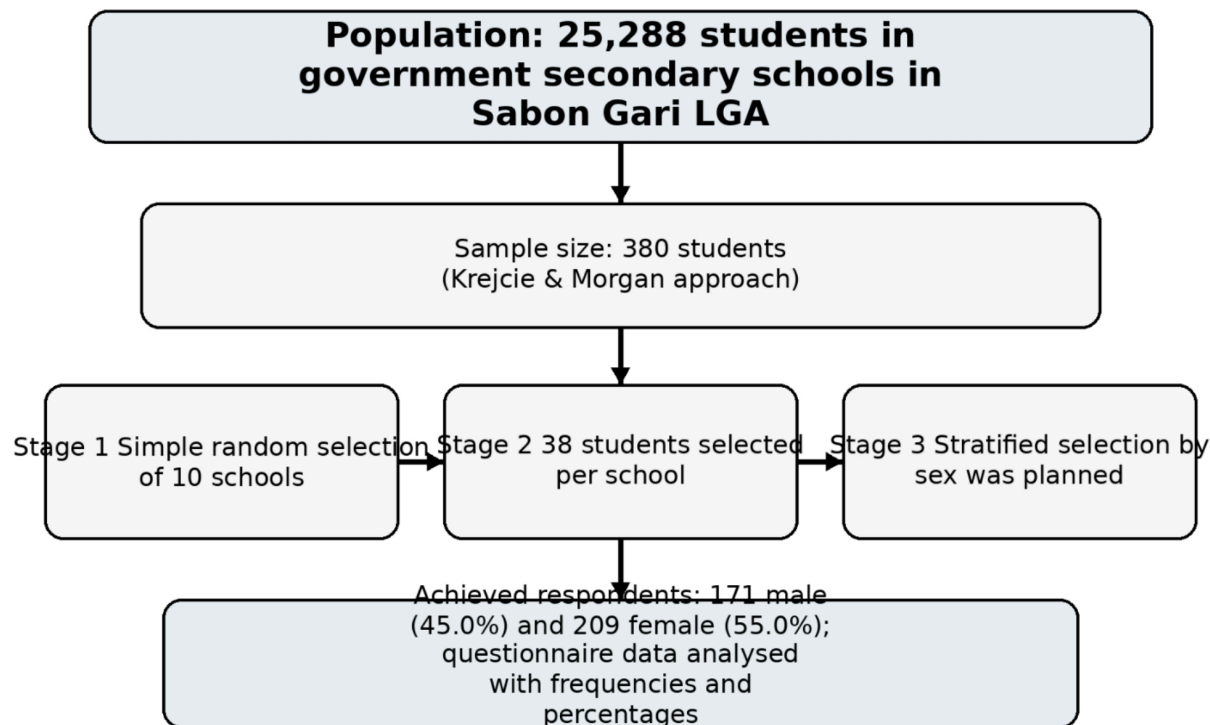


Figure 6

Sampling process as described in the source project and the achieved respondent sex distribution.

Supplementary Files

This is a list of supplementary files associated with this preprint. Click to download.

- [SupplementaryDataPoorHealth.csv](#)
- [SupplementaryMaterials.docx](#)
- [floatimage1.png](#)