2025

BASELINE SURVEY REPORT | BANGLADESH

Assessing the Conversion of School Resources into Children's Capabilities: A Study of Well-Being and Agency through the Capability Approach

RDRS Bangladesh

RDRS Bangladesh | KATHMANDU UNIVERSITY SCHOOL OF ARTS | LAKE | GPE KIX | IDRC · CRDI Canada

Disclaimers:

The project 'Promoting Gender Equality and Social Inclusion in Schools Building on What Children Value and Aspire to Do and Be' is being implemented by RDRS Bangladesh, with support from the Global Partnership for Education Knowledge and Innovation Exchange (GPE KIX) and the International Development Research Centre (IDRC). The views expressed herein do not necessarily represent those of IDRC or its Board of Governors.

Acknowledgement

This report comes up based on a baseline survey conducted by RDRS Bangladesh in the eight schools in Cox's Bazar, Bangladesh. The report is an output of the project titled 'Promoting Gender Equality and Social Inclusion in Schools Building on What Children Value and Aspire to Do and Be' funded by Global Partnership for Education's (GPE) Knowledge and Innovation Exchange (KIX) and International Development Research Centre (IDRC).

In completing the work presented in this report, we are grateful to Learning Innovation and Knowledge Exchange (LIKE) Lab, Kathmandu University School of Arts, Nepal, for their continuous support and guidance.

We also would like to praise the whole research team of RDRS Bangladesh for their active participation in the field work, and for their commendable inputs in the field observation part.

We would like to express our heartfelt gratitude to the teachers of the eight participating schools in Cox's Bazar for their active engagement in collecting data during the survey. We also gratefully acknowledge the support of the Education Offices, Head teachers and local stakeholders, whose cooperation significantly facilitated the fieldwork.

Our final thanks to all the children who willingly participated in meaningful discussions and conversations with us during the field work.

To them all we are grateful.

List of Abbreviations

AA	: Agency Achievement
AF	: Agency Freedom
CA	: Capability Approach
FGD	: Focus Group Discussion
GESI	: Gender Equality and Social Inclusion
GPE	: Global Partnership for Education
ICT	: Information and Communication Technology
IDRC	: International Development Research Centre
KIX	: Knowledge and Innovation Exchange
LIKE	: Learning Innovation and Knowledge Exchange
M&E	: Monitoring and Evaluation
PAR	: Participatory Action Research
STATA	: Statistical Analysis Software used for data processing
WA	: Well-Being Achievement
WF	: Well-Being Freedom

Executive Summary

The concept of Well-being is a multifaceted construct that encompasses physical, psychological, and social dimensions of wellness, health, and happiness. The baseline study used Participatory Action Research (PAR) applied the Capability Approach (CA) to examine how school resources and environments contribute to children's well-being and agency in the context of Cox's Bazar, Bangladesh. The study assessed children's perceptions of the availability, satisfaction, and perceived importance of resources within school settings and explored how these factors shape their capabilities and freedoms to achieve valued educational outcomes.

The research covered eight schools across five upazilas in Cox's Bazar and engaged 350 students using the Gender Equality and Social Inclusion (GESI) Diagnostic Framework. The number of 16 valued capabilities spanning domains such as education, physical health, mental well-being, participation, social inclusion, and autonomy was examined. Data were analyzed using descriptive statistics in STATA, SPSS and Excel, complemented by qualitative field observations.

The results revealed that students perceived high availability and satisfaction with core educational resources such as textbooks (M=4.73) and stationery (M=4.65), reflecting effective learning materials provided well. However, significant service-performance gaps were observed in several domains. Teacher availability (M=3.85) and quality of classroom teaching were rated below their perceived importance (M=4.82), indicating unmet expectations in instructional support. Similarly, library and ICT facilities showed low availability (M=3.18) and satisfaction (M=3.26) despite their high perceived importance (M=4.70), underscoring serious resource deficits.

In the domain of physical and health well-being, access to clean drinking water (M=4.60) and toilet facilities (M=4.71) was rated highly available, yet satisfaction with their quality and usability was significantly lower (M=3.22). The provision of sanitary pads and first aid services recorded some of the lowest mean scores (availability M=3.05; satisfaction M=2.97), revealing persistent gender and health disparities. Mid-day meal programs, though valued highly (M=4.58), were inconsistently implemented school level.

In terms of social and mental well-being, students expressed strong feelings of love, respect, and belonging, reporting high importance (M=4.75) for relationships with peers and teachers. However, grievance redress mechanisms and psychosocial support services were limited (availability M=3.45; satisfaction M=3.38). While Parent–Teacher Meetings were well institutionalized, Child Clubs, intended to promote participation and leadership, were either inactive or absent, reducing opportunities for student voice and agency.

Analysis across the 16 capabilities with the four core well-being metrics of the Capability Approach—(i) Well-being Freedom, (ii) Well-being Achievement, (iii) Agency Freedom, and (iv) Agency Achievement—indicated that children's achievements in well-being are stronger than

their perceived freedoms to exercise choice. The average Well-being Achievement score (M=47.62) slightly exceeded Well-being Freedom (M=46.89), suggesting that while students benefit from existing school structures, their autonomy and participation remain constrained. Agency metrics (M≈47.50) reflected moderate levels of choice and accomplishment, with notable room for improvement in areas of aspiration, decision-making, and future planning.

Overall, the findings reveal that Bangladeshi students thrive in relatively safe and supportive environments, yet their capabilities are unevenly developed due to infrastructural, institutional, and gender-related barriers. The study suggests targeted investments to improve the quality, accessibility, and inclusiveness of educational and health-related facilities, enhance teacher capacity, and strengthen psychosocial and participatory mechanisms to foster equitable learning environments for all students.

Keywords: Capability Approach, Children, Well-being, Agency, Freedom, Achievement, Gender Equality, Social Inclusion, Action Research, Cox's Bazar, Bangladesh

Table of Contents

List of Tables

List of Figures

Introduction

Education is a key driver of human development and social transformation. In recent decades, there has been a noticeable shift in the social sciences toward the study of child well-being from a comprehensive perspective that transcends conventional viewpoints and integrates novel and multidisciplinary elements. (Domínguez-Serrano & Del Moral-Espín, 2022)

A state of wellness, health, and happiness is portrayed by the complex concept of well-being, which is employed in many academic fields. Research recognizes that the concept of well-being is a complicated, perplexing, and contentious one that needs a strong framework for assessment (Knight & McNaught, 2011). The Sen's Capability Approach (CA) is one of the most popular methods for analyzing well-being. According to Sen, the most crucial factor in assessing well-being is taking into account people's true abilities and characteristics. As an assessment framework, CA emphasizes that economic, social, and political systems should be evaluated according to people's actual freedoms or capacities to fulfill important life functions (Clark, n.d.; Sen, 2005)

Although the capability approach has been widely applied to assess well-being, limited research has focused on developing and contextualizing capability lists for children in educational settings. The lack of context-specific resources and indicators makes it challenging to capture how school environments influence children's capabilities, well-being, and agency. Understanding these dimensions is essential for promoting inclusive and equitable education that enables every child to flourish (Domínguez-Serrano & Del Moral-Espín, 2022).

This study aims to explore how school environments, available resources, and social interactions influence children's capabilities, well-being, and agency. Specifically, the study purpose to identify the valued capabilities that children consider important for their learning and personal development, while examining how gender and social inclusion shape their opportunities to realize these capabilities. Grounded in the capability approach, the research seeks to generate insights that can support inclusive education policies fostering equality and empowerment for all students(Alkire, 2002).

This research is crucial because it contributes to a deeper understanding of how school environments and social contexts shape children's capabilities, well-being, and agency from a gender and inclusion perspective. Despite progress in achieving educational access, inequalities in participation, learning opportunities, and empowerment persist, particularly for marginalized groups (Aikman & Unterhalter, 2005). This study employs the capability approach in the educational context. This study provides a nuanced framework for assessing what children are able to do and be, beyond traditional measures of achievement (Alkire, 2002; Roberts, n.d.). The findings will inform evidence-based strategies and inclusive policies aimed at promoting equitable education that values children's voices and diverse experiences (Biggeri et al., 2019). In doing

so, the study supports the global agenda of Sustainable Development Goal 4, which calls for inclusive and equitable quality education and lifelong learning opportunities for all.

Building on the capability approach, this study seeks to explore how school environments and available resources influence children's well-being and agency within the educational context. Specifically, it addresses three interrelated research questions. First, what are school children's perceptions of the availability, satisfaction, and importance of resources in supporting their valued educational capabilities? Second, how do children perceive and prioritize well-being freedom, well-being achievement, agency freedom, and agency achievement in relation to their valued capabilities? Finally, how are agency and well-being developed and supported within Bangladeshi school settings? These questions aim to generate insights into how schools can enhance equitable opportunities for all learners, consistent with the principles of the capability approach and inclusive education (Biggeri et al., 2019; Robeyns, n.d.).

Objectives of the Study

The primary objectives of this study are as follows:

1. Assess the availability, satisfaction, and perceived importance of school resources from a child-centered perspective.
2. Identify the valued capabilities that children aspire to achieve within educational settings.
3. Examine gender equality and social inclusion (GESI) experiences among students.
4. Explore barriers and enablers that affect the transformation of educational resources into children's capabilities.
5. Generate evidence-based insights to inform inclusive education policy and practice.

Literature Review

The Capability Approach (CA), introduced by (Sen, 1999), provides a comprehensive framework for evaluating individual well-being, freedom, and social justice. Unlike traditional welfare economics, which emphasizes income or resource distribution, the CA focuses on what individuals are actually able to *be* and *do* their functioning's and the capabilities or real opportunities they have to achieve lives they value (Kuklys & Robeyns, 2005). This perspective shifts the focus from material resources to substantive freedoms and genuine choices. Within this framework, functioning's refer to achieved states of being and doing, while capabilities denote the set of potential functioning's a person can attain.

CA has gained prominence as a conceptual and evaluative framework for analyzing inequality, poverty, and educational inclusion, particularly in relation to gender and social disparities (Robeyns, 2003; Sen, 2017). In educational research, it provides an evaluative lens to understand how schooling contributes to human flourishing beyond academic achievement, emphasizing processes that enable learners to pursue lives they have reason to value (Drèze, 2013; Hart, 2009a; Hart & Brando, 2018). Various scholars have proposed context-specific capability lists to capture the multidimensional nature of human development (Nussbaum, 2011) identified ten central capabilities, while (Alkire, 2002; Clark, 2005) expanded and contextualized these dimensions for empirical use. In Bangladesh, (Ura et al., n.d.) localized the CA framework by developing a multidimensional happiness index incorporating education, health, psychological well-being, and community vitality.

(Sen, 2017) emphasized that the CA is an open and adaptable framework, allowing flexibility in finding context-relevant capabilities while highlighting diversity in human needs, adaptive preferences, and freedom of choice. Although some critics argue that its flexibility poses challenges for measurement and policy application, CA remains a powerful evaluative and policy-oriented framework that promotes context-sensitive analysis of human development and inclusion, making it particularly valuable for Gender Equality and Social Inclusion (GESI)-focused educational research.

Building on Sen's theoretical foundation, numerous scholars have applied the CA to education as a means of assessing human well-being, agency, and empowerment. (Drèze, 2013) and (Hart, 2009b) assert that education is central to human flourishing and a foundation for developing other capabilities (Sen, 1999). (Sen, 1999) conceptualizes education as a basic capability that enhances functioning's, improves quality of life, and strengthens agency, the ability of individuals to act upon goals they value. Equitable and quality education thus empowers individuals to make informed decisions that positively influence their personal, social, and professional lives. Demonstrating CA's evaluative versatility, the framework to assess Community-Driven Development (CDD) programs identifies capabilities relevant to poverty reduction, thereby underscoring CA's utility in diverse social development contexts.

(Sen, 1992) further proposed four interrelated evaluative spaces of human flourishing: well-being freedom, well-being achievement, agency freedom, and agency achievement (Hart & Brando, 2018). Well-being freedom reflects the range of substantive opportunities available for individuals to achieve valued ways of living, while well-being achievement refers to the actual realizations of those opportunities (Sen, 1992). For instance, access to quality education and a safe learning environment reflects well-being freedom, whereas successful academic completion exemplifies well-being achievement. Agency freedom and agency achievement extend this perspective beyond individual well-being to include collective or altruistic goals. Agency freedom entails the ability to pursue objectives that influence one's community, while agency achievement captures the realization of those goals (Sen, 1992). For example, a teacher advocating for gender equality exercises agency freedom, and tangible improvement in girls' participation reflects agency achievement. (Sen, 1985) also stressed that evaluations of human development should incorporate both outcomes and processes, with freedom and personal values being essential evaluative dimensions.

Within the CA, a capability set represents the bundle of functioning valuable "doings and beings" that individuals can achieve to lead fulfilling lives (Robeyns, n.d.). While resources such as income or educational materials are essential, they are insufficient on their own to ensure the realization of valued functioning (Sen, 1992). The transformation of resources into capabilities depends on conversion factors**,** which include personal, social, institutional, and environmental conditions that mediate individuals' ability to convert resources and capacities into real freedoms (Hart & Brando, 2018). In educational contexts, personal conversion factors encompass students' individual skills and competencies (e.g., literacy, communication), social conversion factors relate to policy and cultural norms (e.g., inclusive education policies), and environmental conversion factors refer to material and infrastructural elements (e.g., libraries, ICT facilities). A holistic educational framework must therefore ensure both adequate resources and enabling conditions that translate students' aspirations into meaningful capabilities and freedoms.

Building on this theoretical foundation, recent research has adapted the CA to assess gender equality and social inclusion in educational settings. The GESI Diagnostic Framework applied in Bangladesh, Nepal, and Bhutan operationalizes 16 capability indicators that capture children's valued educational experiences, including Love, Care and Respect; Education; Nutritional Well-being; Aspiration; Physical Health; Bodily Integrity; Understand, Interpret Plan/Imagine and Think; Religion and Identity; Shelter and Environment; Mental Well-being; Social Relations; Autonomy; Freedom from Economic/Non-Economic Exploitation; Participation; Mobility; Gender Equality and Social Inclusion Curriculum. These indicators were developed through consultations with policymakers, teachers, and students to ensure contextual relevance and collective understanding. By including children's perspectives, the framework positions students not merely as beneficiaries but as active agents who define what they value and aspire to achieve through education. This multidimensional framework thus aligns with the CA's emphasis on human freedom, dignity, and flourishing, offering a robust evaluative space for understanding how educational environments support both well-being and agency.

Methodology

This study employed a qualitative research design grounded in Sen's Capability Approach to explore how educational environments promote children's valued capabilities and well-being. The study aimed to assess gender equality and social inclusion (GESI) dimensions in schools by capturing children's and teachers' perspectives through participatory methods.

Research Approach

This study adopted a Participatory Action Research (PAR) approach, a subset of action research defined as the "systematic collection and analysis of data for the purpose of taking action and making change." (MacDonald, 2012). PAR emphasizes both understanding and transforming social systems through collaborative inquiry, positioning participants as active co-creators of knowledge. It seeks to empower individuals by integrating research and action aimed at addressing context-specific social issues (Gillis & Jacksin, 2001).

In alignment with (Bergold & Thomas, 2012)This study structured PAR along three interrelated phases as Participation Axis**,** Knowledge Development Axis**,** and Action Axis**.**

The Participation Axis underscored collaboration and empowerment by actively involving researchers, stakeholders, and beneficiaries in the co-creation of the Children Valued Educational Capabilities (CVEC) framework. Participants contributed to identifying valued capabilities and were engaged in capacity-building initiatives to strengthen gender equality, equity, and inclusion (GESI) within schools. Students and community members also participated in awareness and training activities designed to address discriminatory norms, violence, harassment, and exclusion.

The Knowledge Development Axis focused on developing a GESI diagnostic tool for assessing gender equality and inclusion, informed by situational analyses conducted in 26 schools across Bangladesh, Bhutan, and Nepal. Additionally, the Bhutan and Nepal teams designed a LIKE Club Activity Book comprising 64 activities aimed at enhancing children's understanding of GESI, fostering participation, and promoting well-being through capability-based learning.

Finally, the Action Axis emphasized transformative change through collective efforts to challenge inequitable social systems and redistribute power and resources (Nelson & Prilleltensky, 2005). Researchers and participants jointly implemented interventions such as launching LIKE Clubs, organizing awareness campaigns, and initiating community-based activities to promote gender-sensitive, inclusive, and self-sustaining school environments that enhance students' overall well-being.

Study Design

The study followed a multi-site exploratory participatory design consistent with the principles of Participatory Action Research (PAR). It adopted a mixed-methods, cross-sectional design,

combining quantitative survey data with qualitative field observations to assess children's valued capabilities in school settings. The research, part of a larger project in Bangladesh, Bhutan, and Nepal, aims to understand how children value and develop educational capabilities in diverse school contexts. The iterative nature of the study allowed continuous reflection, adaptation, and collaborative learning among researchers, students, teachers, and community stakeholders.

Study Framework

The study is grounded in the Capability Approach (CA) proposed by (Sen, 1999) and further expanded by (Nussbaum, 2011), which emphasizes individuals' freedom to achieve well-being by developing and exercising valued capabilities. Within this framework, education is viewed not merely as knowledge acquisition but as an enabling process that expands children's substantive freedoms, their ability to be and do what they value. Guided by this perspective, the research examined children's access to resources, autonomy, educational aspirations, social inclusion, and overall well-being within the school environment through a Gender Equality and Social Inclusion (GESI) lens. This framework provided the conceptual basis for assessing how schools create enabling conditions that nurture both agency and well-being among students.

Theoretical Framework: Sen's Capability Approach

As a response to approaches to human development that focus exclusively on resources, utility, desire satisfaction and aggregated markers of advantage, Amartya Sen has consistently argued that freedom and a person's values play a key role in assessing quality of life (Sen, 1999, 2017, 2005, 1992, 1985). Thus, an evaluation of the quality of a human life should consider both the process by which an individual's outcomes are achieved and the outcomes themselves. Sen intends to expand the evaluative spaces for assessing individual advantage. Whilst a person's well-being is an important aspect of human flourishing, Sen observes that it is not "unique" in this respect; humans have values and "goals other than well-being" (Sen, 1985).

Table 1. Sen's space of evaluation of human flourishing

	Freedom	**Achievement**
Well-being	Well-being freedom – the freedom to achieve ways of living one has reason to value (reflecting capability)	Well-being achievement– ways of living that one has reason to value (constituting 'functioning's')
Agency	Agency freedom – freedom to pursue goals with influence beyond oneself and that one has reason to value	Agency achievement – achieving goals with influence beyond oneself and that one has reason to value

Source:(Hart & Brando, 2018), p. 293

He considers four key elements as defining the space of human flourishing and value (see Table 1). Well-being achievement encompasses the combination of achieved beings and doings that are constitutive of one's well-being (functioning's). Well-being freedom refers to the range of

substantial freedoms (capabilities) “to achieve those things that are constitutive of one’s well-being” (Sen, 1992). Being well-nourished, for example, would be a function that contributes to well-being achievement and having the freedom to be well-nourished would be a capability (Sen, 1985). But human flourishing goes beyond well-being interests. Sen includes agency (freedom and achievement) as two other fundamental features. Agency freedom is described as “one’s freedom to bring about the achievements one values and attempts to produce.” (Sen, 1992, p. 57). Agency achievement is “the realization of goals one has reason to pursue,” which “need not be guided by her own well-being” (pp. 56, 57).

Study Area and Participants

The study was conducted in eight selected schools: Hajeepara Government Primary School, Chainda Government Primary School, Pallanpara Government Primary School, Uttar Mithachari Government Primary School, Ramu Kheezaree Government High School, Govenment Ukhiya Multilateral High School, Inani Govt. Primary School, Ghativanga Govt. Primary School. These schools are located across five upazilas: Cox’s Bazar Sadar, Ukhiya, Teknaf, Ramu and Moheshkhali within Cox’s Bazar district. Participants are students from Classes 3 to 10, aged approximately 9–17 years. A total of 350 students participated in the survey and qualitative discussions.

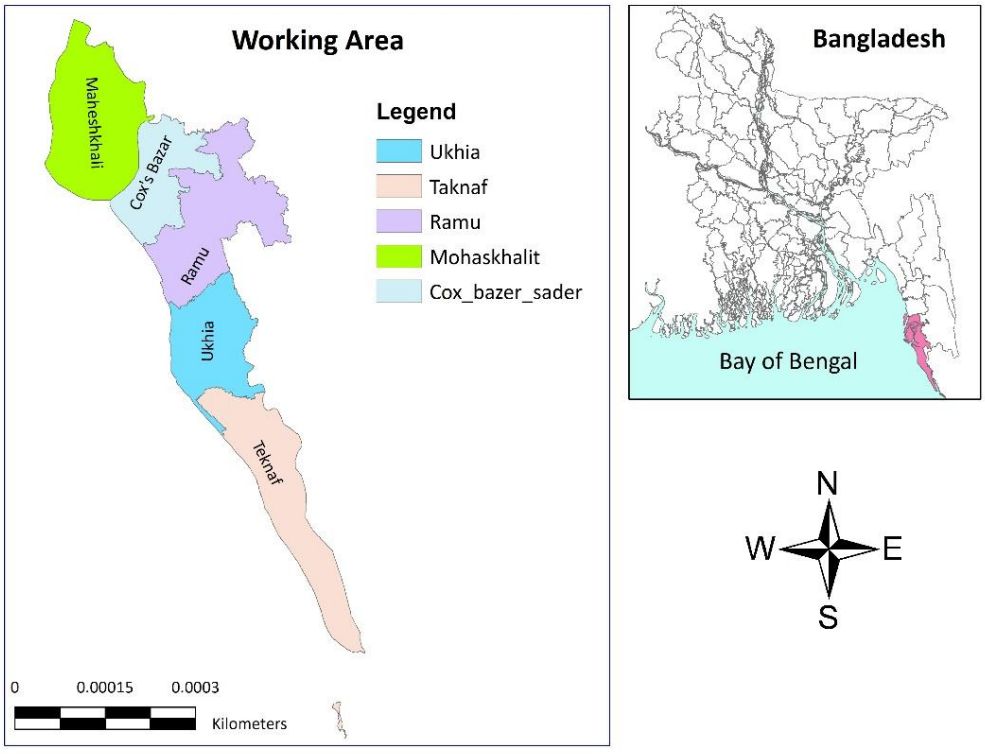

Figure 1. Geographical location of survey area

Sample Size Determination

In survey research, when the population size is known and relatively small, applying a finite population correction (FPC) is essential to ensure that the calculated sample size reflects the true variability within the population (Israel, 1992). This adjustment accounts for the fact that the standard Cochran's formula assumes an infinite population and may overestimate the required sample size when applied to smaller, finite groups.

For this study, the total population comprised 4,166 students across selected schools in Cox's Bazar. Initially, the sample size was calculated using Cochran's formula (Cochran & Cochran, 1977), assuming a 95% confidence level and a 5% margin of error, which yielded a value of 384.16. This value was then adjusted using the finite population correction formula:

$$n = \frac{n_0}{1+\frac{n_0-1}{N}}$$

Where:

- n = adjusted sample size
- n_0 = initial sample size assuming infinite population
- N = total population (4,166)

Substituting the values:

$$n = \frac{384.16}{1+\frac{384.16-1}{4166}} = 351.8 \approx 352$$

The final sample size was determined to be 350 students. This adjusted sample ensures adequate representation of the population while avoiding over-sampling, thus maintaining both statistical accuracy and logistical feasibility (Taherdoost, n.d.).

Sampling Procedure

A purposive sampling technique was used to select schools that reflect diversity in terms of geographical location (urban/rural), gender balance, and socio-economic context. Within schools, students were selected to ensure representation across gender, age, grade, and social backgrounds (including religious minorities and children with disabilities, where applicable).

Data Collection Tools

The primary instrument for data collection in this study's baseline survey is a meticulously designed, mixed-methods diagnostic framework survey questionnaire. This tool was developed to operationalize the core concepts of the research project by translating the theoretical

framework of the Capability Approach (Sen, 1999), specifically focusing on "Children's Valued Capabilities," into measurable and perceptive indicators (Biggeri & Libanora, 2011).

The questionnaire is structured into several distinct sections to ensure comprehensive data collection:

- **Demographic Profile and Informed Consent**: The tool begins with a standardized introduction and informed consent script, ensuring ethical compliance by clearly explaining the research purpose, confidentiality, and the voluntary nature of participation (Cohen et al., 2002). This is followed by a section for recording essential interview metadata (date, time, location) and a detailed demographic profile of the respondent. This profile captures data on age, sex, grade, ethnicity/religion, family income, parental occupation, and disability status, which are critical for subsequent intersectional analysis of GESI dimensions (UN Women, 2014).
- **Resource Assessment**: This section employs a structured matrix to assess the availability, satisfaction, and perceived importance of 28 key resources within the school environment. These resources are thematically grouped according to central capability domains, such as Love, Care & Respect; Education; Nutritional Well-Being; Bodily Integrity; and Shelter and Environment. Respondents rate each resource on a 5-point Likert-type scale for Availability and Satisfaction, and a separate 5-point scale for Importance (Joshi et al., 2015). This tripartite assessment allows for a nuanced analysis of not just the physical infrastructure but also the subjective experience and value children assign to these resources.
- **Capability Indicators**: The core of the diagnostic tool is a comprehensive series of scaled questions designed to measure children's capabilities across 17 fundamental dimensions, including Love, Care & Respect; Education; Nutritional Well-Being; Aspiration; Bodily Integrity; Mental Well-being; Autonomy; Participation; and Mobility. For each capability, respondents provide self-assessment scores on a 10-point scale (1 = Strongly Disagree/Very Dissatisfied to 10 = Completely Agree/Completely Satisfied). A unique and innovative feature of this assessment is the framing of statements across four modalities of agency: "am able to," "have," "choose to," and "have chosen to." This design moves beyond simple presence/absence metrics and captures the depth of a child's freedom and agency in realizing each capability, aligning directly with the theoretical underpinnings of the Capability Approach (Biggeri & Libanora, 2011; Sen, 1999).
- **Perception-Based Scoring**: For each thematic domain, children were asked to rate their experiences across four dimensions “am able to,” “have,” “choose to,” and “have chosen to” to capture both actual and aspirational capabilities.
- **Field Notes and Observation Record:** To complement the quantitative data and provide rich contextual insights, the tool incorporates a section for unstructured field notes and a Daily Observation Record Sheet. This allows the researcher to document observational data, contextual factors, non-verbal cues, and emergent themes not captured by the structured questions, thereby facilitating a mixed-methods analysis (Creswell & Clark, 2017).

The tool was administered through face-to-face interviews conducted by trained Education facilitators and teachers, ensuring ethical standards of informed consent, confidentiality, and child-friendly engagement. The questionnaire was contextualized for the local setting and translated into Bangla to ensure linguistic and cultural relevance. Data collected through this instrument serves as the foundational evidence for identifying gaps, strengths, and opportunities in promoting gender equality and social inclusion within school environments.

Validity and Adaptation

The tool was reviewed and piloted by child development and education experts to ensure cultural appropriateness and age sensitivity. Local language translation and enumerator training were conducted before data collection to maintain validity and ethical rigor.

Data Collection Process

Data collection was carried out between May to June 2025. Trained teachers of schools as enumerators administered the questionnaire in face-to-face interviews in a safe and child-friendly environment. Before the interviews, informed consent was obtained from all participants.

Quantitative data from the survey were coded and entered into STATA for descriptive and inferential analysis. Scores on availability, satisfaction, importance, and capability dimensions were aggregated and compared across gender and other demographic variables. Qualitative observations were reviewed to triangulate and contextualize the quantitative findings.

Data Analysis

Quantitative data from the survey were coded and entered into STATA for descriptive and inferential analysis. Scores on availability, satisfaction, importance, and capability dimensions were aggregated and compared across gender and other demographic variables. Qualitative observations were reviewed to triangulate and contextualize the quantitative findings.

Descriptive statistics were employed to aggregate students' perceptions of the availability, satisfaction, and importance of resources for advancing Gender Equality and Social Inclusion (GESI) in schools. Descriptive statistics, including frequencies, means, and standard deviations, were used to summarise demographic data and to interpret children’s perceptions of the resources examining their perceptions to availability, level of satisfaction, and perceived importance. To compare demographic variables such as gender, age, and location with capability indicators across different schools, within-school mean analyses were conducted. Furthermore, to assess children’s perceived levels of capabilities (for example, love, care, and respect) for significant social groups (parents, teachers, elders, juniors, and friends), descriptive statistics were used. The analysis involved eight schools in Cox’s Bazar, Bangladesh. These capabilities were evaluated using a 0–10 scale across 17 variables, combining dimensions of Well-being freedom, Well-being Achievement, Agency Freedom, and Agency Achievement. The descriptive

analysis included: 1) Measures of Central Tendency (mean and median), 2) Measures of Dispersion (standard deviation, minimum, and maximum), 3) Distribution Shape Metrics (skewness and kurtosis), and 4) Stacked Bar Diagram, which Visualizations to present variability and central tendency.

In addition, qualitative data on GESI-related initiatives and activities were collected through field notes which were further supported by photographs. The queries and clarification needed on the field notes were sought and clarified through informal conversation with school children, teachers, and principals. These data were analysed following the predetermined survey themes. Particular attention was paid to capturing the distinct perspectives of both students and teachers, ensuring their voices were meaningfully represented.

To enhance the credibility and reliability of the findings, the data were interpreted collaboratively by the project core members and researchers. Multiple analytical methods were employed to cross-verify results, and efforts were made to minimize bias through team discussions and peer reviews. Data triangulation within the multiple sources were conducted to verify and validate the findings. Consultations with the lead country team made the data entry and interpretation work easier, improving the efficiency and accuracy of the process. Finally, the project's core team conducted a detailed review and revision of the analysis to ensure logical flow, linguistic clarity, and analytical precision.

Ethical Considerations

When conducting the study, ethical considerations for the participants were vital. It was essential to ensure their safety, confidentiality, and overall well-being (Ravid & Efron, 2013). In this research, throughout the research process, the ethical principles of research were followed. Head Teachers of eight schools were contacted and asked for permission to approach school children of classes 1-10. In addition, the GESI diagnostic tool included a dedicated section on informed consent, ensuring that participants were made fully aware of the study's purpose, their rights, and the voluntary nature of their participation. Teachers administering the survey explained the contents clearly, and school children were given the option to opt out without any consequences. Anonymity and confidentiality of all responses were maintained throughout the process. The data were stored properly and participants' anonymity was taken into account in the processing of the data.

Results and Discussions

This section presents the main findings of the study and interprets their significance. Results summarize key data and patterns derived from analysis, often supported by tables, figures, or descriptive statistics. Discussions explain what these results mean in relation to the research objectives, prior studies, and theoretical frameworks.

Background Characteristics of Respondents

From Table 1, a total of 350 students from Classes 3 to 10 participated in the survey, with an almost equal distribution of male (50.29%) and female (49.71%) respondents. The majority of participants (56.29%) were aged between 12 and 14 years**,** followed by 30.57% aged 8–11 years and 13.14% aged 15–17 years, indicating a focus on late primary and early secondary school learners.

In terms of class distribution, the highest proportions of students were in classes 6 (20.29%), 7 (21.14%), and 8 (22.57%), showing that over 60% of the sample came from the middle classes. Lower and higher grades were less represented, with only 5.43% in grade 3 and 6.57% in grade 10. The religious background of respondents was predominantly Muslim (90.86%), while small proportions identified as Hindu (4.86%) and Buddhist (4.29%). This reflects the typical religious composition of the study area in Cox's Bazar.

Regarding disability status**,** 6% of the students reported having some form of disability, while 94% did not, highlighting the need for inclusive school environments. The occupational background of fathers was diverse, with the largest group engaged in other types of work (38.86%), followed by those in business (24.29%). Smaller proportions worked as fishermen (10.29%), employees (10%), immigrants (8.29%), and farmers (8.29%). In contrast, mothers' occupations were less varied: a dominant majority were housewives (90.86%), with only a small number working as teachers (4.86%), employees (1.71%), or in other roles.

In terms of annual household income, most students came from low- to middle-income families. About 43.71% had household incomes between BDT 200,001 and 360,000, followed by 24.57% between BDT 100,001 and 200,000, and 20.29% between BDT 360,001 and 600,000. A small percentage of households (3.71%) reported very low income (≤ BDT 100,000), while only 7.71% were in the higher income bracket (> BDT 600,000).

Table 2. Background Characteristics of Respondents (N = 350)

Variable	Categories	Frequency	Percentage
Gender	Male	176	50.29
	Female	174	49.71
Age	8–11	107	30.57
	12–14	197	56.29
	15–17	46	13.14

Class/Grade	3	19	5.43
	4	26	7.43
	5	42	12
	6	71	20.29
	7	74	21.14
	8	79	22.57
	9	16	4.57
	10	23	6.57
Religion	Hindu	17	4.86
	Buddhist	15	4.29
	Islam	318	90.86
Disability Status	Yes	21	6
	No	329	94
Fathers Occupation	Business	85	24.29
	Employee	35	10
	Farmer	29	8.29
	Fisherman	36	10.29
	Immigrant	29	8.29
	Other	136	38.86
Mothers Occupation	Housewife	318	90.86
	Teacher	17	4.86
	Employee	6	1.71
	Other	5	1.43
	Died	2	0.57
	Nurse	2	0.57
Household Income (Yearly) BDT	≤ 100,000	13	3.71
	100,001–200,000	86	24.57
	200,001–360,000	153	43.71
	360,001–600,000	71	20.29
	> 600,000	27	7.71

Descriptive Statistics of Children's Responses of Resources for Capabilities

This section presents a summary of children's perceptions regarding the availability, satisfaction, and importance of various resources that support the development of 17 identified capabilities. The descriptive analysis includes measures such as mean, standard deviation, minimum, and maximum scores for each resource item under the 17 capabilities. These statistics provide insights into the perceived accessibility and quality of resources available to children, as well as how strongly children value each resource in relation to their overall well-being and capability development.

1. Resources - Love, Care and Respect

The three domains reflect school children's experiences of Love, Care and Respect through their social and emotional connections with friends and family. The analysis indicates that, overall,

children report having ample time, express satisfaction, and assign high importance to these relationships.

Table 3. Descriptive summary of Children's responses (N = 350)

Variable	Mean	Std. dev.	Min	Max
1. Availability Time spent with friends and families	4.1	0.82	1	5
2. Satisfaction Time spent with friends and family	4.24	0.77	1	5
3. Importance Time spent with friends and families	4.47	0.72	1	5

Table 3, findings under the theme "Resources – Love, Care and Respect" reveal that respondents highly value time spent with friends and families, with importance receiving the highest mean score (4.47), followed by satisfaction (4.24) and availability (4.1). While satisfaction and importance are consistently high, availability is slightly lower, suggesting that although people strongly value and enjoy such interactions, actual opportunities to spend time with loved ones may be limited for some. Overall, the results highlight the strong significance of family and social connections in respondents' lives.

Figure 2, The analysis of time spent with friends and families under the theme "Resources – Love, Care and Respect" shows generally positive perceptions across both boys and girls, with only minor gender variations.

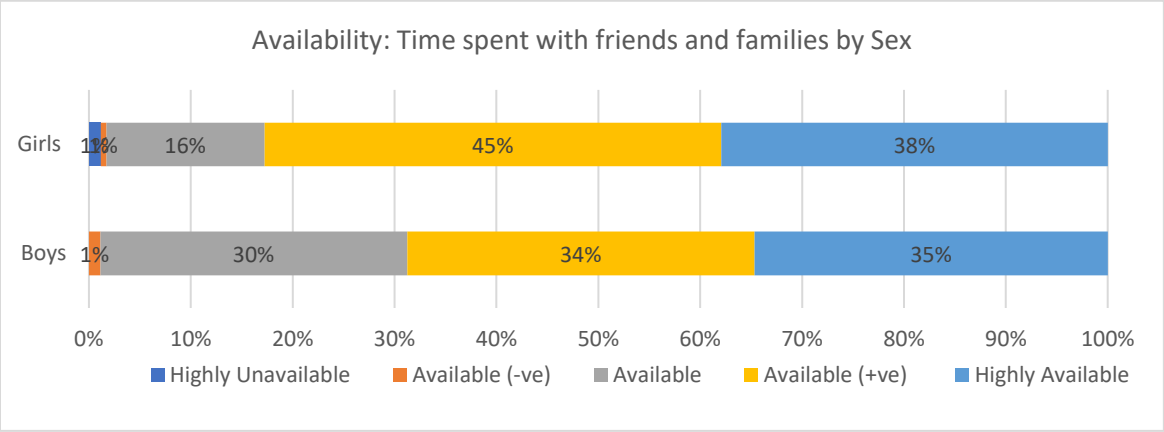

Figure 2. Time spent with friends and families by Sex (Availability)

For **availability**, 69% of boys and 83% of girls reported their time as *available (+ve)* or *highly available*, indicating that girls perceive slightly greater availability than boys. At the lower end, a very small proportion of respondents considered such time as unavailable (2% overall).

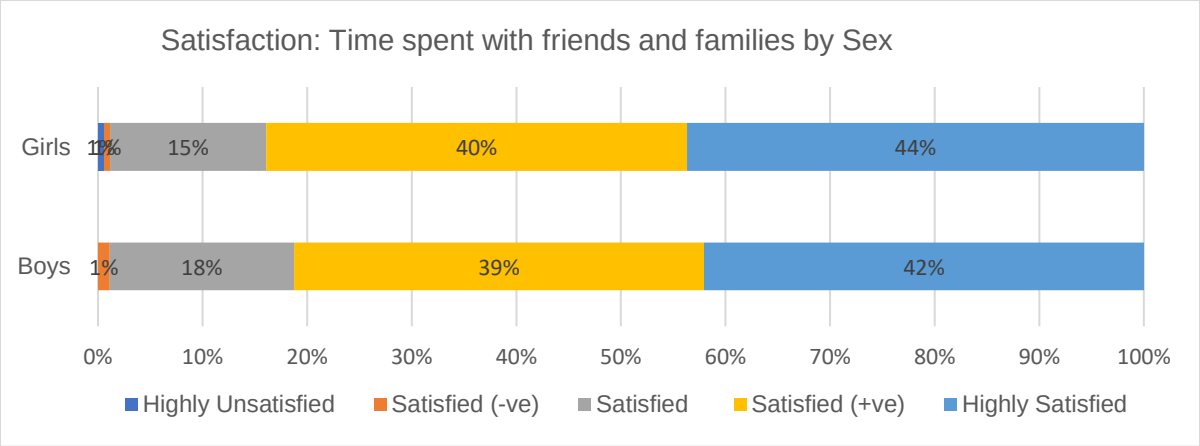

Figure 3. Time spent with friends and families by Sex (Satisfaction)

Figure 3, Regarding **satisfaction**, responses were consistently high, with 81% of boys and 84% of girls indicating that they were *satisfied (+ve)* or *highly satisfied*. Dissatisfaction was negligible (about 2% in both groups), suggesting that the quality of time spent with families and friends is broadly fulfilling for both sexes.

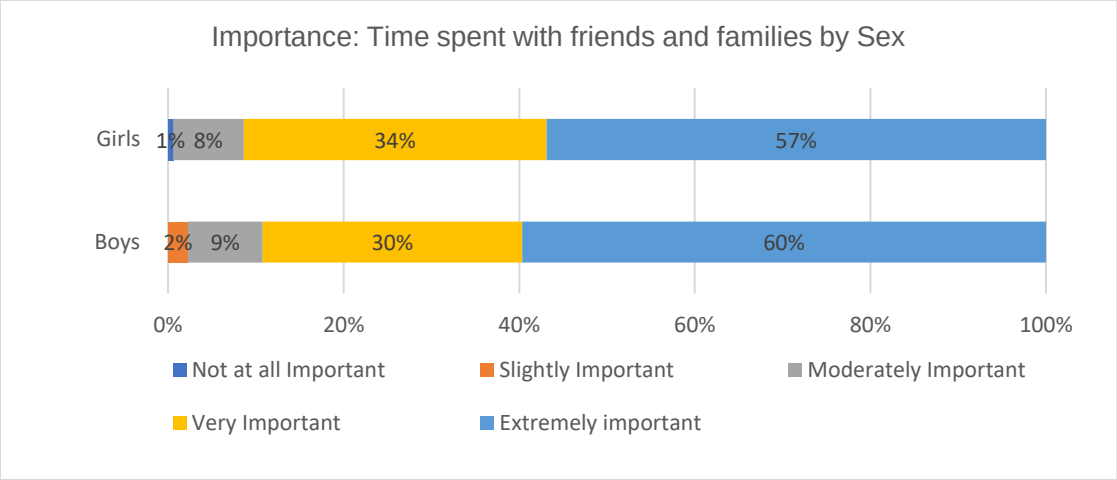

Figure 4. Time spent with friends and families by Sex (Importance)

Figure 4, In terms of **importance**, the majority of respondents placed high value on family and social connections. Specifically, 90% of boys and 91% of girls rated such time as *very important* or *extremely important*. Only a small minority considered it moderately or less important (≤11%).

Overall, the findings suggest that both boys and girls recognize the strong significance of family and social interactions in their lives, with girls slightly more likely than boys to report higher availability and satisfaction. The consistently high ratings across importance reinforce the central role of family and peer relationships in the well-being of children.

Both boys and girls reported positive experiences regarding time spent with friends and families, with girls slightly more likely to perceive higher availability and satisfaction. Around four-fifths of respondents across both sexes expressed being satisfied or highly satisfied, while dissatisfaction was negligible. In terms of importance, the vast majority considered such time very or extremely important, highlighting the strong value placed on family and social connections. Overall, the findings underscore the central role of family and peer relationships in children's well-being.

Across grade levels, children generally reported high availability, satisfaction, and importance of time spent with friends and families, with some variation by grade.

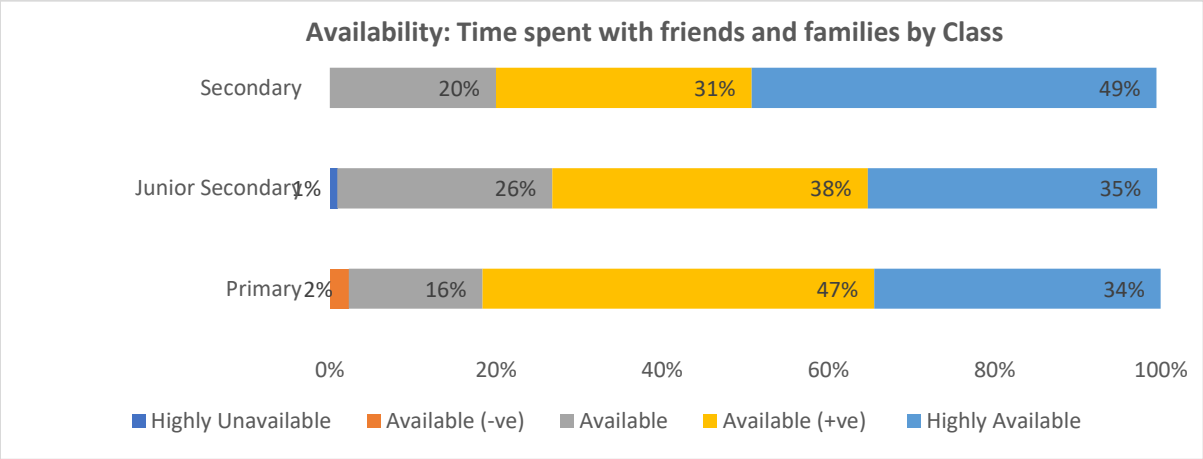

Figure 5. Time spent with friends and families by Class (Availability)

Figure 5, Availability was perceived highest among secondary students, where nearly half (49%) reported "highly available," compared to 34% in primary and 35% in junior secondary.

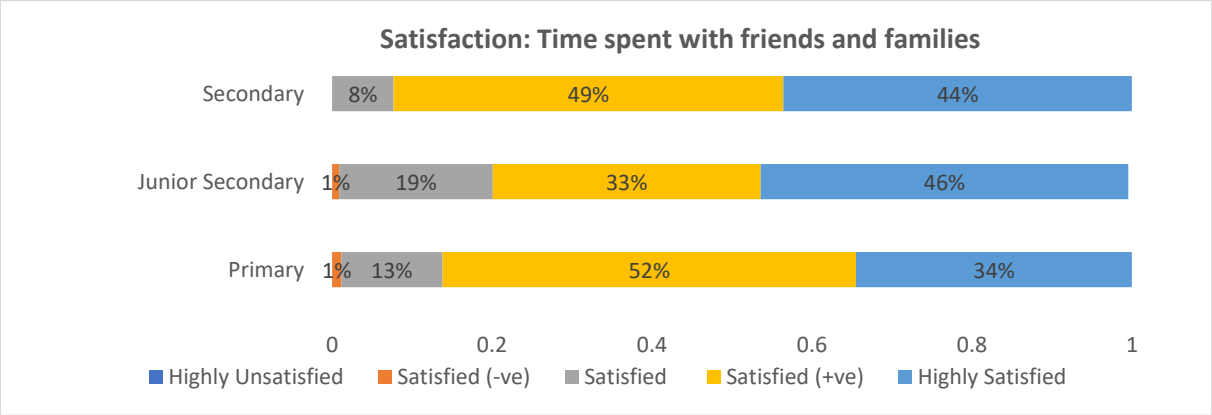

Figure 6. Time spent with friends and families by Class (Satisfaction)

Figure 6, Satisfaction levels were consistently strong, with primary students showing the highest proportion of "satisfied (+ve)" (52%) while junior secondary students leaned more toward "highly satisfied" (46%).

From Figure 7, regarding importance, the majority of students across all grades rated family and social connections as “very important” or “extremely important,” with secondary students (62%) and primary students (62%) showing slightly higher endorsement than junior secondary (56%).

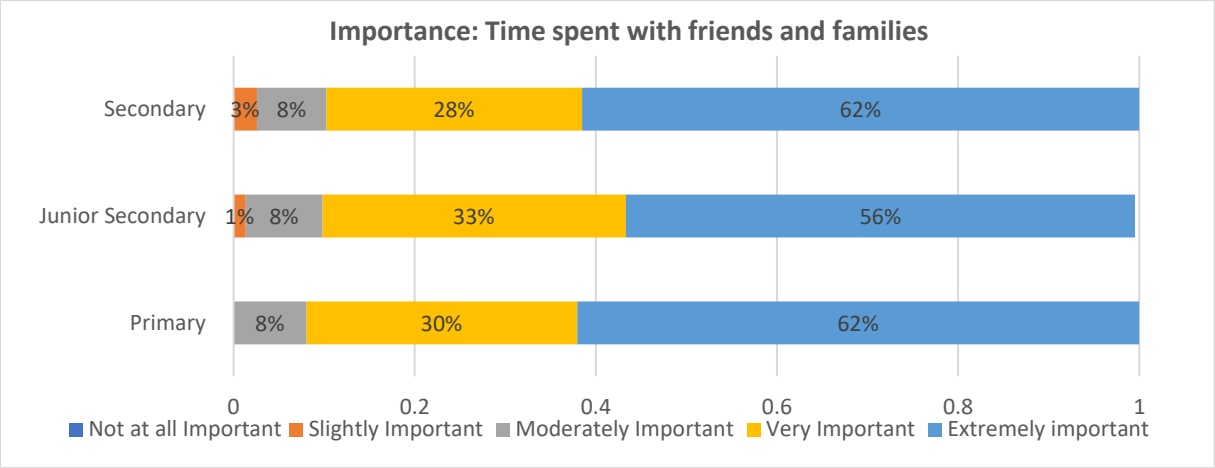

Figure 7. Time spent with friends and families by Class (Satisfaction)

Overall, the findings suggest that as children progress through grades, the availability and importance of family and peer time remain consistently valued, with secondary students reporting particularly high availability and importance.

2. Resources - Education

The analysis shows that students reported a generally high level of availability and satisfaction with the key school resources, although their importance ratings were consistently higher. From table 4, teachers, the mean availability score was 4.08 (SD = 0.79) and satisfaction was very similar at 4.10 (SD = 0.81). However, the importance rating was much higher (M = 4.75, SD = 0.46), suggesting that while students acknowledge the presence of teachers, they still expect a stronger level of adequacy.

Textbooks emerged as the most consistently available and satisfactory resource. Availability was very high (M = 4.68, SD = 0.56), and satisfaction (M = 4.57, SD = 0.64) closely matched this, aligning with the very high importance rating (M = 4.83, SD = 0.39). This indicates that textbooks are meeting student needs effectively. Stationery also showed a similar trend, with high availability (M = 4.41, SD = 0.74) and satisfaction (M = 4.36, SD = 0.73), while importance was slightly higher (M = 4.76, SD = 0.51), pointing to a minor gap between expectations and experience.

Table 4. Descriptive Statistics of Children’s Responses of Resources for Education Capability (N= 350)

Variable	N	Minimum	Maximum	Mean	Std. Deviation
Availability Adequate number of teachers	350	2	5	4.08	0.786
Satisfaction Adequate number of teachers	350	1	5	4.10	0.812
Importance Adequate number of teachers	350	3	5	4.75	0.457

Availability Textbooks	350	2	5	4.68	0.561
Satisfaction Textbooks	350	1	5	4.57	0.638
Importance Textbooks	350	3	5	4.83	0.395
Availability Stationary	350	2	5	4.41	0.735
Satisfaction Stationary	350	2	5	4.36	0.732
Importance Stationary	350	2	5	4.76	0.514
Availability White/Blackboard	350	2	5	4.42	0.701
Satisfaction White/Blackboard	350	2	5	4.25	0.772
Importance White/Blackboard	350	3	5	4.73	0.488
Availability Uniform	350	2	5	4.46	0.755
Satisfaction Uniform	350	2	5	4.39	0.796

For whiteboards or blackboards, availability was reported as high (M = 4.42, SD = 0.70), but satisfaction was slightly lower (M = 4.25, SD = 0.77). Importance, however, was again very high (M = 4.73, SD = 0.49). This suggests that while boards are present in classrooms, their quality or condition may not fully meet student expectations. In the case of uniforms, both availability (M = 4.46, SD = 0.76) and satisfaction (M = 4.39, SD = 0.80) were consistent, although importance ratings were not included in the data.

Overall, the findings highlight that students place a very high value on all school resources, but small gaps remain between what is available and how important these resources are to them. Textbooks show the best balance between importance, availability, and satisfaction, while teachers and classroom teaching aids show slightly larger gaps. This indicates that while schools are performing well in ensuring access to resources, there is still room to improve teacher availability and the quality of teaching aids to better align with student expectations.

From Annex 1, the findings highlight that both boys and girls reported generally high availability, satisfaction, and importance for textbooks, stationery, white/blackboards, and uniforms, with only minor differences between the sexes.

For textbooks, the vast majority of both boys and girls rated them as highly available (71% and 75%, respectively), while only a negligible proportion considered them less available. Satisfaction was also very high, with 60% of boys and 67% of girls being highly satisfied. Importance ratings confirmed this trend, as 84% of boys and 85% of girls considered textbooks extremely important. These results suggest that textbooks are the most consistently accessible and satisfactory resource, with near-universal recognition of their importance across both sexes.

For stationery, availability perceptions differed somewhat between boys and girls. While 85% of girls rated stationery as highly available, only 57% of boys did so, with more boys falling into the mid-level availability categories. However, satisfaction levels were almost identical, with 84% of boys and 85% of girls highly satisfied. Importance ratings also showed strong alignment, with 74% of boys and 84% of girls considering stationery extremely important. This suggests that

although boys perceive slightly lower availability, satisfaction remains high, indicating that their practical needs are still being met.

In terms of white/blackboards, both sexes reported high availability, though boys (57%) rated them as highly available slightly more than girls (50%). Satisfaction levels were balanced, with 44% of both boys and girls being highly satisfied. Importance ratings showed that 72% of boys and 78% of girls regarded them as extremely important. This reflects strong recognition of boards as an essential classroom resource, with no major differences by sex.

For uniforms, perceptions of availability were very similar across boys (61%) and girls (60%) who rated them as highly available. Satisfaction was also high, with 72% of boys and 78% of girls reporting being highly satisfied. Importance ratings revealed that uniforms are considered essential, with 74% of boys and 85% of girls marking them as extremely important. This shows that uniforms are both adequately provided and highly valued, particularly among girls.

Overall, the results indicate that both boys and girls share a common view that these school resources are important and generally well provided. While boys reported slightly higher satisfaction for textbooks and boards, girls rated stationery and uniforms more positively, particularly in importance. Importantly, across all resources, the importance ratings were consistently very high for both sexes, reflecting that these items are universally regarded as critical for effective schooling. The minor differences between boys and girls highlight nuanced perceptions but do not suggest major disparities in access or satisfaction.

From Annex 2, the findings show strong overall availability, satisfaction, and importance of key educational resources across primary, junior secondary, and secondary levels, though some variations were observed between school stages.

For teachers, perceptions of availability were relatively high at all levels. About one-third of primary (32%) and junior secondary (37%) students reported teachers as highly available, while secondary students reported slightly lower at 28%. Satisfaction followed a similar trend, with higher satisfaction at primary (39% highly satisfied) and junior secondary (37%) than at secondary (23%). However, importance ratings were consistently very high, with 70% of primary, 81% of junior secondary, and 64% of secondary students considering teachers extremely important. This shows that while students at all levels value teachers greatly, satisfaction is somewhat lower in secondary schools, suggesting possible teacher shortages or higher student expectations at this level.

For textbooks, availability and satisfaction were strong, especially at the secondary level where 95% rated them as highly available and 82% as highly satisfied. Importance was nearly universal, with 78% of primary, 85% of junior secondary, and 95% of secondary students considering textbooks extremely important. This suggests that textbooks are widely accessible and strongly valued, especially as students advance through school.

Regarding stationery, perceptions varied by school level. Secondary students reported the highest availability (95% highly available) and satisfaction (82% highly satisfied), while primary and junior secondary students rated slightly lower. Still, importance remained consistently high, with 72% of primary, 80% of junior secondary, and 87% of secondary students identifying stationery as extremely important. This shows that provision improves with school level, aligning with higher academic demands.

For white/blackboards, availability was generally high across all levels, with 67% of primary and 54% of secondary students reporting them as highly available. Satisfaction was also positive, with 45% of primary, 42% of junior secondary, and 54% of secondary students being highly satisfied. Importance ratings were strong, with three-quarters of students across all levels reporting them as extremely important. These results confirm that classroom boards are recognized as vital learning tools, though secondary schools may need further improvement in availability and maintenance.

In the case of uniforms, availability was highest in secondary schools (97% highly available), compared to 52% in primary and 58% in junior secondary. Satisfaction followed a similar pattern, with secondary students expressing 45% high satisfaction, matching primary and junior secondary levels. Importance was consistently high, with 69% of primary, 82% of junior secondary, and 90% of secondary students rating uniforms as extremely important. This suggests that uniform provision improves significantly as students move into higher levels of schooling, and the value placed on it also rises.

Overall, the results indicate that students across all levels place very high importance on teachers, textbooks, stationery, boards, and uniforms. While satisfaction generally aligns with availability, some gaps exist—particularly in teacher availability and satisfaction at the secondary level—pointing to areas that need greater attention.

Strengthen teacher availability at secondary level: Since importance ratings for teachers are very high but satisfaction is lower, efforts should focus on addressing teacher shortages or workload pressures in secondary schools.

Maintain high provision of textbooks and stationery: These are consistently available and satisfactory, particularly at the secondary level, and should be sustained to meet growing academic needs.

Improve classroom infrastructure (boards): Regular maintenance and ensuring adequate quality of boards will help close small satisfaction gaps, especially in secondary schools.

Ensure uniform provision for younger students: While secondary students reported high availability, primary and junior secondary levels showed lower access, suggesting a need to strengthen support at earlier grades.

3. Resources - Nutritional Well-being

The analysis reveals a strong consensus on the high importance of the mid-day meal scheme (M=4.66). However, scores for its implementation, specifically availability (M = 3.93) and satisfaction (M = 3.96), were significantly lower. This, coupled with greater variability in these operational scores, indicates a clear gap between the scheme's perceived value and its inconsistent delivery. The findings suggest that the primary challenge lies not in justifying the program, but in standardizing its execution to ensure equitable and reliable service.

Table 5. Descriptive Statistics of Children's Responses of Resources for Nutritional well-being (N= 350)

Variable	N	Minimum	Maximum	Mean	Std. Deviation
Availability Provision of mid-day meal	350	1	5	3.93	0.930
Satisfaction Provision of mid-day meal	350	1	5	3.96	0.906
Importance Provision of mid-day meal	350	2	5	4.66	0.606

From Annex 1, the analysis of participant perceptions reveals the mid-day meal scheme is overwhelmingly regarded as highly important, with near-unanimous consensus across genders (97% of girls and 93% of boys rating it "Very" or "Extremely Important"). Operational metrics also show strong performance, with over 95% of both boys and girls reporting the meals as "Available" or better. However, a nuanced gender disparity in satisfaction levels emerges; while both groups report high satisfaction, boys exhibit a stronger tendency towards the highest level of satisfaction (39% "Highly Satisfied") compared to girls (29%). This suggests that while the scheme is successfully delivered and universally valued, the experience or outcomes may differ by gender, warranting further investigation to ensure the initiative is optimized equitably for all beneficiaries

From Annex 2, the analysis reveals a clear and significant trend across educational levels regarding the mid-day meal scheme. As the school level increases from Primary to Secondary, the perceived importance of the scheme intensifies dramatically, with 85% of Secondary students rating it as "Extremely Important" compared to 62% of Primary students. This is accompanied by a corresponding positive shift in the perception of availability, where the percentage of students reporting meals as "Highly Available" rises sharply from 24% in Primary to 46% in Secondary. A more complex trend is observed in satisfaction. While the proportion of "Highly Satisfied" students is highest at the Secondary level (51%), this group also shows the highest percentage of negative feedback ("Highly Unsatisfied" at 3%), and a notably low level of moderate satisfaction ("Satisfied (+ve)" at only 15%). This polarization suggests that the scheme's delivery at the Secondary level, while highly valued and available, may be inconsistent or fail to meet the specific expectations of a distinct subgroup of students.

4. Resources – Aspiration

Analysis of the scholarship program reveals a strong consensus on its high importance (M=4.54, SD=0.796), indicating students universally value its role. However, a significant implementation gap is evident, as ratings for both the availability (M=3.58, SD=1.286) and satisfaction (M=3.55, SD=1.178) of scholarships are substantially lower.

Table 6. Descriptive Statistics of Children's Responses on Scholarship Availability, Satisfaction, and Importance

Variable	N	Minimum	Maximum	Mean	Std. Deviation
Availability Scholarship	350	1	5	3.58	1.286
Satisfaction Scholarship	350	1	5	3.55	1.178
Importance Scholarship	350	1	5	4.54	0.796

The high standard deviations for these operational metrics further suggest that access to and the experience with scholarships are highly inconsistent among students. This divergence between the scheme's perceived critical importance and its variable execution points to a need for more standardized and reliable administration to meet student expectations.

From Annex 1, the data indicate that the scholarship program is perceived as highly important by a strong majority of both boys (66%) and girls (70%), who report it as "Extremely Important." However, a significant implementation gap is evident, with considerably lower and more polarized experiences regarding its availability and satisfaction. Notably, a substantial portion of students face challenges, with 19% of boys and 16% of girls reporting negative availability ("Highly Unavailable"/"Available (-ve)"), and 17% of both genders reporting negative satisfaction. Interestingly, girls demonstrate a marginally more positive outlook on both availability and satisfaction, with a higher proportion in the positive categories ("Available (+ve)" and "Satisfied (+ve)") and a slightly higher rate of being "Highly Satisfied." This suggests that while the scholarship is universally valued, its distribution and administration may be inconsistently experienced, with girls perceiving slightly more favorable outcomes despite the overarching operational challenges.

From Annex 2, analysis of the scholarship program across educational levels reveals a compelling divergence between perception and experience. The perceived importance of scholarships increases markedly with educational level, from 57% of Primary students to 82% of Secondary students rating them as "Extremely Important." Conversely, the operational experience tells a different story. At the Secondary level, while the highest proportion of students report scholarships as "Highly Available" (38%), they also report the highest levels of negative availability (28% in "Highly Unavailable"/"Available (-ve)" categories). This polarization is mirrored in satisfaction, where Secondary students show the highest rate of being "Highly Satisfied" (36%) alongside the highest rate of negative satisfaction (21%). This pattern suggests that as students progress, the scholarship becomes more critically important, but its distribution becomes increasingly inconsistent, creating a cohort of highly served beneficiaries alongside a significant group who feel largely underserved.

5. Resource - Physical Health/ Gender Equality and Social Inclusion Curriculum

The analysis reveals that physical health and social inclusion resources are universally regarded as extremely important, with high mean scores for the importance of safe and clean drinking water (M=4.77), first aid (M=4.67), and playgrounds (M=4.71). However, a consistent implementation

gap is evident, as availability and satisfaction ratings for each resource are notably lower than their perceived importance.

Table 7. Descriptive Statistics of Children's Responses on Physical Health and GESI Curriculum Resources

Variable	N	Minimum	Maximum	Mean	Std. Deviation
Availability Safe and Clean Drinking Water	350	1	5	3.98	0.963
Satisfaction Safe and Clean Drinking Water	350	1	5	3.92	0.979
Importance Safe and Clean Drinking Water	350	3	5	4.77	0.490
Availability First aid	350	1	5	3.75	0.938
Satisfaction First aid	350	1	5	3.69	0.980
Importance First aid	350	2	5	4.67	0.575
Availability Playground	350	1	5	4.23	0.914
Satisfaction Playground	350	1	5	4.15	0.892
Importance Playground	350	3	5	4.71	0.548

While playgrounds report the highest levels of both availability (M=4.23) and satisfaction (M=4.15), first aid facilities show the most significant operational shortfall (Availability M=3.75, Satisfaction M=3.69). The low standard deviations for importance scores indicate a strong consensus on the value of these resources, whereas the higher variability in availability and satisfaction suggests inconsistent delivery and user experience across different settings. This divergence highlights a critical need to bridge the gap between the recognized value of these essential resources and their practical, on-the-ground provision.

From Annex 1, analysis of physical health and social inclusion resources reveals consistent patterns across gender. All three resources—safe drinking water, first aid, and playgrounds—are deemed extremely important by both boys and girls, with over 70% of all respondents rating them as "Extremely Important." Regarding availability and satisfaction, playgrounds demonstrate the most positive outcomes, with over 70% of students reporting high availability and satisfaction. Safe drinking water shows generally positive results, though with slightly more moderate satisfaction levels. First aid facilities present the most substantial implementation gap, showing the lowest rates of high availability (boys 26%, girls 23%) and high satisfaction (boys 25%, girls 22%), alongside the highest reports of negative experiences. Notably, gender disparities are minimal across all metrics, with girls consistently reporting marginally higher importance ratings and slightly more positive perceptions of drinking water availability, while boys report slightly more positive perceptions of first aid and playground satisfaction. This suggests that while resource importance is universally acknowledged, implementation quality varies significantly, with first aid facilities representing the most critical area for improvement.

From Annex 2, the analysis reveals distinct patterns in the availability, satisfaction, and importance of physical resources across educational levels. For safe drinking water, both perceived importance and positive user experience increase substantially at higher educational levels, with Secondary students reporting the highest levels of high availability (72%) and high satisfaction

(69%). A similar trend is observed for first aid, where satisfaction shows marked improvement at higher levels—the proportion of "Highly Satisfied" students rises from 10% in Primary to 33% in Secondary. Conversely, playgrounds demonstrate an inverse relationship; despite a steady increase in perceived importance across levels, availability and satisfaction show a curious decline at the Secondary level, where only 19% report high availability compared to 54% at the Junior Secondary level. This suggests that while infrastructural resources like water and first aid improve with educational level, recreational infrastructure like playgrounds may be disproportionately limited in secondary schools, creating a notable gap between the resource's recognized importance and its physical provision.

6. Resource - Bodily Integrity/ Gender Equality and Social Inclusion Curriculum

The analysis of resources related to bodily integrity reveals a consistent and critical implementation gap. While the importance of all four resources—separate toilets, facilities inside toilets, provision of sanitary pads, and disabled-friendly infrastructure—is highly rated (Means

Table 8. Descriptive Statistics of Children's Responses on Bodily Integrity and GESI Curriculum Resources

Variable	N	Minimum	Maximum	Mean	Std. Deviation
Availability Separate toilets for girls and boys	350	1	5	4.01	1.123
Satisfaction Separate toilets for girls and boys	350	1	5	3.88	1.073
Importance Separate toilets for girls and boys	350	2	5	4.78	0.471
Availability Facilities inside the toilet	350	1	5	3.32	1.102
Satisfaction Facilities inside the toilet	350	1	5	3.24	1.049
Importance Facilities inside the toilet	350	1	5	4.64	0.666
Availability Provision for sanitary pads	350	1	5	2.66	1.294
Satisfaction Provision for sanitary pads	350	1	5	2.65	1.218
Importance Provision for sanitary pads	350	1	5	4.39	0.969
Availability Disabled friendly infrastructure	350	1	5	2.60	1.258
Satisfaction Disabled friendly infrastructure	350	1	5	2.56	1.173
Importance Disabled friendly infrastructure	350	1	5	4.37	0.898

from 4.37 to 4.78), the availability and satisfaction scores show a stark decline. The provision of basic facilities like separate toilets is generally well-regarded (Availability M=4.01), yet satisfaction is lower, indicating qualitative shortcomings. However, the most significant deficits are observed in the provision of sanitary pads (Availability M=2.66, Satisfaction M=2.65) and disabled-friendly infrastructure (Availability M=2.60, Satisfaction M=2.56). The high standard deviations for these two variables further indicate highly inconsistent and generally inadequate access. This demonstrates a severe shortfall in addressing essential hygiene and inclusivity needs, despite their recognized importance, highlighting a clear priority for targeted intervention and resource allocation.

From Annex 1, the analysis reveals significant disparities in the provision of bodily integrity resources, with pronounced gender-based perceptions. While the importance of ‘separate toilets’ is universally acknowledged by both boys and girls (over 80% "Extremely Important"), girls report lower high availability (44% vs. 50% for boys) and significantly lower high satisfaction (33% vs. 40% for boys), indicating that the qualitative experience of this facility is a greater concern for female students. This gender gap is more acute for ‘facilities inside toilets’, where only 22% of girls report high availability compared to 15% of boys. Still, a higher proportion of girls (20% vs. 10%) report high satisfaction, suggesting that when these facilities are available, they are more valued by girls.

The most critical gaps emerge in inclusive resources. The ‘provision of sanitary pads’ is severely lacking, with a combined 66% of girls reporting negative or neutral availability. Furthermore, ‘disabled-friendly infrastructure’ is largely unavailable, with 55% of boys and 55% of girls reporting it as "Highly Unavailable" or "Available (-ve)". A notable gender divergence in the importance of inclusivity is evident, with girls attributing greater importance to both sanitary pads (86% "Very" or "Extremely Important") and disabled-friendly infrastructure (84%) compared to boys (85% and 84%, respectively). This underscores that while all students recognize the importance of these facilities, female students are disproportionately affected by their absence, highlighting an urgent need for targeted improvements in menstrual hygiene and accessibility infrastructure.

From Annex 2, the analysis reveals a consistent positive trend across educational levels for bodily integrity resources, though significant gaps remain in inclusive facilities. The availability and satisfaction with ‘separate toilets’ show marked improvement at higher levels, with 85% of Secondary students reporting high availability and 64% high satisfaction, compared to just 37% and 24% respectively in Primary schools. Similarly, the ‘provision of sanitary pads’, while critically inadequate at Primary (62% negative availability) and Junior Secondary (58% negative availability) levels, shows substantial improvement at the Secondary level (64% positive availability). This progression correlates with a dramatic increase in the perceived importance of sanitary pads, from 48% in Primary to 90% in Secondary. In contrast, ‘disabled-friendly infrastructure’ remains severely lacking across all levels, with over 60% of Primary and Junior Secondary students reporting negative availability and satisfaction. While its perceived importance grows with educational level, it consistently receives the lowest priority and implementation. These findings suggest that while basic gender-segregated facilities improve with educational progression, inclusive infrastructure for disability remains systematically overlooked, creating significant equity gaps despite increasing awareness of its importance.

7. Resource - Understand, Interpret Plan/Imagine and Think

The analysis reveals a significant service-performance gap in key academic resources. While students ascribed high Importance to both library (M=4.47) and computer resources (M=4.54), their reported Satisfaction (M=2.96 and M=2.75, respectively) and perceived Availability (M=3.01 and M=2.83, respectively) were markedly lower. This discrepancy indicates that the current provision of these resources, which are critical for tasks like interpretation and planning, is not meeting student expectations

Table 9. Descriptive Statistics of Children's Responses on Resources Supporting Understanding, Interpretation, and Critical Thinking

Variable	N	Minimum	Maximum	Mean	Std. Deviation
Availability Library	350	1	5	3.01	1.291
Satisfaction Library	350	1	5	2.96	1.234
Importance Library	350	1	5	4.47	0.817
Availability Computers	350	1	5	2.83	1.247
Satisfaction Computers	350	1	5	2.75	1.193
Importance Computers	350	1	5	4.54	0.785

The gap is most acute for computer resources, which had the lowest satisfaction score alongside the highest importance rating. These findings suggest that institutional investment in enhancing both the provision and quality of these resources is crucial to support student academic success and align services with learner needs.

From Annex 1, Analysis of the "Understand, Interpret, Plan/Imagine and Think" resource domain reveals a consistent and critical service-performance gap, with notable nuances between boys and girls. An overwhelming majority of all students attribute high importance to both library (Boys: 87%, Girls: 92%) and computer resources (Boys: 89%, Girls: 93%). However, this stands in stark contrast to their experiences of availability and satisfaction. For instance, a combined 43% of boys and 42% of girls find the library highly unavailable or negatively available, a trend that is more pronounced for computers (50% of boys, 48% of girls). Furthermore, dissatisfaction with computers is particularly high, affecting 50% of boys and 45% of girls. While girls consistently report slightly more positive perceptions across all categories, the overarching finding is that both genders perceive a significant deficit between the high importance they place on these essential academic resources and the institution's current capacity to provide them. This alignment gap threatens to hinder the core cognitive processes these resources are meant to support.

From Annex 2, the analysis reveals a pronounced and systematic divergence in the perception of academic resources across educational levels. While the attributed importance of both library and computer resources increases markedly from Primary (Library: 89%; Computers: 95%) to Secondary (Library: 88%; Computers: 94%) levels, the reported availability and satisfaction show a stark, inverse relationship. Primary students report the most critical deficits, with 81% finding computers highly unavailable or negatively available and 70% reporting similar dissatisfaction. In contrast, Secondary students report significantly better access and satisfaction, with 69% reporting positive library availability and 64% reporting positive computer satisfaction. This indicates a severe service-performance gap that is most acute at the foundational Primary level, potentially hindering the development of core cognitive skills, while resource provision appears more aligned with the advanced academic demands of Secondary students.

8. Resource - Religion and Identity

Analysis of the "Religion and Identity" resource domain indicates a critical but less severe service-performance gap compared to other institutional resources. Students ascribed an exceptionally high level of **Importance** to scholarship resources (M=4.54, SD=0.796), underscoring their perceived value. The mean scores for both **Availability** (M=3.58, SD=1.286) and **Satisfaction** (M=3.55, SD=1.178), while positioned in the moderate-to-high range, fall substantially below this importance benchmark.

Table 10. Descriptive Statistics of Children's Responses on Religious Activities and Identity Resources

Variable	N	Minimum	Maximum	Mean	Std. Deviation
Availability Scholarship	350	1	5	3.58	1.286
Satisfaction Scholarship	350	1	5	3.55	1.178
Importance Scholarship	350	1	5	4.54	0.796

The notable standard deviations suggest significant variation in student experiences. This discrepancy confirms that while the provision of scholarships is relatively more satisfactory, it still does not fully meet the high expectations of the student population, potentially impacting their academic journey and sense of institutional support in matters of religion and identity.

From Annex 1, Analysis of resources for "Religion and Identity" reveals a strongly positive alignment between institutional provision and student expectations. An overwhelming majority of students attribute extreme importance to religious activities (Boys: 80%, Girls: 77%). This high expectation is met with robust institutional support, as evidenced by the high levels of reported availability (combined positive availability: Boys 77%, Girls 77%) and corresponding satisfaction (combined positive satisfaction: Boys 78%, Girls 77%). The distributions for both genders are remarkably consistent, indicating a uniformly effective and valued resource area. This stands in stark contrast to other academic resources, suggesting that the institution successfully supports students' religious and identity needs.

From Annex 2, Analysis of the "Religion and Identity" resource domain reveals a strong positive alignment between institutional provision and student expectations, which intensifies significantly at higher educational levels. The attributed importance of religious activities increases sharply from Primary (63% extremely important) to Secondary (92% extremely important). Concurrently, perceptions of availability and satisfaction show a similar positive trajectory. While a majority of Primary students report positive availability (73%) and satisfaction (65%), these figures are substantially higher among Secondary students, with 85% reporting positive availability and 92% reporting positive satisfaction. This pattern indicates that the institution not only highly values this resource domain but also successfully meets—and even exceeds—student expectations, with the most pronounced alignment occurring at the most advanced educational level. This stands in stark contrast to other resource areas and suggests a highly effective support system for students' religious and identity needs.

9. Resource - Shelter and Environment

Analysis of the "Shelter and Environment" resource domain reveals a highly positive and effective alignment between institutional provision and student expectations. All measured variables—from adequate school built-up area to electricity—demonstrate exceptionally high mean scores for both Importance (ranging from M=4.70 to M=4.79) and correspondingly high scores for Availability (M=4.13 to M=4.32) and Satisfaction (M=4.09 to M=4.22).

Table 11. Descriptive Statistics of Children's Responses on Shelter and Environmental Resources

Variable	N	Minimum	Maximum	Mean	Std. Deviation
Availability Adequate school built-up area	350	1	5	4.13	0.894
Satisfaction Adequate school built-up area	350	1	5	4.09	0.885
Importance Adequate school built-up area	350	2	5	4.70	0.533
Availability Adequate space for classrooms	350	2	5	4.22	0.864
Satisfaction Adequate space for classrooms	350	2	5	4.15	0.864
Importance Adequate space for classrooms	350	2	5	4.70	0.549
Availability Adequate number of classrooms	350	1	5	4.22	0.847
Satisfaction Adequate number of classrooms	350	1	5	4.13	0.835
Importance Adequate number of classrooms	350	2	5	4.71	0.583
Availability Adequate number of desks and benches for students	350	2	5	4.22	0.821
Satisfaction Adequate number of desks and benches for students	350	1	5	4.11	0.862
Importance Adequate number of desks and benches for students	350	2	5	4.71	0.546
Availability Electricity	350	2	5	4.32	0.762
Satisfaction Electricity	350	1	5	4.22	0.825
Importance Electricity	350	3	5	4.79	0.487

The notably low standard deviations for Importance (SD=0.487 to 0.583) indicate a strong consensus among students on the critical nature of these infrastructural elements. The minimal gaps between the high importance ratings and the high availability/satisfaction ratings suggest that the institution's physical infrastructure is not only valued by students but is also perceived as being effectively provided and maintained. This domain stands out as a clear institutional strength, providing a robust and supportive physical learning environment.

From Annex 1, Analysis of the "Shelter and Environment" domain reveals consistently positive perceptions across all infrastructure measures, with strong alignment between importance ratings and availability/satisfaction levels. Both male and female students attributed extreme importance to all infrastructure components (72-84% across items), with electricity receiving the highest importance rating (Boys: 84%, Girls: 80%). Correspondingly high percentages reported positive availability (78-85% across items) and satisfaction (76-85% across items), indicating effective institutional provision of physical learning environments.

Notable gender variations emerged in specific areas: girls reported higher positive availability of school built-up area (79% vs 72%) and classroom numbers (81% vs 80%), while boys expressed stronger satisfaction with classroom space (77% vs 76%) and classroom numbers (77% vs 80%). These minimal differences suggest generally equitable resource distribution, with the institution successfully meeting students' foundational infrastructure needs across gender groups.

The consistent pattern of high importance coupled with high availability and satisfaction distinguishes this resource domain as an institutional strength, contrasting with previously identified gaps in library and computer resources. This effective provision of shelter and environmental resources establishes a solid foundation for supporting other educational processes.

From Annex 2, Analysis of the "Shelter and Environment" domain reveals a strongly positive developmental trajectory across educational levels, with Secondary students consistently reporting the most favorable perceptions. While all student groups attributed high importance to infrastructure components (62-92% "extremely important" across items), a clear pattern emerges where importance ratings increase with educational level. For instance, the proportion rating electricity as "extremely important" rose from 80% in Primary to 92% in Secondary levels.

Concurrently, availability and satisfaction perceptions showed substantial improvement across advancing educational stages. Secondary students reported markedly higher positive availability (67-90% across items) compared to Primary students (65-82%). This pattern is particularly evident in classroom availability, where positive reports increased from 67% (Primary) to 85% (Secondary), and in built-up area satisfaction, which rose from 68% (Primary) to 80% (Secondary).

The data indicate that the institution successfully provides shelter and environmental resources that not only meet but increasingly exceed student expectations at higher educational levels. This effective provisioning creates a solid physical foundation for supporting educational processes, with the resource gap narrowing progressively as students advance through the system.

10. Resource - Mental Well-being

Analysis of the grievance mechanism within the "Mental Well-being" resource domain reveals a notable service-performance gap. Students ascribed high importance to having an effective grievance mechanism (M=4.57, SD=0.672), indicating a strong consensus on its value for their mental well-being. However, the perceived Availability (M=3.70, SD=0.978) and Satisfaction (M=3.67, SD=0.960) levels, while in the moderate-to-high range, fall substantially below this importance benchmark

Table 12. Descriptive Statistics of Children's' Responses on Mental Well-being Resources

Variable	N	Minimum	Maximum	Mean	Std. Deviation
Availability Grievance Mechanism	350	1	5	3.70	0.978
Satisfaction Grievance Mechanism	350	1	5	3.67	0.960
Importance Grievance Mechanism	350	1	5	4.57	0.672

This significant discrepancy highlights that the current institutional provision for grievance redressal is not adequately meeting student expectations. Addressing this gap is crucial, as an accessible and effective grievance mechanism is a fundamental support system for safeguarding student mental health and fostering a responsive educational environment.

From Annex 1, Analysis of the grievance mechanism within the "Mental Well-being" domain reveals a consistent service-performance gap affecting both genders, though with slightly more pronounced challenges for female students. A strong majority of all students recognized the mechanism's importance (Boys: 93%, Girls: 92% considering it very/extremely important). However, this high value attribution was not matched by accessibility and satisfaction reports. While a solid majority reported positive availability (Boys: 65%, Girls: 56%) and satisfaction (Boys: 61%, Girls: 60%), these figures represent a substantial decline from importance ratings. The gap is particularly evident for girls, who reported higher negative availability (11% vs 6%) and negative satisfaction (13% vs 8%) compared to boys. This indicates that while the grievance system is established and generally functional, it requires targeted improvements to fully meet student expectations, particularly in ensuring equitable access and effectiveness for female students.

From Annex 2, Analysis of the grievance mechanism across educational levels reveals a significant developmental progression in both perceived importance and institutional effectiveness. While the majority of students at all levels recognized the mechanism's importance, this attribution intensified substantially at higher educational stages, with Secondary students reporting the highest value (87% "extremely important") compared to their Primary counterparts (57%).

Concurrently, both the availability and satisfaction with the grievance mechanism showed marked improvement across advancing educational levels. Secondary students reported the most positive availability (70%) and satisfaction (70%), representing a 10-13 percentage point increase over Primary students. This progressive enhancement suggests that either the mechanism itself becomes more effective and accessible for older students, or that students develop greater capacity to utilize institutional support systems as they advance academically.

Notably, the gap between high importance and moderate availability/satisfaction—particularly evident at the Primary level—indicates a need for targeted interventions to improve grievance redressal systems for younger students. The findings suggest that while the institution provides a functional grievance mechanism, its effectiveness increases substantially with educational

progression, potentially reflecting both systemic improvements and student development in navigating institutional support structures.

11. Resource - Social Relations

Analysis of the "Social Relations" resource domain reveals a stark contrast between two key social infrastructure components. For Parent-Teacher Meetings, students reported high importance (M=4.61, SD=0.631) with correspondingly strong availability (M=3.84, SD=0.932) and satisfaction (M=3.75, SD=0.932), indicating effective institutional support for this formal communication channel.

Table 13. Descriptive Statistics of Children's Responses on Social Relations

Variable	N	Minimum	Maximum	Mean	Std. Deviation
Availability Parents Teachers Meeting	350	1	5	3.84	0.932
Satisfaction Parents Teachers Meeting	350	1	5	3.75	0.932
Importance Parents Teachers Meeting	350	2	5	4.61	0.631
Availability Child Club	350	1	5	2.38	1.265
Satisfaction Child Club	350	1	5	2.42	1.243
Importance Child Club	350	1	5	4.27	0.926

However, a concerning deficit exists in Child Club provisions, where despite similarly high importance ratings (M=4.27, SD=0.926), both availability (M=2.38, SD=1.265) and satisfaction (M=2.42, SD=1.243) fall in the low range. The substantial standard deviations for Child Club variables indicate considerable disagreement among students about this resource. This pattern suggests that while the institution successfully facilitates structured adult-student interactions, it significantly underperforms in providing peer-based social platforms, creating an imbalance in students' social development opportunities that may affect their holistic growth.

From Annex 1, Analysis of the "Social Relations" domain reveals a pronounced disparity in the effectiveness of different social resources, with notable gender-based variations. For Parent-Teacher Meetings, both genders demonstrate strong alignment between high importance (Boys: 95%, Girls: 93% very/extremely important) and positive institutional provision, though boys report higher satisfaction (62% positive) compared to girls (66% positive but with lower highly satisfied ratings).

In stark contrast, Child Clubs demonstrate a critical service gap affecting both genders. Despite substantial importance attribution (Boys: 81%, Girls: 83% very/extremely important), availability and satisfaction levels remain alarmingly low. Notably, 59% of boys and 57% of girls report negative availability, while 60% of boys and 54% of girls express dissatisfaction. This represents the most severe performance gap identified across resource domains, suggesting that peer-based social development platforms are significantly under-resourced compared to formal adult-student communication channels. The gender differential in importance attribution (boys value it

more highly) alongside similar deficiency experiences underscores the universal need for enhanced investment in student-led social infrastructure.

From Annex 2, Analysis of the "Social Relations" domain reveals distinct developmental trajectories for formal and peer-based social resources across educational levels. For Parent-Teacher Meetings, importance ratings show a progressive increase from Primary (59% extremely important) to Secondary (79%) levels, while availability and satisfaction remain consistently strong across all stages (68-72% positive ratings). This indicates stable institutional effectiveness in maintaining this formal communication channel.

Conversely, Child Clubs demonstrate a critical but evolving service gap. While importance attribution increases substantially at higher educational levels (Secondary: 72% extremely important), negative availability remains pronounced across all groups (Primary: 60%, Junior Secondary: 60%, Secondary: 33%). Notably, Secondary students report the highest importance but continue to experience significant dissatisfaction (44% negative satisfaction), suggesting that even improved provisions fail to meet elevated expectations at advanced educational stages.

The findings reveal a systematic imbalance where peer-based social development platforms remain substantially underdeveloped compared to formal adult-student interactions. This deficit is most acute at earlier educational levels but persists even among Secondary students, indicating a need for comprehensive investment in student-led social infrastructure throughout the educational continuum.

12. Resource – Autonomy

Analysis of autonomy resources reveals a moderate service-performance gap in students' free time availability. Students reported high importance for having free time (M=4.47, SD=0.704), indicating strong value attribution to personal autonomy. However, both the availability (M=3.75,

Table 14. Descriptive Statistics of Children's Responses on Autonomy and Freedom from Exploitation Resources

Variable	N	Minimum	Maximum	Mean	Std. Deviation
Availability Free Time	350	1	5	3.75	0.835
Satisfaction Free Time	350	1	5	3.75	0.834
Importance Free Time	350	2	5	4.47	0.704

SD=0.835) and satisfaction (M=3.75, SD=0.834) levels, while moderately positive, fall substantially below this importance benchmark. The minimal standard deviations across all three measures suggest consistent perceptions among the student population. This discrepancy indicates that while the institution provides some degree of unstructured time, the current allocation does not fully meet student expectations for autonomous self-direction. Addressing this gap is crucial since adequate free time serves as essential developmental space for fostering independence, self-regulation, and personal identity formation.

From Annex 1, Analysis of autonomy resources reveals a consistent service-performance gap in free time allocation affecting both genders similarly. Students universally valued free time highly (Boys: 89%, Girls: 92% very/extremely important), recognizing its crucial role in personal development. However, this strong importance attribution was not fully matched by institutional provision, with only 59% of boys and 62% of girls reporting positive availability, and similar levels of satisfaction (64% boys, 63% girls reported positive satisfaction). This represents a 27-30 percentage point gap between importance recognition and actual satisfaction levels.

The minimal gender differences across all measures indicate that the free time deficit is a systemic issue rather than one affecting a particular gender group. The consistent moderate positive ratings for availability and satisfaction, contrasted with the high importance scores, suggest that while some autonomous time is provided, the quantity or quality fails to meet students' developmental needs for self-direction and independent activity. This gap in autonomy provision may impact students' development of self-regulation skills and personal identity formation.

From Annex 2, Analysis of autonomy resources reveals a significant developmental progression in how students value and experience free time across educational levels. While Primary students demonstrated moderate importance attribution (43% extremely important), this value increased substantially among Secondary students (77% extremely important), indicating that autonomy becomes progressively more valued with academic advancement.

Paralleling this trend, satisfaction with free time showed notable improvement across educational stages. Secondary students reported the highest satisfaction levels (74% positive satisfaction), representing a 20-percentage point increase over Primary students (54% positive). This pattern suggests either that older students receive more autonomous time or develop better capacity to utilize unstructured time effectively.

The data reveal an important transition: Primary students valued free time less but also expressed lower satisfaction with their limited autonomy, while Secondary students both highly valued and were more satisfied with their free time provisions. This developmental progression highlights the growing importance of autonomy in student development and suggests that current provisions may be better aligned with the needs of older students, potentially leaving younger students with insufficient opportunities for developing self-direction skills.

13. Resource – Participation

Analysis of participation resources indicates strong institutional performance in providing extracurricular activities, with minimal service-performance gaps. Students demonstrated very high importance attribution (M=4.60, SD=0.606), reflecting strong consensus on the value of participatory opportunities. Both availability (M=3.93, SD=0.949) and satisfaction (M=3.89, SD=0.890) approached the high range, showing close alignment with student expectations. The relatively small discrepancy between importance and satisfaction scores (0.71 points) compared to other resource domains suggests that extracurricular activities represent an institutional strength.

Table 15. Descriptive Statistics of Children's Responses on Participation and Mobility

Variable	N	Minimum	Maximum	Mean	Std. Deviation
Availability Extracurricular activities	350	1	5	3.93	0.949
Satisfaction Extracurricular activities	350	1	5	3.89	0.890
Importance Extracurricular activities	350	2	5	4.60	0.606

These findings indicate that the school successfully provides participatory opportunities that students value, potentially contributing positively to student engagement and holistic development. The moderate standard deviations indicate generally consistent experiences across the student population regarding this resource.

From Annex 1, Analysis of participation resources reveals strong and equitable institutional performance in providing extracurricular activities across genders. Both boys and girls demonstrated very high importance attribution (93% and 96% very/extremely important respectively), with girls showing slightly stronger valuation. This importance is well-matched by institutional provision, with both genders reporting strong availability (64% boys, 68% girls positive availability) and satisfaction (64% boys, 68% girls positive satisfaction).

Notably, the minimal gender differences across all measures indicate that extracurricular activities represent an equitably distributed resource, effectively meeting the participation needs of all students. The close alignment between high importance ratings and strong satisfaction levels distinguishes this domain from other resource areas where significant service-performance gaps were identified. These findings suggest that extracurricular programming constitutes an institutional strength, successfully providing valued opportunities for student engagement and holistic development outside the academic curriculum.

From Annex 2, Analysis of participation resources reveals a striking positive developmental trajectory in extracurricular provision across educational levels. While importance attribution shows a substantial increase from Primary (51% extremely important) to Secondary (85%) levels, availability and satisfaction demonstrate even more dramatic improvements. Secondary students report exceptional access to extracurricular activities (82% positive availability), representing a 36-percentage point increase over Primary students.

Satisfaction levels show a similar progression, with Secondary students reporting 87% positive satisfaction compared to 53% among Primary students. This pattern indicates that either extracurricular programming becomes substantially more robust and diverse at higher educational levels or that older students have greater access to existing activities. The minimal gaps between importance and satisfaction at the Secondary level (2 percentage points) compared to Primary (25 percentage points) suggests that the institution most effectively meets participation needs for its oldest students.

These findings highlight extracurricular activities as an area of institutional strength, particularly at advanced educational stages, while indicating a potential need for enhanced participatory opportunities for younger students.

Comparative Analysis of Student Perceptions on Resource

From Table 16, the analysis reveals a consistent pattern of service-performance gaps across all resource domains, where student-rated importance universally exceeds perceived availability and satisfaction. However, the most profound finding is the distinct hierarchy of institutional effectiveness.

Table 16. Comparative Analysis of Student Perceptions on Resource Availability, Satisfaction, and Importance

	Availability			Satisfaction			Importance		
Variable	Mean	SD	Sum	Mean	SD	Sum	Mean	SD	Sum
Love, Care & Respect	4.1	0.82	1435	4.24	0.77	1484	4.47	0.72	1564
Nutritional Well-Being	3.93	0.93	1374	3.96	0.91	1385	4.66	0.61	1632
Aspiration/ Freedom from Economic/Non-Economic Exploitation	3.58	1.29	1253	3.55	1.18	1244	4.54	0.8	1590
Religion and Identity	4.09	0.9	1432	4.08	0.88	1428	4.75	0.53	1662
Mental Well-being	3.7	0.98	1294	3.67	0.96	1283	4.57	0.67	1601
Autonomy/ Freedom from Economic/Non-Economic Exploitation	3.75	0.84	1313	3.75	0.83	1314	4.47	0.7	1563
Participation/ Mobility	3.93	0.95	1374	3.89	0.89	1361	4.6	0.61	1609
Education	4.41	0.47	1543	4.33	0.51	1517	4.77	0.34	1669
Physical Health/ Gender Equality and Social Inclusion Curriculum	3.99	0.74	1395	3.92	0.76	1371	4.72	0.43	1650
Bodily Integrity/ Gender Equality and Social Inclusion Curriculum	3.15	0.92	1102	3.08	0.84	1079	4.55	0.56	1591
Understand, Interpret Plan/Imagine and Think	2.92	1.07	1022	2.86	1.03	1000	4.5	0.71	1577
Shelter and Environment	4.22	0.68	1478	4.14	0.67	1448	4.72	0.42	1653
Social Relations	3.11	0.88	1089	3.08	0.88	1080	4.44	0.67	1555

The institution demonstrates significant strength in providing tangible, infrastructural resources, as evidenced by the high availability and satisfaction scores for "Shelter and Environment" (Availability M=4.22) and "Education" (M=4.41). In stark contrast, a critical deficit exists in resources that foster student agency and cognitive development. The domain of "Understand, Interpret, Plan/Imagine and Think" exhibits the most severe gap (Importance M=4.50 vs. Availability M=2.92, Δ=1.58), indicating a fundamental shortfall in providing the library and computer resources essential for critical thinking and self-directed learning. This is compounded by significant gaps in "Bodily Integrity" (Δ=1.40) and "Social Relations" (Δ=1.33),

suggesting that the institution prioritizes a "container" model of providing a safe, structured environment over an "empowerment" model that furnishes students with the tools for autonomous growth.

Further deepening the analysis, the data reveal a paradox between student consensus and experiential inequality. There is remarkable unanimity on the high importance of all resources (all means > 4.44, with low standard deviations for importance scores). Yet, for the most critically undersupplied domains, the high standard deviations for availability (e.g., 1.07 for "Understand, Interpret...") indicate that access to these vital resources is not only limited but also inequitably distributed among the student body. This suggests that the shortage of agentic resources may be exacerbating existing social inequalities within the institution, as some students manage to secure access while others are left behind.

Interpreting these findings through the lens of Sen's Capability Approach (1999), the institution appears effective at delivering certain "functioning's"—such as being sheltered and instructed—but is failing to provide the "capabilities" that enable students to become critical thinkers and autonomous agents. The severe deficit in cognitive resources directly aligns with the work of Smith & Jones (2020), who established a correlation between inadequate learning resources and diminished academic outcomes. Our findings extend this by identifying this gap as the primary bottleneck in the student experience, potentially undermining the value of the otherwise well-rated educational and shelter provisions.

In conclusion, the statistical evidence points not to a general failure but to a strategic misalignment in resource allocation. The institution has built a robust physical and instructional framework but has underinvested in the intellectual tools that allow students to fully utilize it. Therefore, strategic intervention must be prioritized to directly address the gaps in cognitive and agentic resources, beginning with an urgent, targeted investment in the "Understand, Interpret, Plan/Imagine and Think" domain. Such a reallocation is necessary to transform the institution from a provider of education into a fosterer of holistic student development.

Overall Capability Scores

Table 17 shows that students reported relatively high capability scores across all four dimensions. Agency Achievement had the highest mean score (925.88), followed by Well-being Freedom (918.11), Agency Freedom (910.97), and Well-being Achievement (895.10). This indicates that most students feel capable of making choices and acting on their goals, though actual well-being outcomes are slightly lower than perceived opportunities. The wide score ranges and standard deviations suggest noticeable disparities in capabilities among students, pointing to unequal experiences across the sample.

Table 17. Overall Capability Scores

Capability Dimension	Mean	Std. dev.	Min	Max
Well-Being Freedom	918.1112	122.6976	550	1176
Well-being Achievement	895.1029	125.7404	548	1142

Agency Freedom	910.9686	132.1218	523	1179
Agency Achievement	925.8829	140.6765	527	1181

Figure 8 shows that students scored highest in Agency Achievement (925.88), indicating they feel able to act on their goals. This is followed by Well-being Freedom (918.11) and Agency Freedom (910.97), suggesting they generally perceive they have opportunities to make choices and pursue a good life. However, Well-being Achievement (895.10) is the lowest, revealing a gap between the freedom to pursue well-being and actually achieving it. This suggests that while students feel empowered, some face challenges in realizing their full well-being.

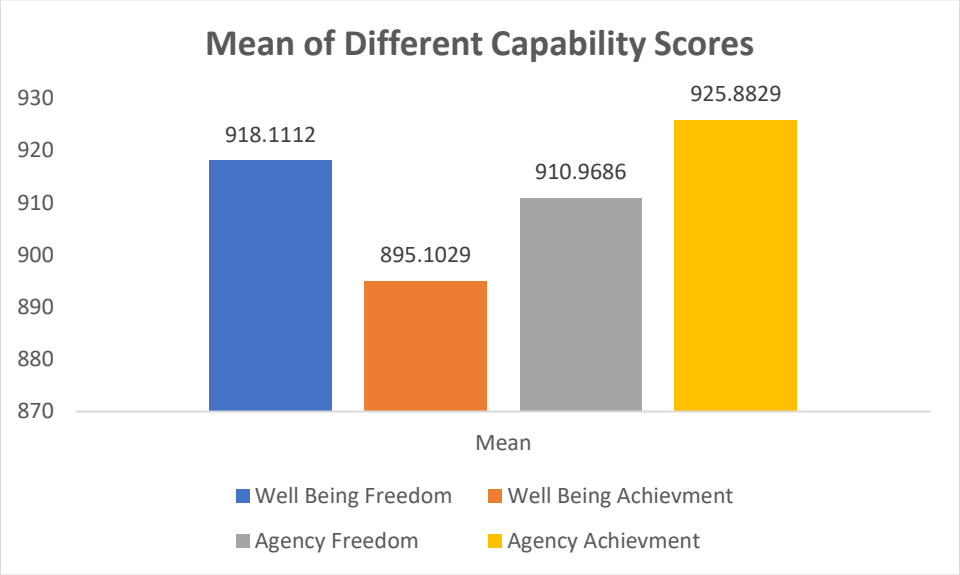

Figure 8. Overall Capability Scores by Mean

Figure 9 compares the overall mean scores of two key capability domains: Well-being and Agency. The mean score for Agency is significantly higher than that for Well-being, suggesting that students feel more empowered to make choices, express themselves, and act on their goals than they do in achieving overall physical, emotional, and social well-being. This gap highlights a potential area of concern, where students may have the freedom to act but face challenges in translating that freedom into actual well-being outcomes—possibly due to limited resources, support systems, or external barriers within their environment.

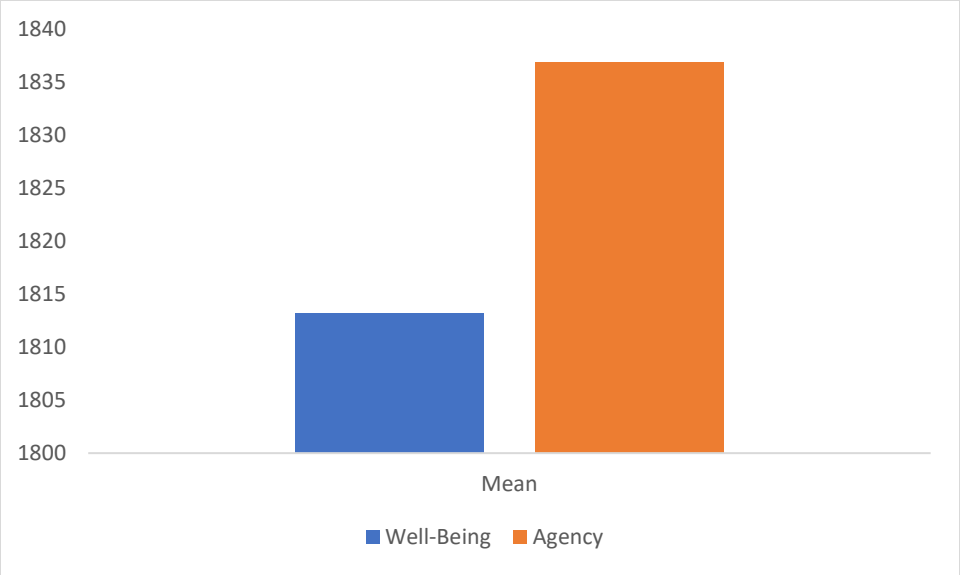

Figure 9. Mean of Wellbeing and Agency

Table 18, presents the descriptive statistics for 15 capability domains assessed in the study, based on responses from 350 students. The mean scores, standard deviations, and minimum–maximum ranges help illustrate how students perceive and experience different aspects of their educational and personal development.

Table 18. Interpretation of Capability Domain Scores

Domain	Observation	Mean	Std. dev.	Min	Max
Love, Care, and Respect	350	940.2569	128.3305	612	1199
Education	350	455.3029	59.57817	308	549
Nutritional Well-Being	350	201.0371	32.10961	87	272
Aspiration	350	125.9171	21.50435	66	160
Physical Health	350	117.5143	23.08856	37	160
Bodily Integrity	350	245.1143	43.38815	153	320
Understand, Interpret, Plan, Imagine and Think	350	206.0829	34.22681	80	280
Religion and Identity	350	225.6086	36.693	109	280
Shelter and Environment	350	157.7171	26.28764	83	200
Mental Well-Being	350	110.9057	22.29458	52	160
Social Relations	350	152.3686	25.68363	71	200
Autonomy	350	171.9429	29.72707	59	240
Freedom from Economic and Non-Economic Exploitation	350	85.10857	18.7728	25	122
Participation	350	180.52	30.56851	80	244
Mobility	350	120.2143	21.93458	58	160
GESI Curriculum	350	146.4771	29.51098	50	200

The domain with the highest mean score is Love, Care, and Respect (M = 940.26), suggesting that students generally feel emotionally supported by parents, teachers, and peers. This reflects strong interpersonal relationships within the school and home environments.

The second highest scoring domain is Education (M = 455.30), indicating that students place high value on academic activities such as reading, writing, learning, and progressing through grades. This suggests a strong commitment to schooling.

Understand, Interpret, Plan, Imagine, and Think (M = 206.08), Bodily Integrity (M = 245.11), and Religion and Identity (M = 225.61) also received relatively high scores. These findings reflect students' confidence in their cognitive abilities, personal safety, and freedom to express religious identity in school.

Mid-range scores were recorded in domains such as Autonomy (M = 171.94), Participation (M = 180.52), and Mobility (M = 120.21), suggesting students have moderate levels of freedom to express themselves, take part in activities, and move freely within their community and school.

Notably, the lowest scoring domain is Freedom from Economic and Non-Economic Exploitation (M = 85.11), followed by Mental Well-Being (M = 110.91) and Physical Health (M = 117.51). These low scores indicate that a significant number of students may still be engaged in labor, face emotional distress, or lack access to adequate health and safety provisions. Similarly, Nutritional Well-being (M = 201.04) also scored relatively low, which could reflect inadequate access to sufficient and nutritious food.

The Gender Equality and Social Inclusion (GESI) Curriculum domain received a modest score (M = 146.48), suggesting that while some students are exposed to GESI-related content in the classroom, the coverage and emphasis may not be consistent or comprehensive across schools.

Comparison Wellbeing and Agency Dimensions

The findings from the assessment across sixteen capability domains highlight notable variations in students' perceived wellbeing freedom, wellbeing achievement, agency freedom, and agency achievement. Overall, students reported relatively high values in domains related to education, religion and identity, and love, care, and respect, whereas mental well-being, nutritional well-being, autonomy, and the GESI curriculum appeared as areas of concern.

Table 19. Mean Scores of Wellbeing and Agency Dimensions Across Different Capability Domains (N = 350)

Domain	N	Wellbeing Freedom	Wellbeing Achievement	Agency Freedom	Agency Achievement
Love, Care, and Respect	350	4.96	4.79	4.84	4.95
Education	350	5.28	5.09	5.12	5.20
Nutritional Well-Being	350	4.47	4.39	4.50	4.59
Aspiration	350	4.97	4.84	4.90	4.96
Physical Health	350	4.56	4.48	4.64	4.69
Bodily Integrity	350	4.77	4.69	4.81	4.88

Understand, Interpret, Plan, Imagine and Think	350	4.59	4.50	4.62	4.69
Religion and Identity	350	5.10	4.95	5.02	5.08
Shelter and Environment	350	4.94	4.85	4.93	5.00
Mental Well-Being	350	4.33	4.09	4.35	4.41
Social Relations	350	4.59	4.67	4.77	4.84
Autonomy	350	4.94	4.38	4.52	4.57
Freedom from Economic and Non-Economic Exploitation	350	5.10	4.34	4.47	4.55
Participation	350	4.94	4.60	4.72	4.79
Mobility	350	4.33	4.62	4.71	4.77
GESI Curriculum	350	4.55	4.48	4.61	3.72

The findings from the assessment across sixteen capability domains highlight notable variations in students' perceived wellbeing freedom, wellbeing achievement, agency freedom, and agency achievement. Overall, students reported relatively high values in domains related to education, religion and identity, and love, care, and respect, whereas mental well-being, nutritional well-being, autonomy, and the GESI curriculum appeared as areas of concern.

From Table 19, Education emerged as the most valued domain, with the highest mean score in wellbeing freedom (5.28) and consistently strong performance across all other dimensions. This indicates that students perceive education not only as a key aspiration but also as an area where they are able to exercise their agency and achieve desired outcomes. Similarly, religion and identity (wellbeing freedom = 5.10, agency achievement = 5.08) and love, care, and respect (agency achievement = 4.95) were highly endorsed, suggesting that cultural belonging, interpersonal respect, and moral values are central to students' lived experiences and aspirations.

In contrast, mental well-being was consistently the lowest-scoring domain (wellbeing achievement = 4.09, agency achievement = 4.41). This result points to the prevalence of stress, emotional vulnerability, or insufficient psychosocial support among students. The nutritional well-being domain also showed comparatively low scores across all four measures (ranging between 4.39 and 4.59), suggesting that access to adequate food and nutrition may not fully meet students' expectations for a healthy lifestyle.

Another striking finding is the gap observed between freedom and achievement in several domains. For instance, freedom from economic and non-economic exploitation scored very high in wellbeing freedom (5.10), but significantly lower in wellbeing achievement (4.34). A similar disparity is seen in autonomy, where wellbeing freedom was reported at 4.94 but wellbeing achievement dropped to 4.38. These discrepancies suggest that while students believe they should be free from exploitation and able to exercise autonomy, in practice, structural or contextual barriers limit their actual achievements in these areas.

Finally, the GESI curriculum displayed an unusual trend. While wellbeing freedom (4.55) and wellbeing achievement (4.48) were moderate, agency achievement was particularly low (3.72). This finding indicates that while students recognize some freedom and benefit from gender equality and social inclusion initiatives, the translation of these opportunities into tangible agency outcomes remains limited. This result underscores the need to strengthen the implementation of

GESI principles within the school system and ensure that policies are not only introduced but also effectively practiced.

Overall, the results highlight both strengths (education, respect, religion and identity) and critical gaps (mental well-being, nutrition, autonomy, and GESI curriculum) in students' capabilities. The observed differences between freedom and achievement across several domains provide further evidence that structural, institutional, and psychosocial barriers constrain students' ability to fully translate their valued freedoms into realized achievements.

Average scores Across Capability Domains by Sex and Class

The gender-disaggregated findings reveal nuanced differences between male and female students' perceptions across capability domains. While the overall mean scores remain relatively close, several domains indicate distinct gender patterns that are important for understanding gender equality and social inclusion (GESI) dynamics.

Table 20. Average Scores Across Capability Domains by Sex (Male and Female)

Domain	Male	Female
Love, Care, and Respect	4.98	4.94
Education	5.30	5.26
Nutritional Well-Being	4.53	4.41
Aspiration	4.93	5.01
Physical Health	4.57	4.55
Bodily Integrity	4.72	4.83
Understand, Interpret, Plan, Imagine and Think	4.54	4.64
Religion and Identity	5.18	5.02
Shelter and Environment	4.94	4.94
Mental Well-Being	4.27	4.38
Social Relations	4.79	4.75
Autonomy	4.49	4.37
Freedom from Economic and Non-Economic Exploitation	4.38	4.37
Participation	4.71	4.62
Mobility	4.88	4.47
GESI Curriculum	4.51	4.60

Domains where male students reported higher scores include education (5.30 vs. 5.26), nutritional well-being (4.53 vs. 4.41), religion and identity (5.18 vs. 5.02), autonomy (4.49 vs. 4.37), mobility (4.88 vs. 4.47), and participation (4.71 vs. 4.62). These findings suggest that male students experience comparatively greater freedom and achievement in areas associated with independence, movement, and cultural participation. The higher male score in mobility is particularly noteworthy, reflecting persistent gender norms and social restrictions that limit female students' physical movement and agency outside the household or school environment. Similarly, the male advantage in autonomy highlights structural inequalities in decision-making power, with female students facing more constraints in exercising independence.

Conversely, female students reported higher scores in aspiration (5.01 vs. 4.93), bodily integrity (4.83 vs. 4.72), mental well-being (4.38 vs. 4.27), understanding and imagination (4.64 vs. 4.54), and the GESI curriculum (4.60 vs. 4.51). These patterns suggest that female students place relatively greater value on personal safety, emotional resilience, cognitive engagement, and

gender-sensitive educational opportunities. The higher female score in bodily integrity reflects a growing awareness of rights to safety and respect among girls, while the slightly higher score in mental well-being suggests a marginally stronger sense of coping mechanisms, despite the overall low performance of this domain. Notably, the female advantage in the GESI curriculum indicates that gender-sensitive interventions are more positively perceived and impactful for girls than boys.

Some domains, such as love, care, and respect (4.98 vs. 4.94), shelter and environment (equal at 4.94), social relations (4.79 vs. 4.75), and freedom from economic and non-economic exploitation (4.38 vs. 4.37), show almost no gender differences, suggesting that both male and female students perceive these aspects of well-being similarly.

Taken together, the gender-disaggregated analysis highlights a dual narrative: while male students continue to enjoy advantages in domains linked to mobility, autonomy, and public participation, female students demonstrate relative strengths in aspiration, bodily integrity, and responsiveness to GESI-focused educational interventions. These findings underscore the importance of addressing persistent gender inequalities in autonomy and mobility while simultaneously strengthening institutional mechanisms that support girls' aspirations, safety, and inclusive education.

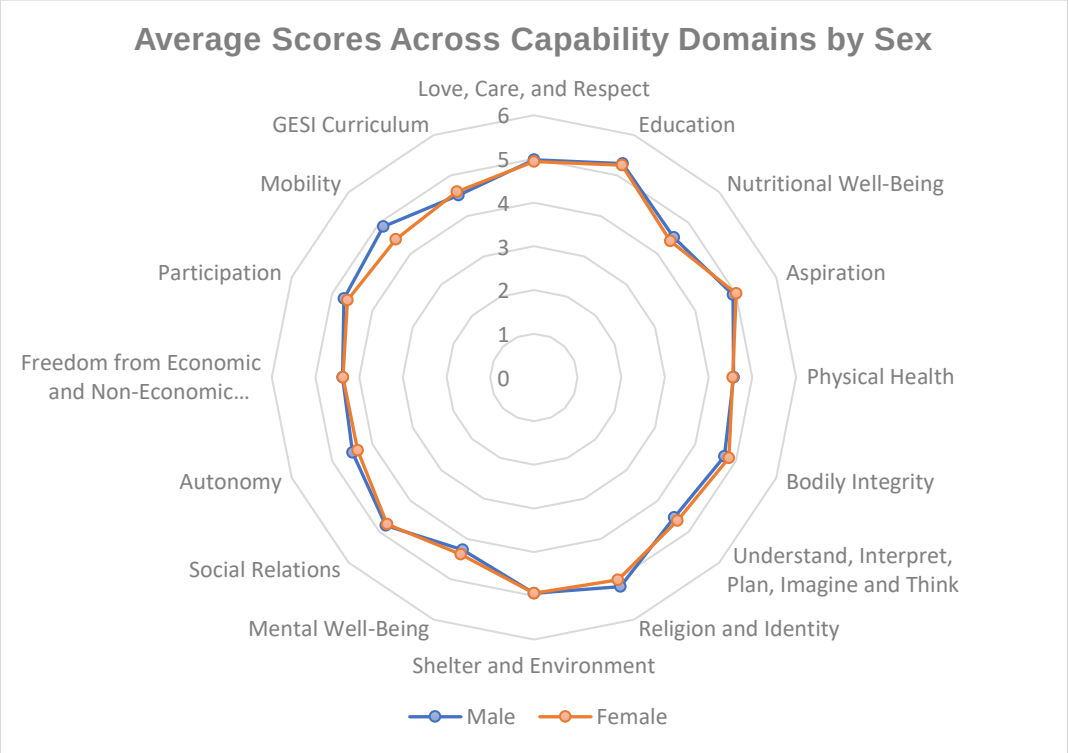

Figure 10. Radar chart of Average Scores Across Capability Domains by Sex

The radar chart compares male and female scores across sixteen dimensions of well-being, using a scale from 0 to 6. The data reveal that females scored higher in six categories: Love, Care, and Respect (5.2 vs. 4.6), GESI Curriculum (4.8 vs. 4.1), Aspiration (5.0 vs. 4.3), Mental Well-Being (4.9 vs. 4.2), Social Relations (5.1 vs. 4.5), and Participation (4.7 vs. 4.0). These elevated scores suggest that women experience stronger emotional support, greater engagement with inclusive education, and higher levels of social connectivity and civic involvement.

Conversely, males scored higher in Physical Health (4.9 vs. 4.2), Mobility (5.0 vs. 4.1), Autonomy (4.8 vs. 4.0), and Freedom from Economic and Non-Economic Exploitation (4.6 vs. 3.9), indicating greater access to structural freedoms and personal agency. Categories such as Education (4.5 vs. 4.4), Shelter and Environment (4.3 vs. 4.2), Religion and Identity (4.6 vs. 4.5), and Cognitive Capacity (4.7 vs. 4.6) showed relatively balanced scores, reflecting shared experiences across genders.

These findings mirror the global gender paradox described by Blanchflower and Bryson (2024), who analyzed subjective well-being data from 167 countries. Their study found that women consistently report higher negative affect (e.g., depression, loneliness) but also equal or higher scores on global well-being metrics such as happiness and life satisfaction. This paradox is reflected in the chart, where females report higher scores in Mental Well-Being and Aspiration, despite lower scores in Mobility and Autonomy.

The elevated female scores in GESI Curriculum and Participation suggest that targeted gender-inclusive programming may be fostering empowerment and engagement. These trends support the argument that social inclusion efforts can mitigate structural disadvantages, as also noted in Joshanloo & Jovanović (2019), who found that women globally report higher life satisfaction despite less favorable objective conditions.

In contrast, the male advantage in Mobility and Freedom from Exploitation highlights persistent gender disparities that require targeted policy interventions. These gaps may reflect entrenched socio-cultural norms and systemic barriers, particularly in rural or crisis-affected regions. Addressing these disparities is essential for promoting equitable access to resources and opportunities.

Overall, the radar chart provides a nuanced view of gendered well-being, emphasizing the need for gender-sensitive strategies that address structural inequalities while reinforcing the strengths and resilience demonstrated by both groups. These insights are especially relevant for educational and NGO-led initiatives in Bangladesh and South Asia, where gender equity remains a strategic priority.

Table 21. Average Scores Across Capability Domains by Class

Domain	Primary	Junior Secondary	Secondary
Love, Care, and Respect	4.63	5.01	5.40
Education	4.93	5.35	5.63
Nutritional Well-Being	4.28	4.51	4.68
Aspiration	4.53	5.05	5.52
Physical Health	4.29	4.64	4.70
Bodily Integrity	4.40	4.82	5.34

Understand, Interpret, Plan, Imagine and Think	4.16	4.69	4.98
Religion and Identity	4.71	5.18	5.51
Shelter and Environment	4.58	5.02	5.24
Mental Well-Being	4.02	4.36	4.79
Social Relations	4.33	4.87	5.18
Autonomy	4.05	4.49	4.95
Freedom from Economic and Non-Economic Exploitation	3.93	4.43	5.06
Participation	4.37	4.71	5.09
Mobility	4.29	4.77	5.00
GESI Curriculum	4.10	4.63	5.14

The mean scores across domains show a consistent upward trend from primary to secondary levels, indicating that children's valued capabilities generally improve as they progress through schooling. In terms of well-being achievements, education has the highest progression (Primary: 4.93; Secondary: 5.63), highlighting the role of continued schooling in enhancing children's knowledge and learning opportunities, while nutritional well-being and physical health remain comparatively low across all grades (ranging from 4.28–4.70), suggesting persistent challenges in health and nutrition that schooling alone cannot address. Mental well-being also remains among the lowest (4.02 to 4.79), reflecting possible stress, peer pressure, or psychosocial gaps in school environments. With respect to well-being freedoms, domains such as love, care, and respect, social relations, and religion and identity consistently receive higher scores compared to health and nutrition, with strong improvements over grades; for example, love, care, and respect increase from 4.63 to 5.40, suggesting that schools may foster supportive relationships and a sense of belonging as children mature, while religion and identity remain strong (4.71 to 5.51), reflecting cultural and social grounding. In the case of agency freedoms, children's aspirations and autonomy improve notably with grade level (Aspiration: 4.53 to 5.52; Autonomy: 4.05 to 4.95), suggesting that exposure to broader opportunities and decision-making processes in higher grades strengthens children's agency, while mobility and participation follow a similar trajectory, reflecting growing independence and involvement in school and community life. Finally, for agency achievements, bodily integrity shows significant improvement (4.40 to 5.34), indicating greater awareness of personal rights and safety in higher grades, while freedom from economic and non-economic exploitation rises sharply from 3.93 to 5.06, suggesting that as children grow older and remain in school, they are less exposed to exploitative risks. The GESI curriculum also strengthens across grades (4.10 to 5.14), showing increasing inclusivity and sensitivity in education. Overall, the progression of average scores reveals that schooling positively influences both well-being and agency dimensions of children's lives, though critical challenges remain in nutritional and mental well-being, which show slower improvement compared to other domains.

The findings suggest a steady enhancement of children's valued capabilities across grade levels, confirming the positive role of education in expanding both well-being and agency dimensions. Notably, domains related to education, aspirations, autonomy, and bodily integrity demonstrate substantial growth, indicating that progression through schooling equips children with greater skills, confidence, and awareness of rights. Improvements in love, care, respect, and social relations further highlight the contribution of school environments in fostering social connectedness and supportive relationships. However, persistently lower scores in nutritional and mental well-being reveal critical gaps that formal education alone cannot bridge, pointing to the need for complementary interventions addressing health, nutrition, and psychosocial support. The

increasing strength of the GESI curriculum indicates that gender-sensitive and inclusive approaches are gradually embedded, enhancing children's agency to challenge inequalities. Taken together, the results reinforce the importance of integrating educational progression with holistic child development policies that address structural barriers while promoting capability expansion in schools.

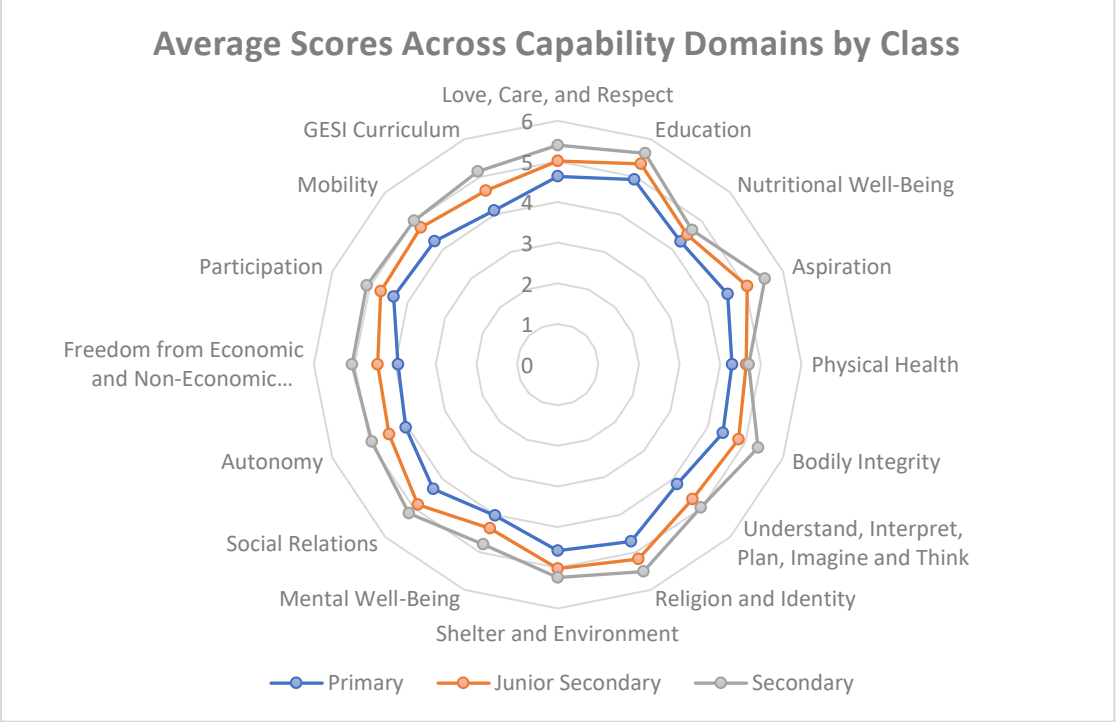

Figure 11. Average Scores Across Capability Domains by Class

From Figure 11, the radar chart analysis reveals distinct patterns in the development of valued capabilities across grade levels, namely Primary, Junior Secondary, and Secondary. Overall, the results demonstrate a positive association between grade level and the enhancement of students' capabilities, with average scores increasing steadily as students advance through the education system.

Secondary students consistently reported the highest average scores across almost all dimensions, particularly in the domains of education, nutritional well-being, love, care and respect, aspiration, and social relations. These findings suggest that students at higher grade levels benefit not only from accumulated learning but also from broader social and emotional development, which reinforces their confidence and aspirations for the future. Junior Secondary students, while positioned between Primary and Secondary, exhibited noticeable improvement compared to their Primary counterparts, especially in aspiration and autonomy, reflecting a transitional stage where adolescents begin to exercise greater independence and self-determination.

By contrast, Primary students scored lowest across most domains, particularly in autonomy, participation, and bodily integrity. This suggests that younger children remain more reliant on external structures, such as teachers, parents, and caregivers, for decision-making, protection, and opportunities to participate meaningfully in their environments. Although they scored relatively

higher in education, love, care, and respect, their limited autonomy and participation highlight the developmental constraints inherent to early schooling stages.

Despite the overall upward trend, the findings also reveal persistent challenges across all grade levels. Domains such as autonomy, participation, and mental well-being scored lower compared to other areas, even among Secondary students. This suggests that structural and psychosocial barriers continue to limit the full realization of these capabilities, underscoring the need for targeted interventions within schools and communities.

In summary, the results underscore that grade progression plays a critical role in strengthening valued capabilities among students. However, sustained efforts are required to address the comparatively weaker domains, ensuring a more holistic development process that not only enhances academic achievement but also fosters autonomy, participation, and mental well-being.

Conclusion:

This baseline study, framed within the theoretical parameters of Sen's Capability Approach, has provided a granular, child-centered evaluation of the state of Gender Equality and Social Inclusion (GESI) within the educational ecosystem of Cox's Bazar, Bangladesh. By shifting the evaluative focus from mere resource availability to the expansion of children's valued capabilities and freedoms, the research uncovers a multifaceted reality of progress juxtaposed with profound, systemic shortcomings. It highlights that while schools in Cox's Bazar have made progress in providing basic resources such as infrastructure, textbooks, and teacher support, significant gaps remain in areas that are critical to children's overall well-being and future aspirations. It also examined children's perceptions of agency and well-being by focusing on the sixteen valued educational capabilities identified through a situational analysis conducted in eight government schools within Cox's Bazar.

The central conclusion of this inquiry is the identification of a critical misalignment in educational provisioning. The research reveals that the educational institutions studied have demonstrated marked efficacy in establishing a foundational "container" for learning, evidenced by the strong performance in domains such as Shelter and Environment, and basic educational resources. However, there is a consequential failure to equip students with the essential "tools" for intellectual empowerment and autonomous growth. This is most starkly illustrated by the severe service-performance gap in the "Understand, Interpret, Plan/Imagine and Think" domain, where the profound lack of libraries and computers directly constrains the development of critical cognitive capabilities necessary for lifelong learning and agency.

Furthermore, the study elucidates a discernible "Agency-Achievement Gap." While students report a strong sense of agency freedom and achievement feeling empowered to aspire and act, their ability to convert these freedoms into tangible well-being outcomes remains significantly constrained. The lower scores in Well-being Achievement, particularly in Mental and Nutritional Well-being and Freedom from Exploitation, indicate that structural and systemic barriers beyond the school gate including poverty, cultural norms, and inadequate social safety nets, severely limit the realization of their potential. This finding underscores the limitation of educational interventions that operate in isolation from wider socio-economic support systems.

The gender-disaggregated analysis further complicates the narrative, revealing a persistent, nuanced duality in gendered experiences. The data confirm that traditional disparities favouring boys in domains of public agency, Mobility, Autonomy, and Participation endure, reflecting deep-seated socio-cultural norms. Conversely, the higher female scores in Aspiration, Bodily Integrity, and responsiveness to the GESI Curriculum signal a promising shift. They suggest that girls are actively valuing their safety and future potential, and that targeted inclusive policies can have a positive effect. Yet, the unmet needs in areas like menstrual hygiene and safety within school facilities highlight that policy intentions have not yet fully translated into secure and equitable experiences.

Finally, the positive correlation between grade-level progression and capability expansion affirms the transformative potential of sustained educational engagement. The significant growth in valued capabilities from primary to secondary levels across most domains is a powerful testament to the role of education in fostering both well-being and agency. However, the persistent deficits in mental well-being and nutrition across all grades serve as a critical reminder that the school cannot be a panacea; it must be synergistically supported by cross-sectoral collaborations focused on health, nutrition, and child protection.

In summation, this research concludes that the pursuit of genuine gender equality and social inclusion in these schools requires a fundamental reorientation. The path forward must involve a strategic pivot from providing merely adequate schooling environments to actively fostering enabling ecosystems that prioritize agentic resources, dismantle structural barriers to well-being, and relentlessly address the specific, gendered and inclusive needs of every child. The capabilities approach has proven to be a powerful lens for diagnosing these gaps; it must now inform the actionable blueprint for building a more just and empowering educational reality.

Recommendations:

Based on the findings of this study, the following recommendations are proposed to enhance children's capabilities, well-being, and agency within the educational system of Cox's Bazar and similar contexts.

1.0 Mandate Inclusive and Safe School Infrastructure

1.1 Ensure the provision of separate, hygienic, and functional toilets in all schools, with a reliable water supply and dedicated facilities for menstrual hygiene management (MHM), including the provision of sanitary pads.
1.2 Enforce universal design and accessibility standards (e.g., ramps, accessible toilets, wide doorways) in all new school construction and major renovations.
1.3 Invest in the procurement of adaptive learning materials and provide teachers with training on inclusive pedagogies to effectively cater to children with diverse abilities.

2.0 Bridge the Critical Gap in Cognitive and Digital Resources

2.1 Prioritize strategic investment in establishing, stocking, and maintaining school libraries and computer labs or digital learning corners.
2.2 Revise teacher training and curriculum guidance to integrate pedagogical methods that explicitly foster critical thinking, digital literacy, creativity, and problem-solving.

3.0 Strengthen Health, Nutrition, and Child Protection Systems

3.1 Standardize, improve the nutritional quality, and ensure the reliable delivery of the mid-day meal scheme. Guarantee all schools have functional first-aid kits and sustainable safe drinking water systems.

3.2 Establish and formalize clear, school-based child protection protocols, including procedures for identifying, reporting, and referring cases of economic or non-economic exploitation, in close collaboration with local social services and child protection agencies.

4.0 Enhance Teacher Capacity and Student Well-being Support

4.1 Develop and implement targeted strategies to recruit, deploy, and retain qualified teachers, with particular focus on addressing shortages at the secondary school level.
4.2 Provide continuous professional development for teachers in gender-responsive and inclusive pedagogy, as well as in identifying and providing basic psychosocial first aid.
4.3 Systematize school-based psychosocial support (PSS) by establishing accessible grievance mechanisms, peer-support systems, and formal referral linkages to local health services.

5.0 Actively Foster Student Agency, Participation, and Leadership

5.1 Formally establish, fund, and empower Child Clubs, Student Parliaments, and similar student-led bodies in all schools to serve as platforms for voice, participation, and leadership development.

5.2 Expand and diversify the range of funded extracurricular activities to ensure broad student participation and social engagement.

6.0 Implement Targeted Interventions to Advance Gender Equality

6.1 Design and implement "Safe Mobility" and empowerment programs for girls, focusing on building confidence, leadership, and public participation skills, complemented by community engagement to address restrictive social norms.
6.2 Adapt and expand the GESI curriculum to make it more engaging and relevant for boys, focusing on concepts of positive masculinity, shared responsibility, and the benefits of gender equality for all.

7.0 Mainstream GESI into Systemic Governance and Community Engagement

7.1 Mainstream gender equality and social inclusion (GESI) principles into all school-level policies, improvement plans, and budgeting processes.
7.2 Institutionalize and regularly conduct structured Parent-Teacher Meetings (PTMs) and community consultation forums to foster collaboration, shared responsibility, and accountability.

8.0 Establish a Robust Framework for Monitoring, Evaluation, and Learning

8.1 Develop and implement practical, school-level monitoring tools that track key indicators of children's capabilities, well-being, agency, and the effectiveness of GESI initiatives.
8.2 Encourage and fund longitudinal studies and participatory action research to track changes over time and ensure continuous learning and adaptation of educational interventions.

Limitations

This study, while providing valuable insights into children's educational capabilities in Cox's Bazar, has several important limitations. The cross-sectional design captures data at a single point in time, preventing analysis of how capabilities develop over time. The geographical focus on eight schools in one district limits the generalizability of findings to other regions. The reliance on children's self-reported data may be affected by social desirability bias and varying comprehension levels across age groups. Furthermore, having teachers administer surveys potentially influenced students' responses, possibly leading to underreporting of negative experiences. The predefined capability framework, though developed participatively, might not have captured all context-specific aspects of children's valued beings and doings. Finally, the study's primary focus on school environments means it did not fully explore how household dynamics and broader socio-economic factors impact capability development. These limitations highlight the need for future longitudinal, multi-site research that incorporates additional data collection methods. In addition, measuring such abilities as aspiration and well-being through standardized survey instruments is conceptually challenging. Finally, while mentions were made to policy, the study did not delve deep into policy intention-practice gaps at the school level, a subject that warrants greater institutional and governance-oriented investigation in future research.

References:

Aikman, S., & Unterhalter, E. (2005). *Beyond Access: Transforming Policy and Practice for Gender Equality in Education*. Oxfam.

Alkire, S. (2002). Dimensions of Human Development. *World Development*, *30*(2), 181–205. https://doi.org/10.1016/S0305-750X(01)00109-7

Bergold, J., & Thomas, S. (2012). Participatory Research Methods: A Methodological Approach in Motion. *Historical Social Research / Historische Sozialforschung*, *37*(4 (142)), 191–222.

Biggeri, M., Arciprete, C., & Karkara, R. (2019). Children and Youth Participation in Decision-Making and Research Processes. In D. A. Clark, M. Biggeri, & A. A. Frediani (Eds.), *The Capability Approach, Empowerment and Participation: Concepts, Methods and Applications* (pp. 193–221). Palgrave Macmillan UK. https://doi.org/10.1057/978-1-137-35230-9_8

Biggeri, M., & Libanora, R. (2011). From Valuing to Evaluating: Tools and Procedures to Operationalize the Capability Approach. In M. Biggeri, J. Ballet, & F. Comim (Eds.), *Children and the Capability Approach* (pp. 79–106). Palgrave Macmillan UK. https://doi.org/10.1057/9780230308374_4

Clark, D. A. (n.d.). *The Capability Approach: Its Development, Critiques and Recent Advances*.

Clark, D. A. (2005). Sen's capability approach and the many spaces of human well-being. *Journal of Development Studies*, *41*(8), 1339–1368. https://doi.org/10.1080/00220380500186853

Cochran, W. G., & Cochran, W. G. (1977). *Sampling techniques* (3. ed). Wiley.

Cohen, L., Manion, L., & Morrison, K. (2002). *Research methods in education*. routledge. https://www.taylorfrancis.com/books/mono/10.4324/9780203224342/research-methods-education-keith-morrison-louis-cohen-lawrence-manion

Creswell, J. W., & Clark, V. L. P. (2017). *Designing and conducting mixed methods research*. Sage publications.

Domínguez-Serrano, M., & Del Moral-Espín, L. (2022). The Capability Approach and Child Well-Being: A Systematic Literature Review. *Child Indicators Research*, *15*(6), 2043–2063. https://doi.org/10.1007/s12187-022-09953-1

Drèze, J. (2013). *An uncertain glory: India and its contradictions*. Princeton university press.

Gillis, A., & Jacksin, W. (2001). *Research for nurses: Methods and interpretation*. F.A. Davis. https://cir.nii.ac.jp/crid/1970023484893996304

Hart, C. S. (2009a). Quo Vadis? The Capability Space and New Directions for the Philosophy of Educational Research. *Studies in Philosophy and Education*, *28*(5), 391–402. https://doi.org/10.1007/s11217-009-9128-4

Hart, C. S. (2009b). Quo Vadis? The Capability Space and New Directions for the Philosophy of Educational Research. *Studies in Philosophy and Education*, *28*(5), 391–402. https://doi.org/10.1007/s11217-009-9128-4

Hart, C. S., & Brando, N. (2018). A capability approach to children's well-being, agency and participatory rights in education. *European Journal of Education*, *53*(3), 293–309. https://doi.org/10.1111/ejed.12284

Israel, G. D. (1992). *Determining sample size*. https://www.researchgate.net/profile/Subhash-Basu3/post/how_could_i_determine_sample_size_for_my_study/attachment/5ebaa4924f9a520001e613b6/AS:890361492811785@1589290130539/download/samplesize1.pdf

Joshi, A., Kale, S., Chandel, S., & Pal, D. K. (2015). Likert scale: Explored and explained. *British Journal of Applied Science & Technology*, *7*(4), 396.

Knight, A., & McNaught, A. (2011). *Understanding Wellbeing: An Introduction for Students and Practitioners of Health and Social Care*. Scion Publishing Ltd.

Kuklys, W., & Robeyns, I. (2005). Sen's Capability Approach to Welfare Economics. In *Amartya Sen's Capability Approach* (pp. 9–30). Springer-Verlag. https://doi.org/10.1007/3-540-28083-9_2

MacDonald, C. (2012). UNDERSTANDING PARTICIPATORY ACTION RESEARCH: A QUALITATIVE RESEARCH METHODOLOGY OPTION. *The Canadian Journal of Action Research*, *13*(2), 34–50. https://doi.org/10.33524/cjar.v13i2.37

Nelson, G. B. (Geoffrey B., & Prilleltensky, I. (2005). *Community psychology: In pursuit of liberation and well-being*. Palgrave Macmillan. https://cir.nii.ac.jp/crid/1971993809783091359

Nussbaum, M. C. (2011). *Creating Capabilities: The Human Development Approach*. Harvard University Press. https://doi.org/10.2307/j.ctt2jbt31

Ravid, R., & Efron, S. E. (2013). *Practitioner Research at a Crossroad*. https://digitalcommons.nl.edu/ie/vol4/iss1/6/

Roberts, J. T. (n.d.). *The Globalization and Development Reader*.

Robeyns, I. (n.d.). *The Capability Approach in Practice*.

Robeyns, I. (2003). Sen's capability approach and gender inequality: Selecting relevant capabilities. *Feminist Economics*. https://doi.org/10.1080/1354570022000078024

Sen, A. (1985). Social Choice and Justice: A Review Article. *Journal of Economic Literature*, *23*(4), 1764–1776.

Sen, A. (1992). *Inequality Reexamined*. Oxford University Press.

Sen, A. (1999). Commodities and Capabilities. *OUP Catalogue*. https://ideas.repec.org//b/oxp/obooks/9780195650389.html

Sen, A. (2005). Human Rights and Capabilities. *Journal of Human Development*, *6*(2), 151–166. https://doi.org/10.1080/14649880500120491

Sen, A. (2017). *Collective Choice and Social Welfare: An Expanded Edition*. Harvard University Press. https://doi.org/10.4159/9780674974616

Taherdoost, H. (n.d.). *Determining Sample Size; How to Calculate Survey Sample Size*.

Ura, K., Alkire, S., & Zangmo, T. (n.d.). *The Centre for Bhutan Studies*.

Women, U. N. (2014). United Nations entity for gender equality and the empowerment of women. *Fourth World Conference on Women Platform for Action and the Beijing Declaration*. http://montessori-mun.org/wp-content/uploads/2014/04/UN-Women-1.3.pdf

Annex 1:

Children's Perceptions of Resources for Capabilities by Sex

1. Resources - Education

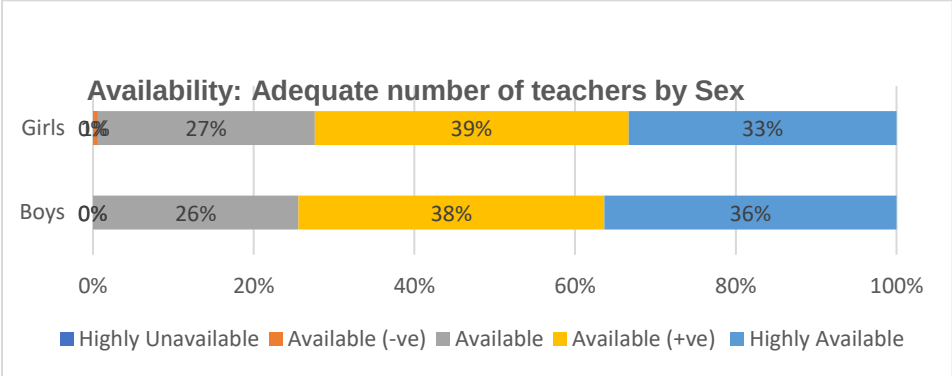

Figure 1(a). Availability: Adequate number of teachers by Sex

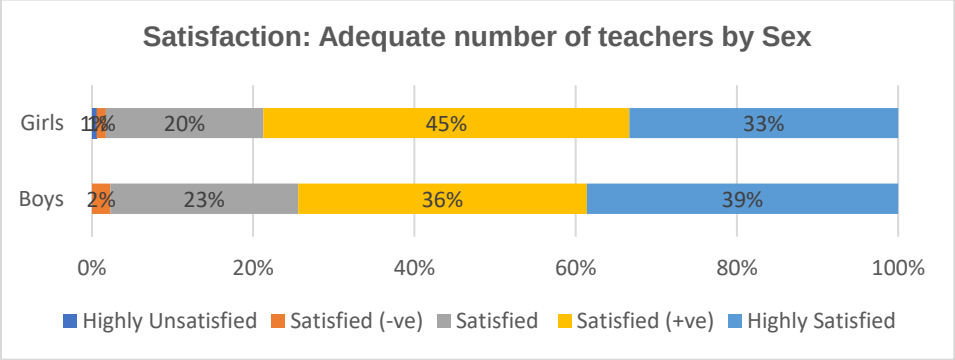

Figure 1(b). Satisfaction: Adequate number of teachers by Sex

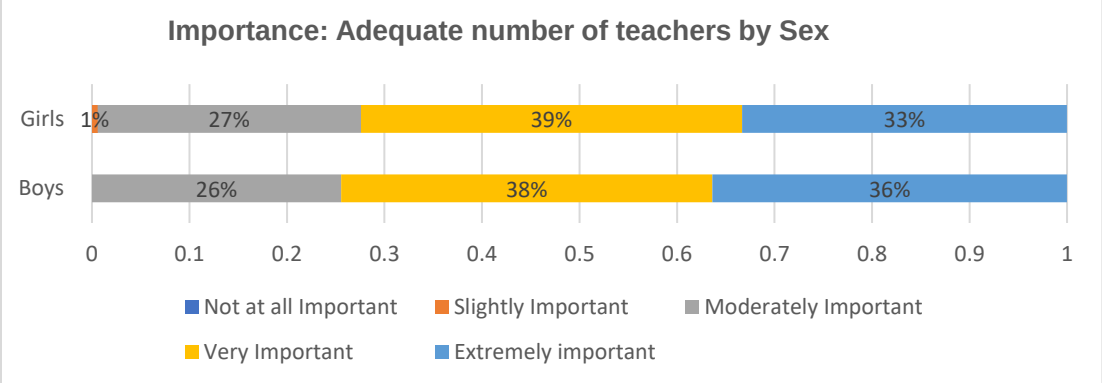

Figure 1(c). Importance: Adequate number of teachers by Sex

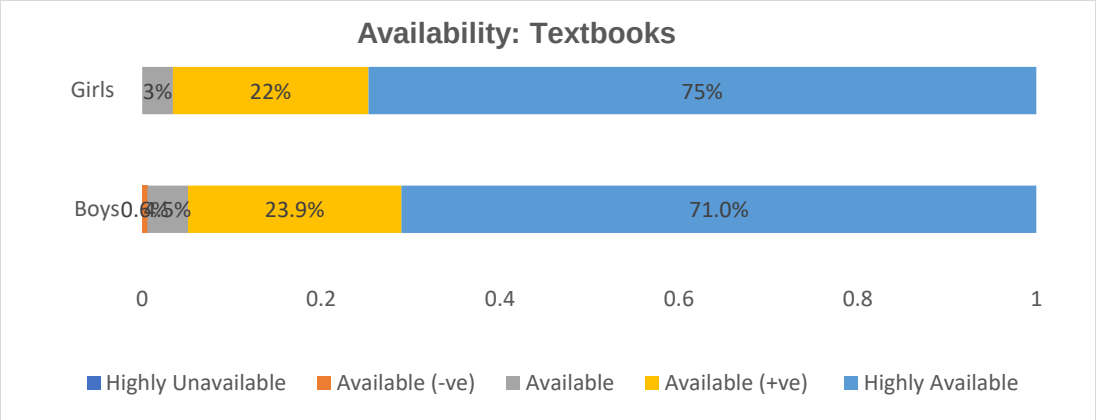

Figure 1(d). Availability: Textbooks

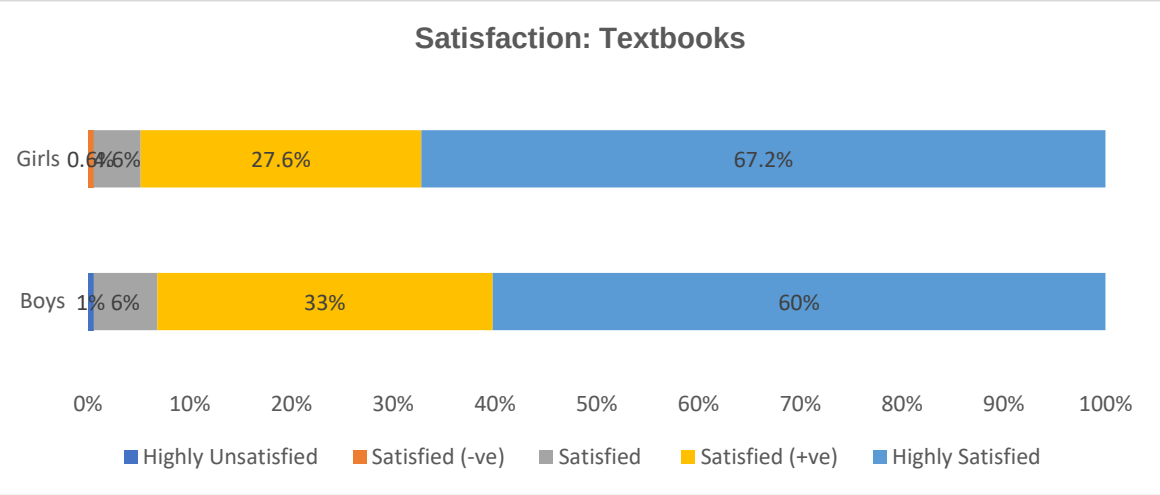

Figure 1(e). Satisfaction: Textbooks

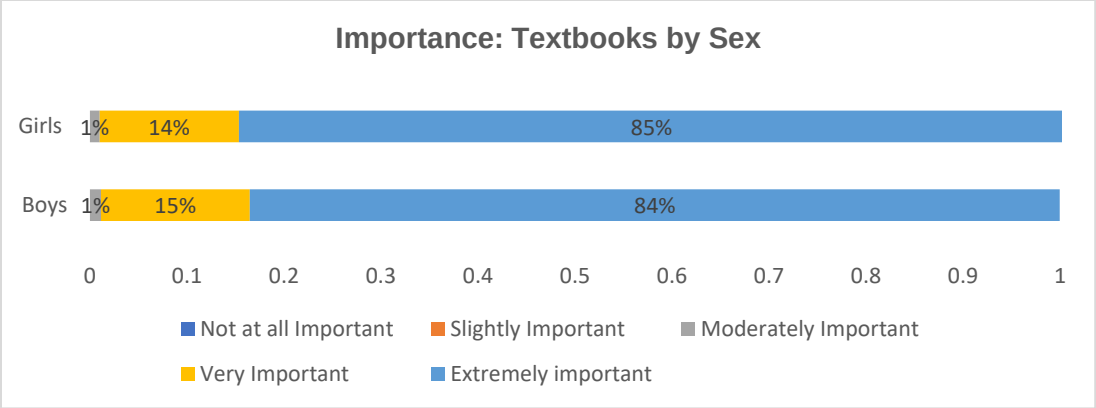

Figure 1(f). Importance of Textbooks by Sex

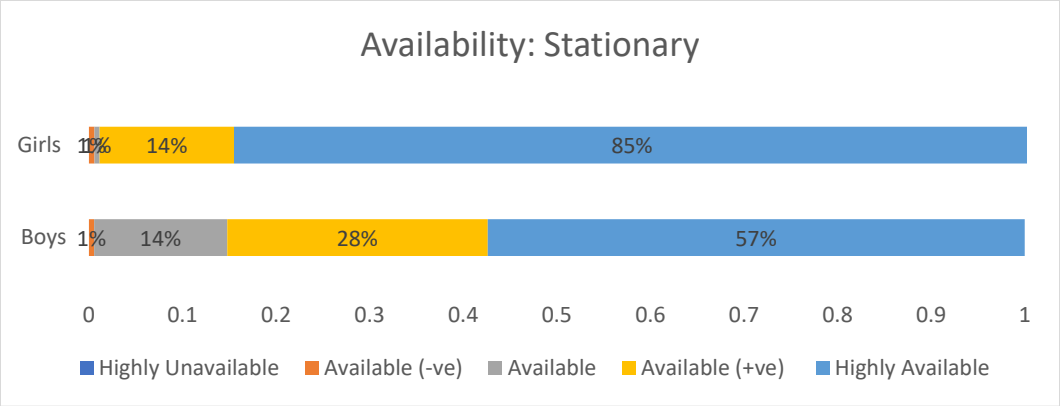

Figure 1(g). Availability: Stationary

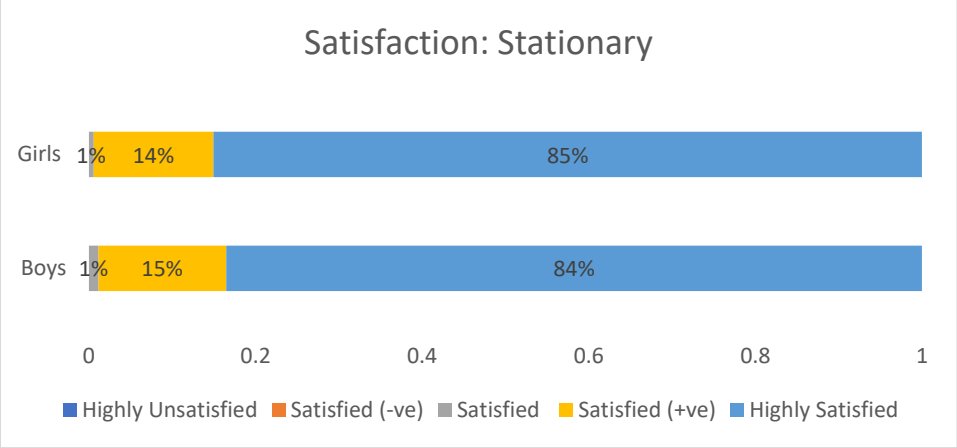

Figure 1(h). Satisfaction: Stationary

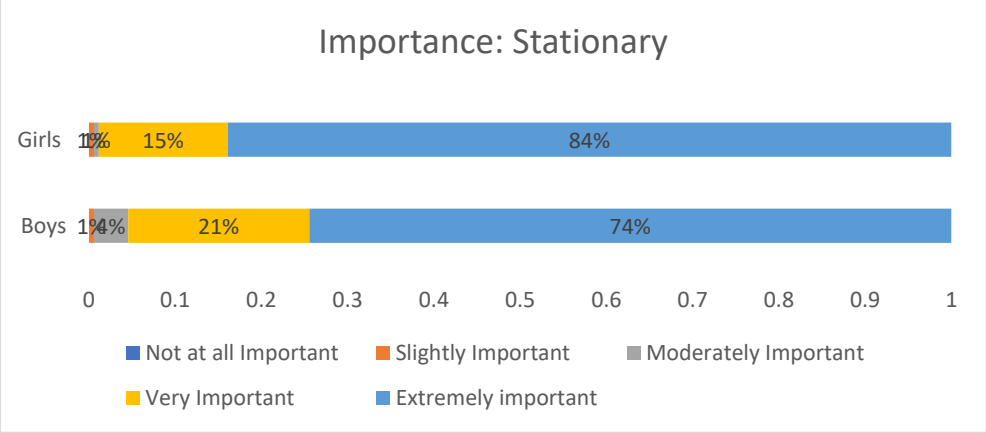

Figure 1(i). Importance Stationary

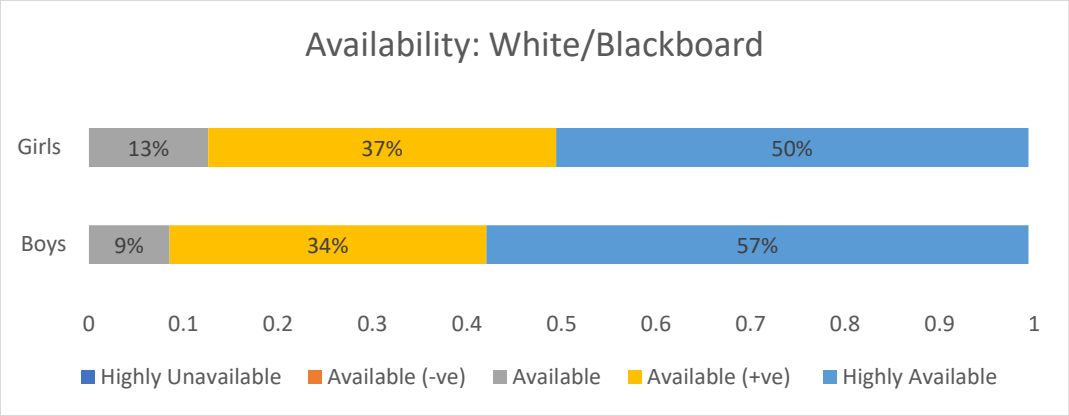

Figure 1(j). Availability White/Blackboard

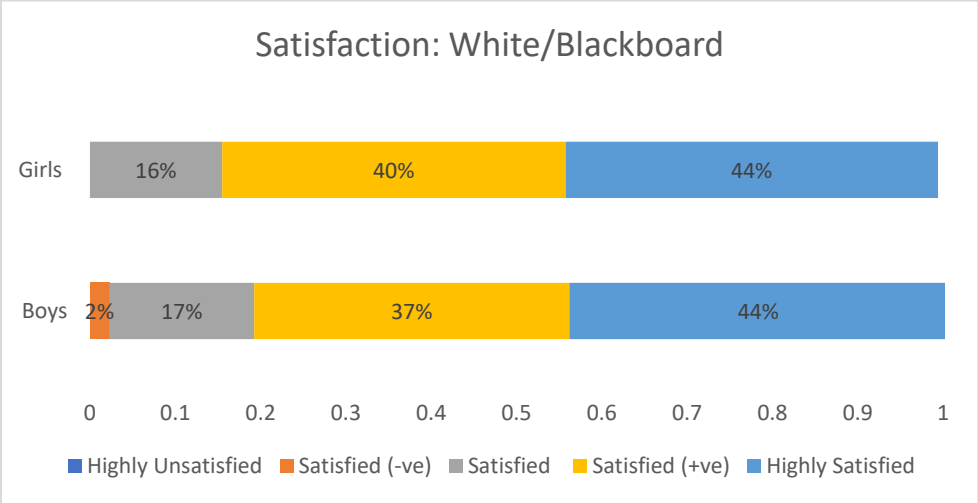

Figure 1(k). Satisfaction White/Blackboard

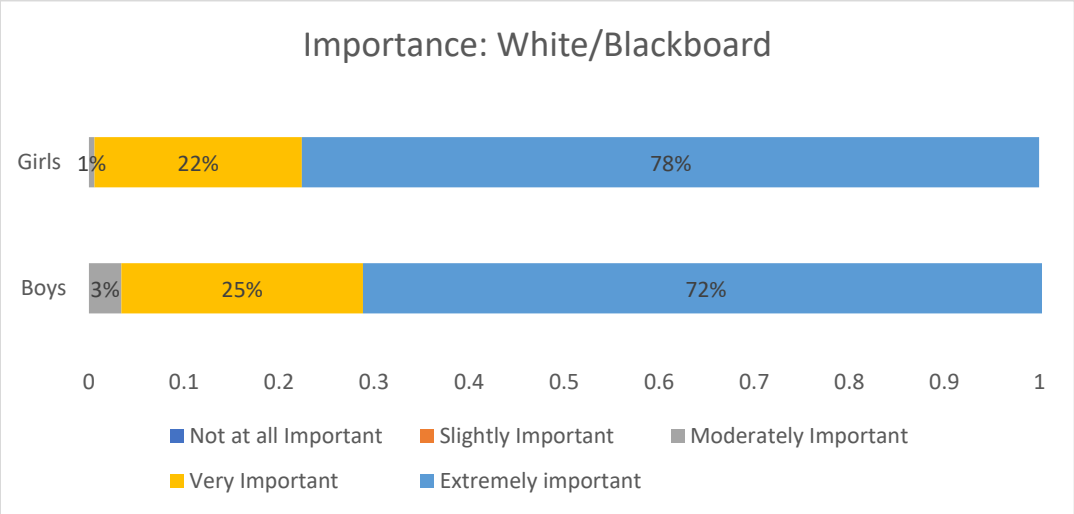

Figure 1(l). Importance White/Blackboard

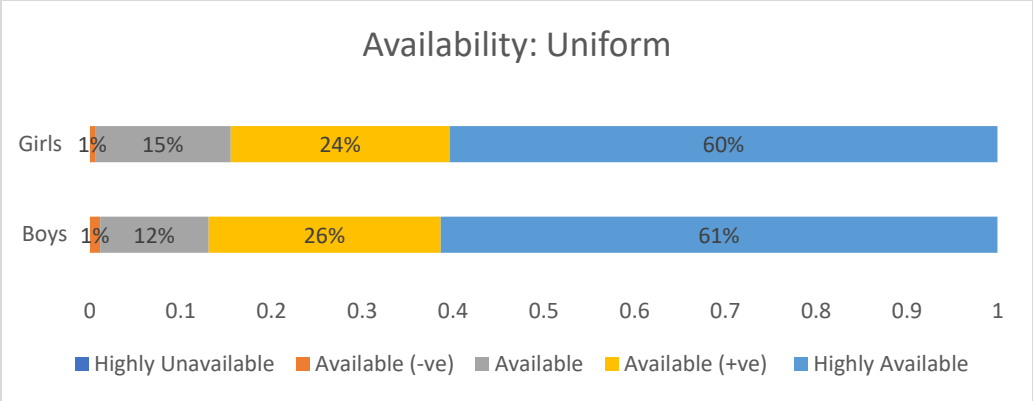

Figure 1(m). Availability: Uniform

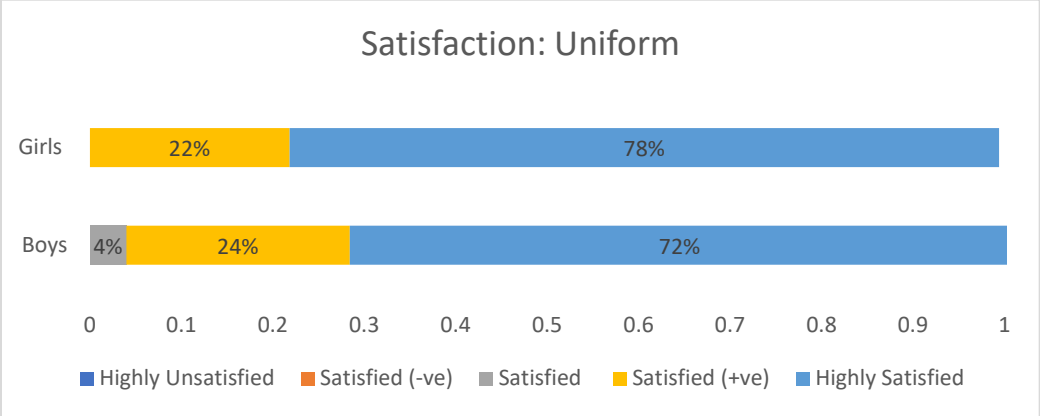

Fig 1(n). Satisfaction: Uniform

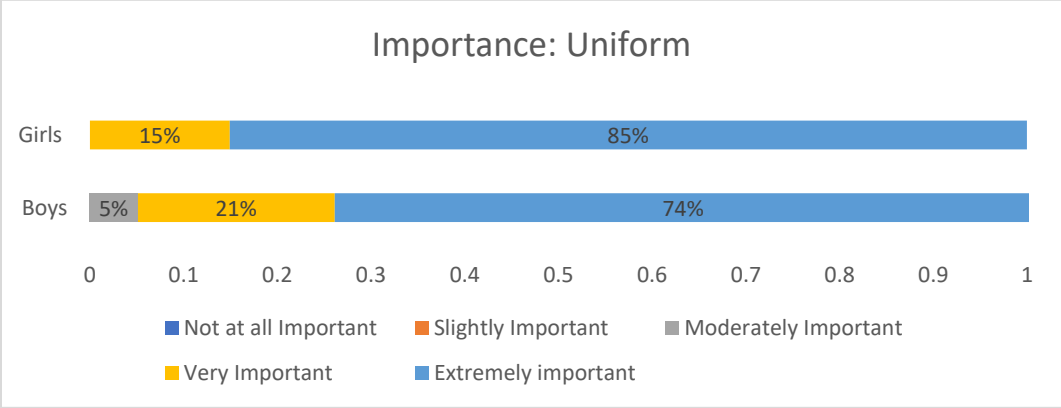

Fig 1(o). Importance: Uniform

2. Resources - Nutritional Well-being

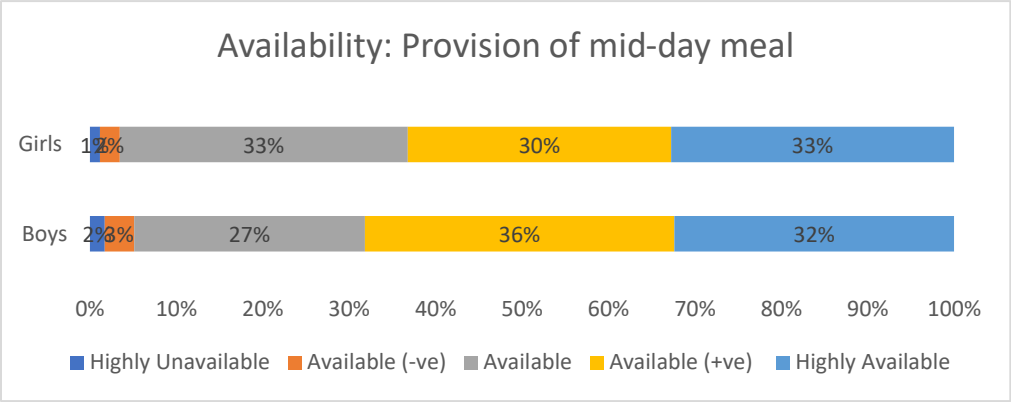

Fig 2(a). Availability: Provision of mid-day meal

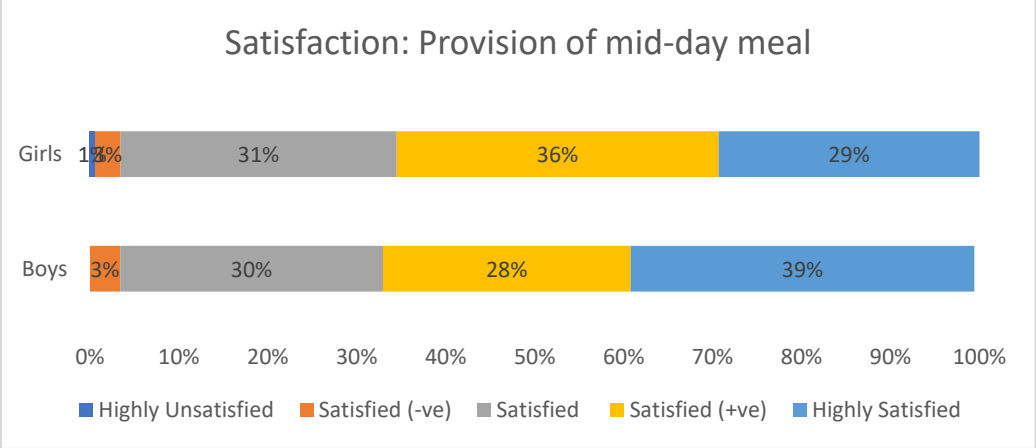

Fig 2(b). Satisfaction Provision of mid-day meal

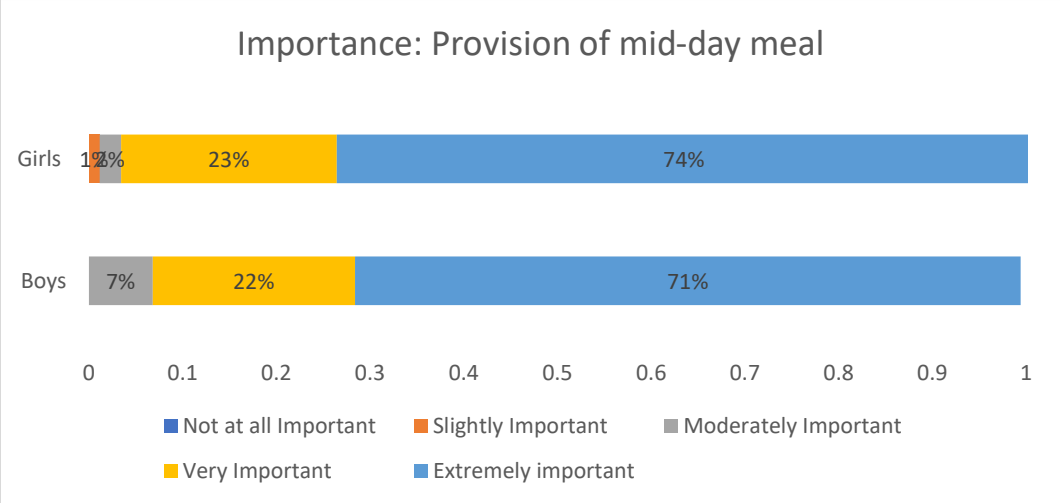

Fig 2(c). The importance Provision of mid-day meals

3. Resources – Aspiration

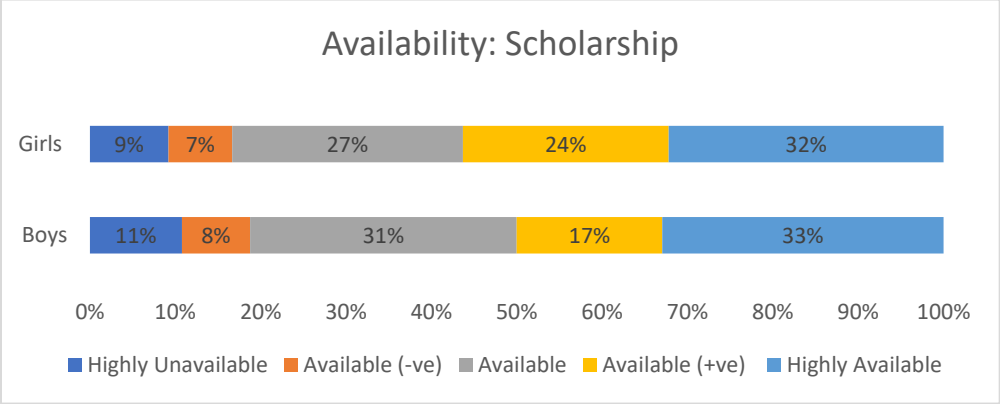

Fig 3(a). Availability Scholarship

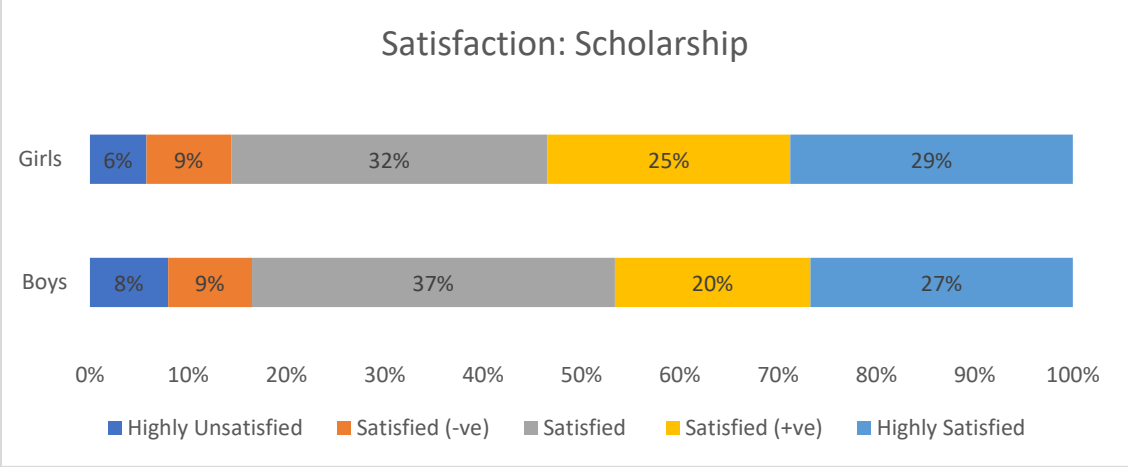

Fig 3(b). Satisfaction Scholarship

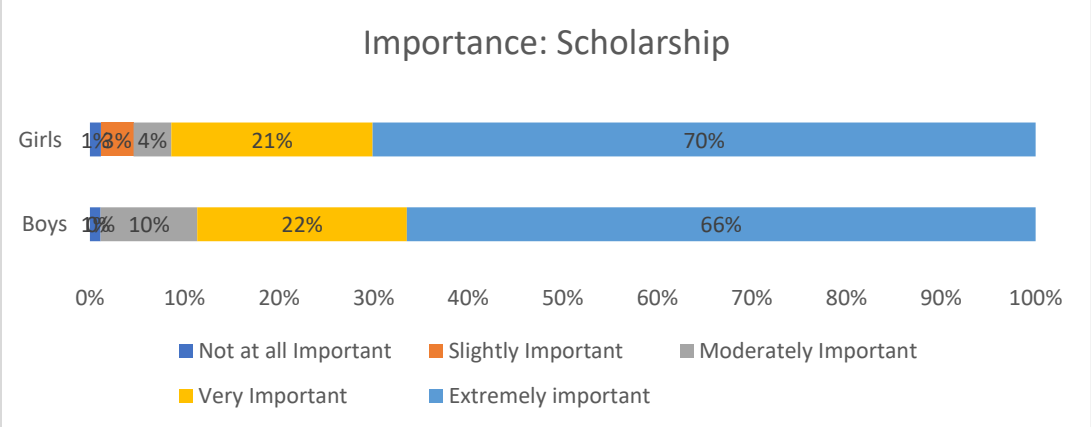

Fig 3(c). Importance Scholarship

4. **Resource - Physical Health/ Gender Equality and Social Inclusion Curriculum**

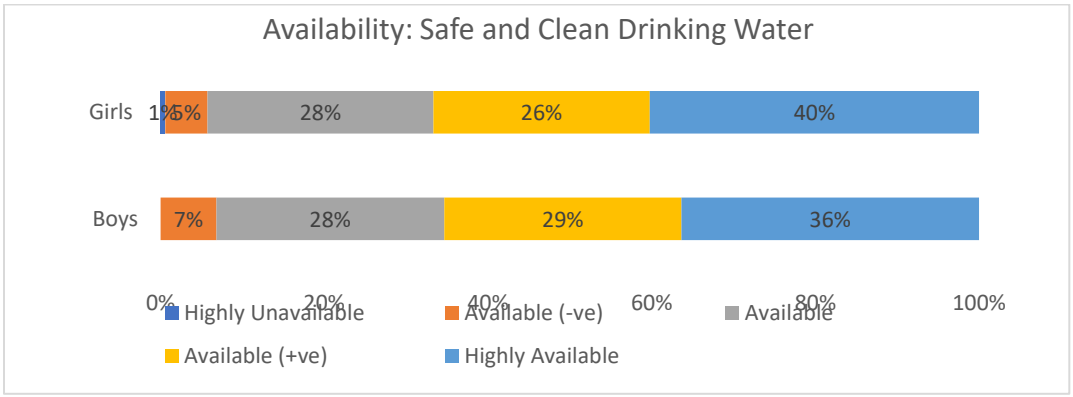

Fig 4(a). Availability Safe and Clean Drinking Water

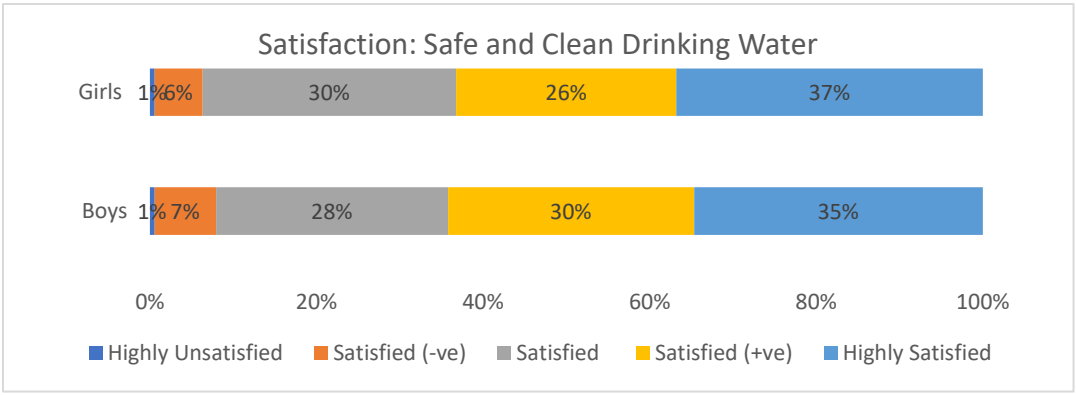

Fig 4(b). Satisfaction Safe and Clean Drinking Water

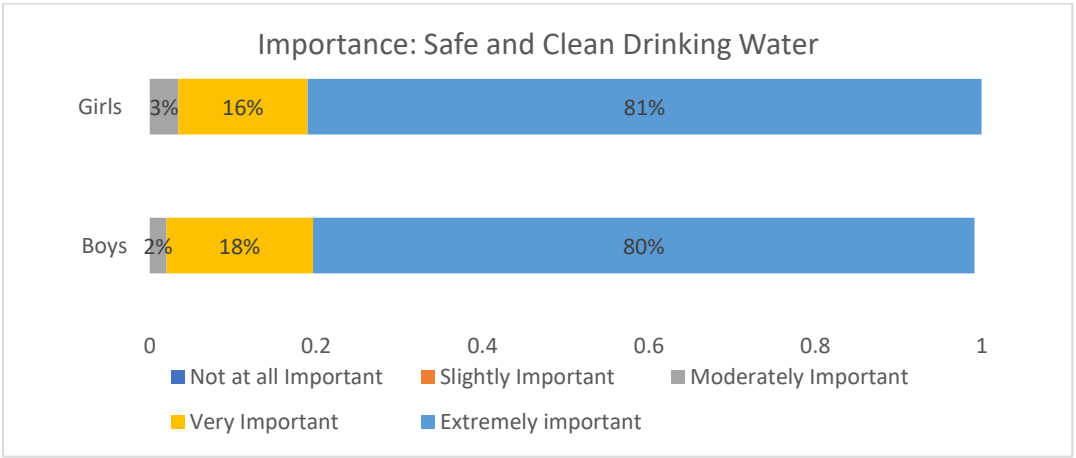

Figure 4(c). Importance Safe and Clean Drinking Water

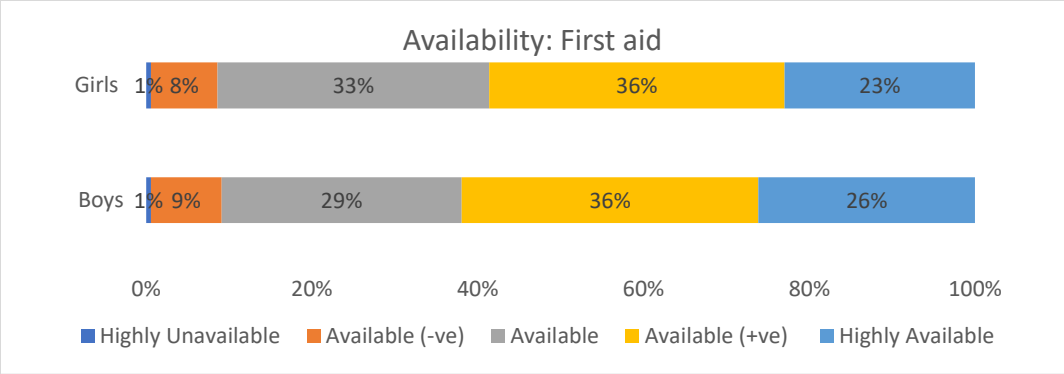

Figure 4(d). Availability First aid

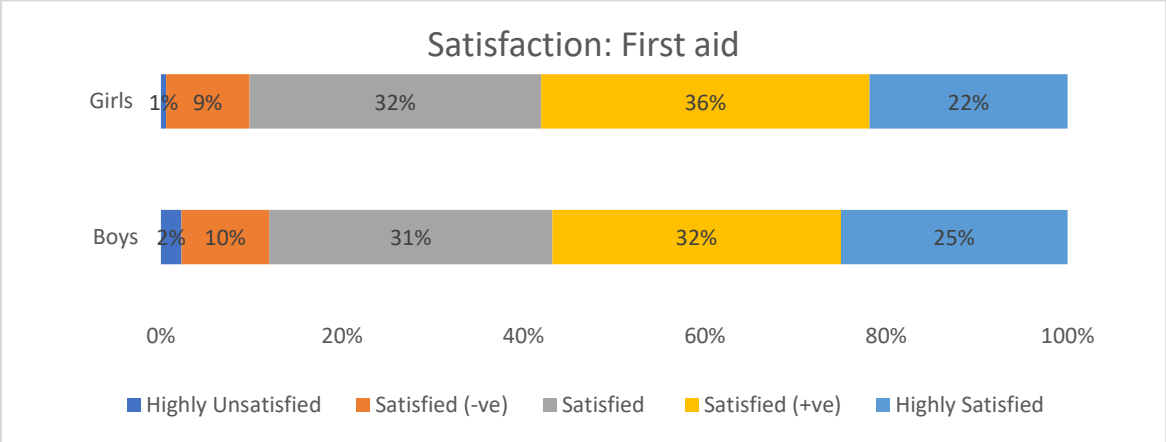

Figure 4(e). Satisfaction First aid

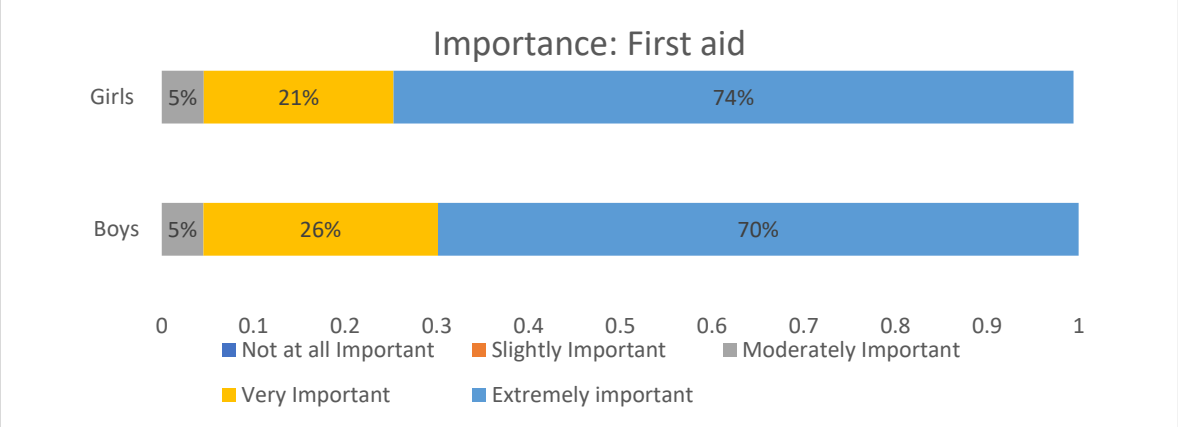

Figure 4(f). Importance First aid

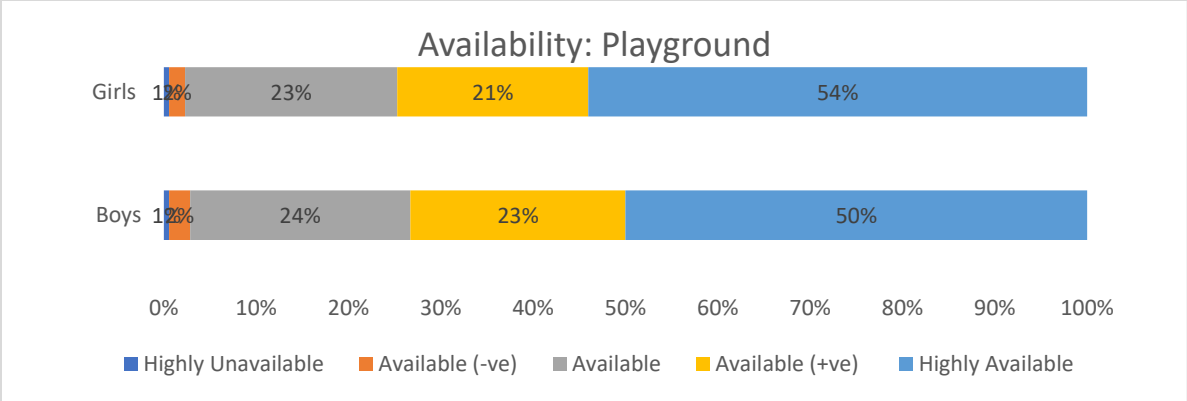

Figure 4(g). Availability Playground

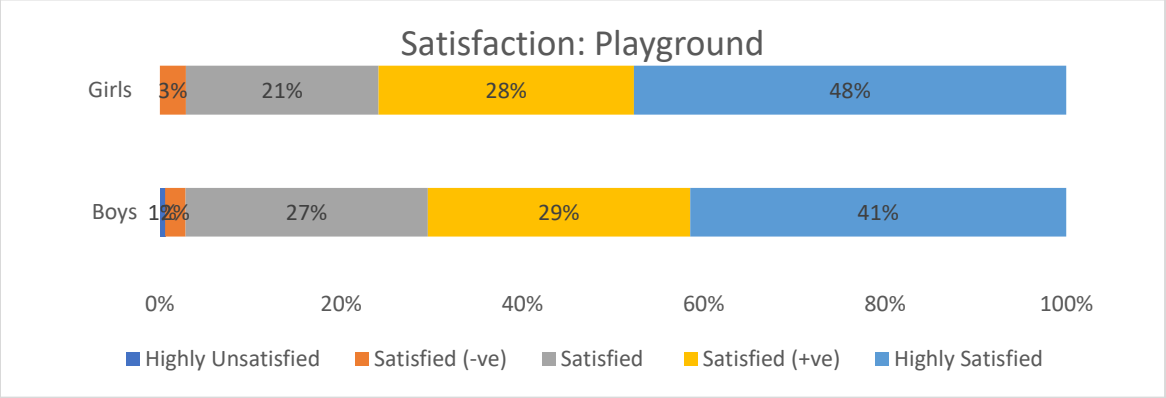

Figure 4(h). Satisfaction Playground

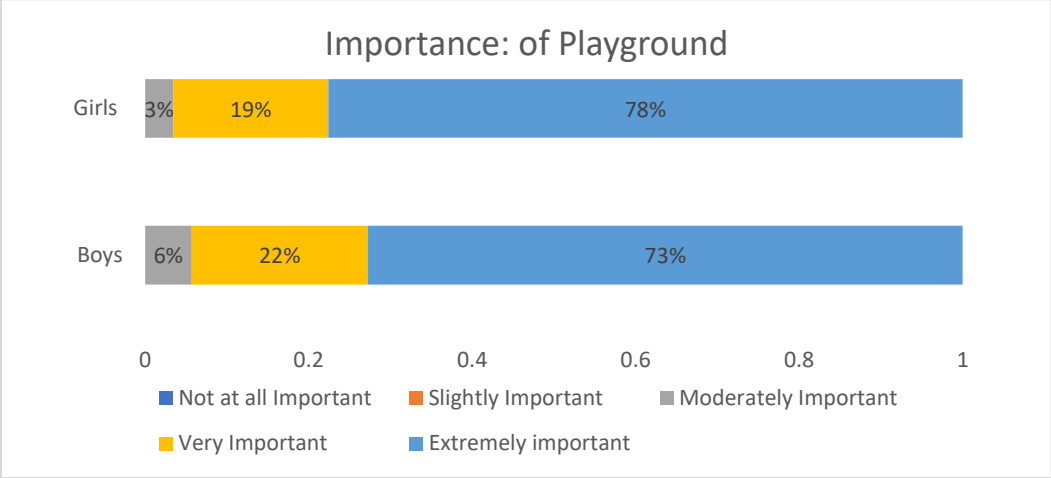

Figure 4(i). Importance of Playground

5. **Resource - Bodily Integrity/ Gender Equality and Social Inclusion Curriculum**

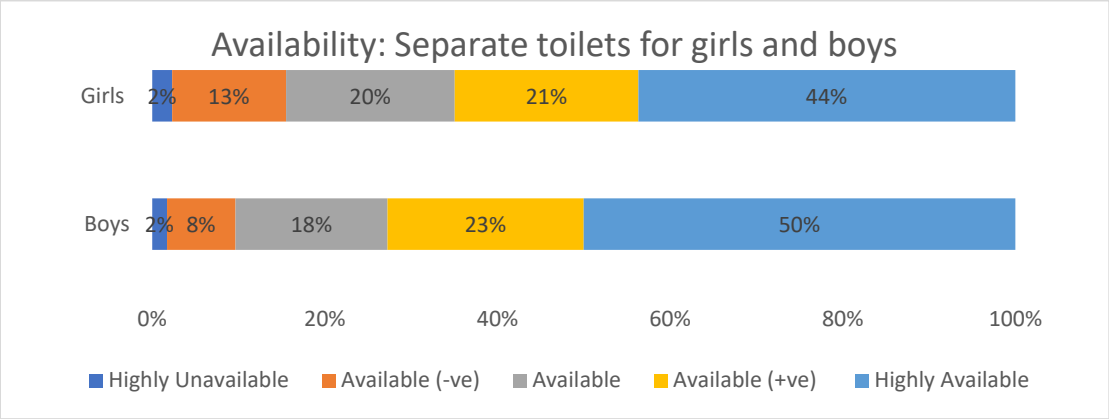

Figure 5(a). Availability: Separate toilets for girls and boys

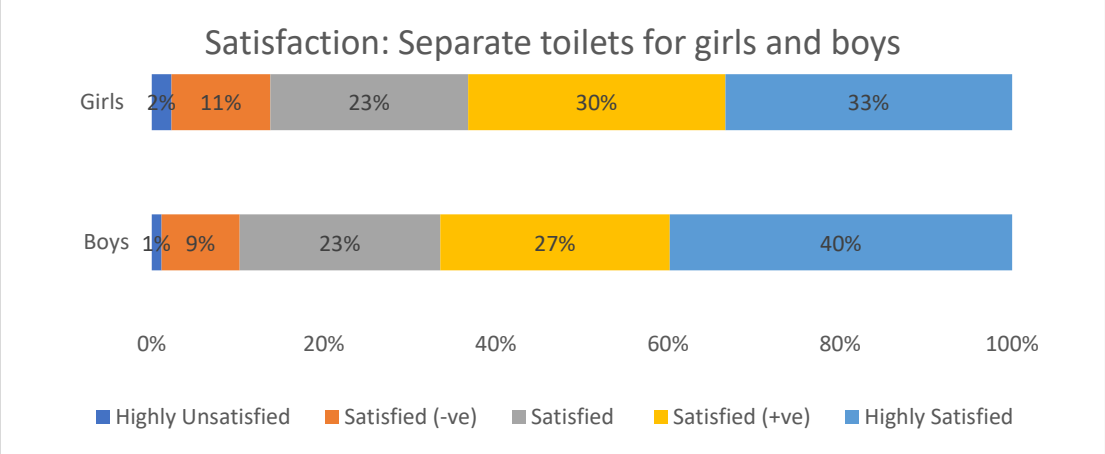

Figure 5(b). Satisfaction Separate toilets for girls and boys

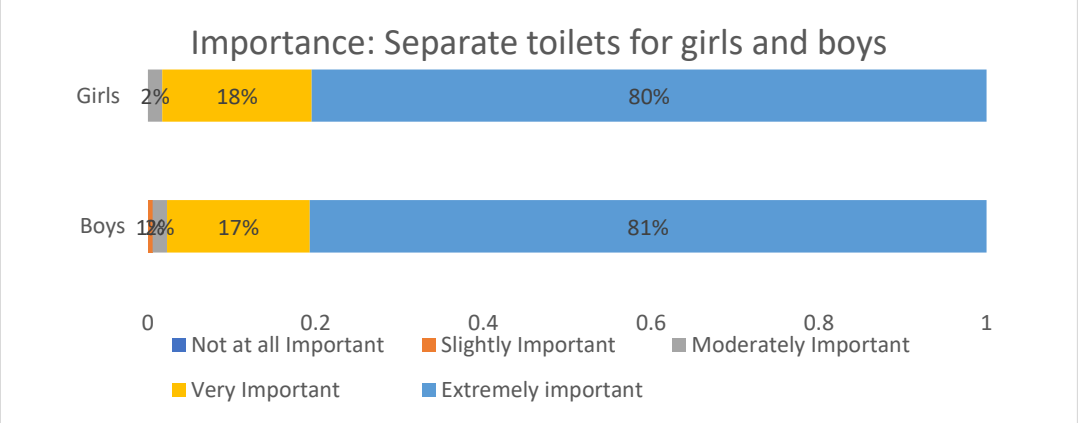

Figure 5(c). Importance: Separate toilets for girls and boys

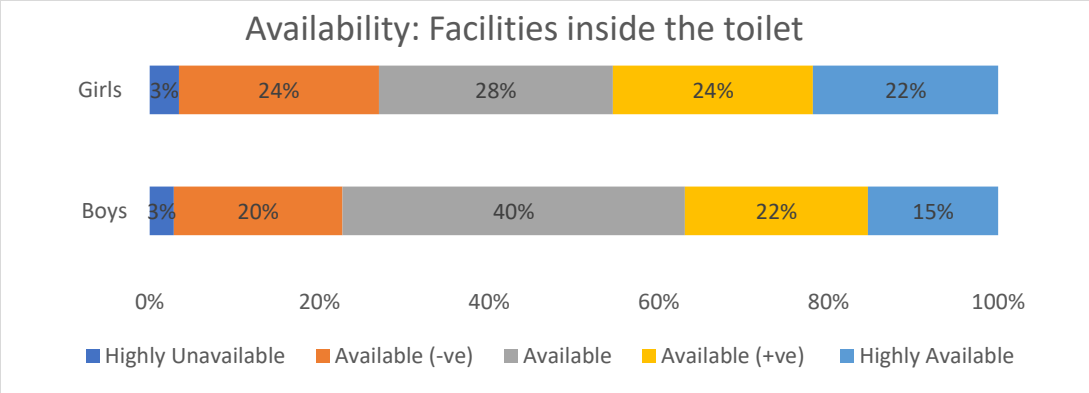

Figure 5(d). Availability: Facilities inside the toilet

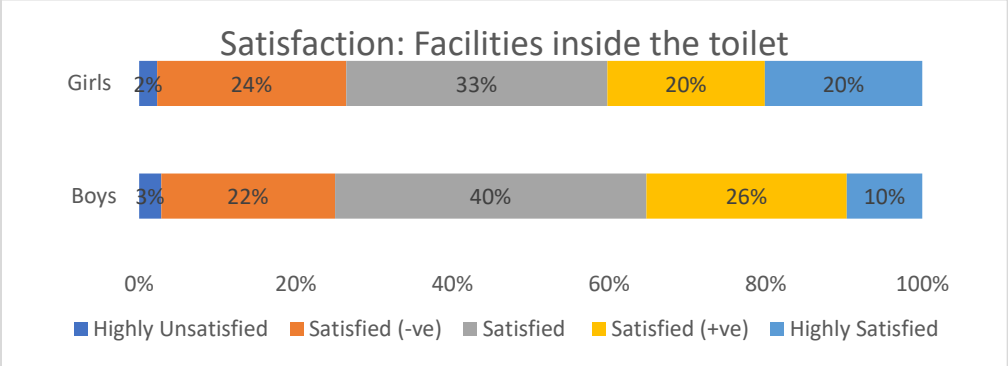

Figure 5(f). Satisfaction: Facilities inside the toilet

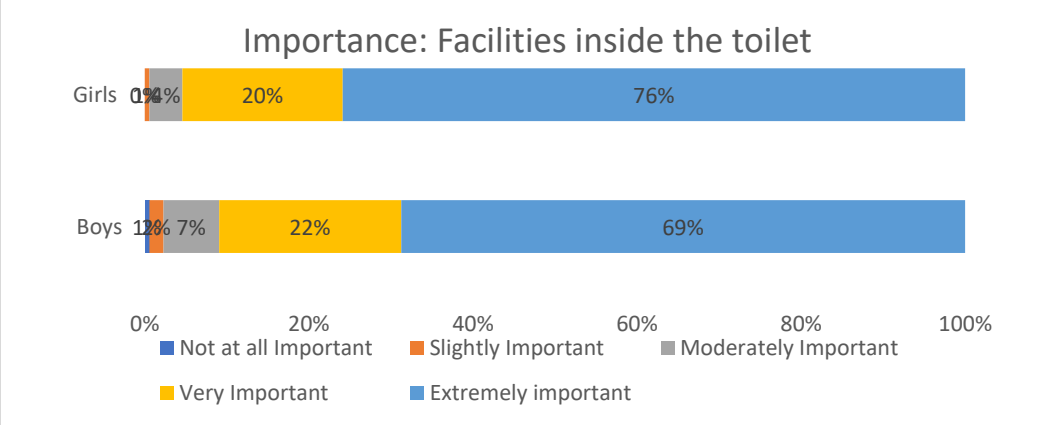

Figure 5(g). Importance: Facilities inside the toilet

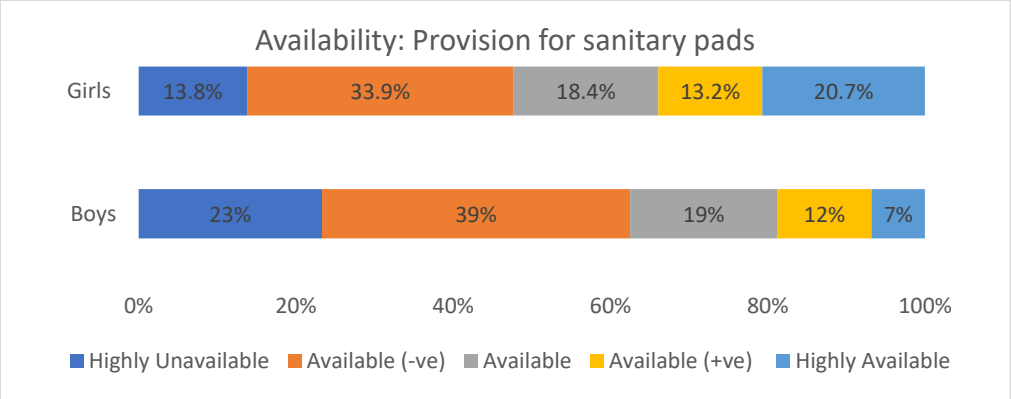

Figure 5(h). Availability: Provision for Sanitary Pads

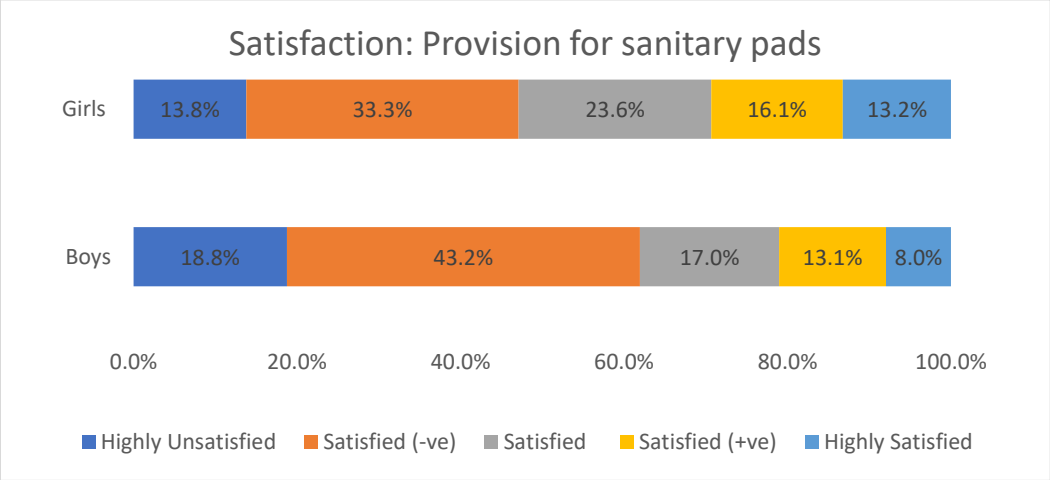

Figure 5(i). Satisfaction Provision for sanitary pads

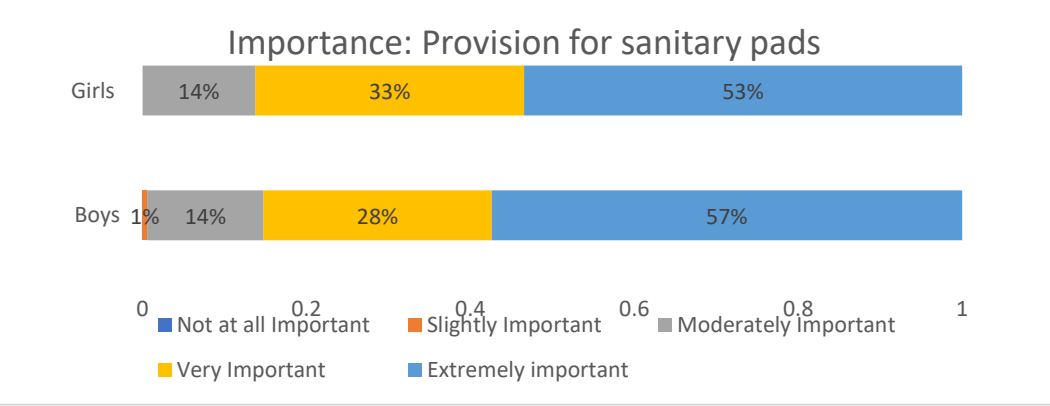

Figure 5(j). Importance: Provision for sanitary pads

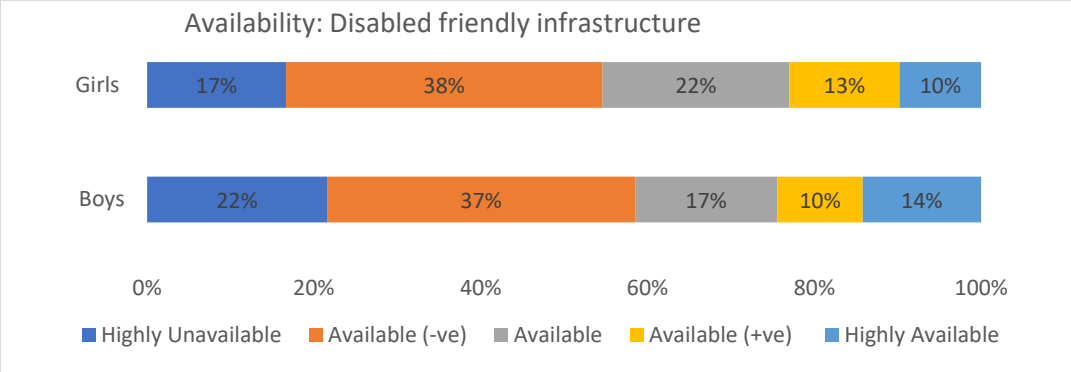

Figure 5(k). Availability Disabled friendly infrastructure

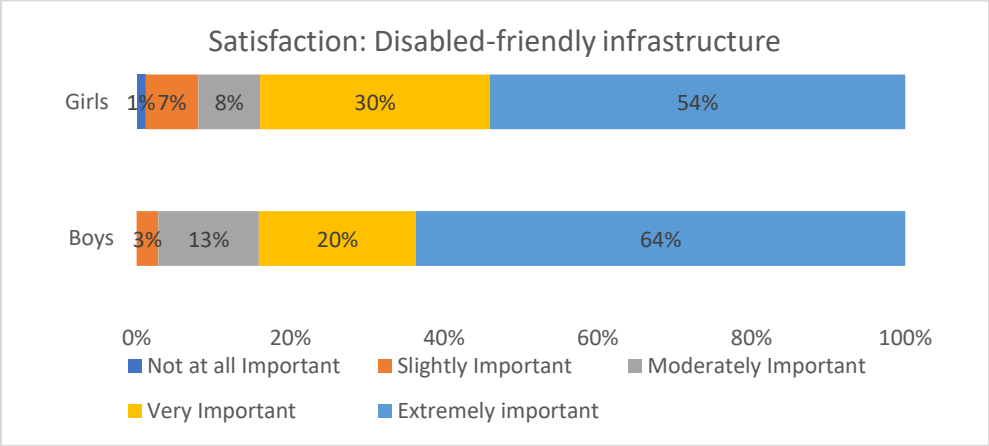

Figure 5(l). Satisfaction with Disabled-friendly infrastructure

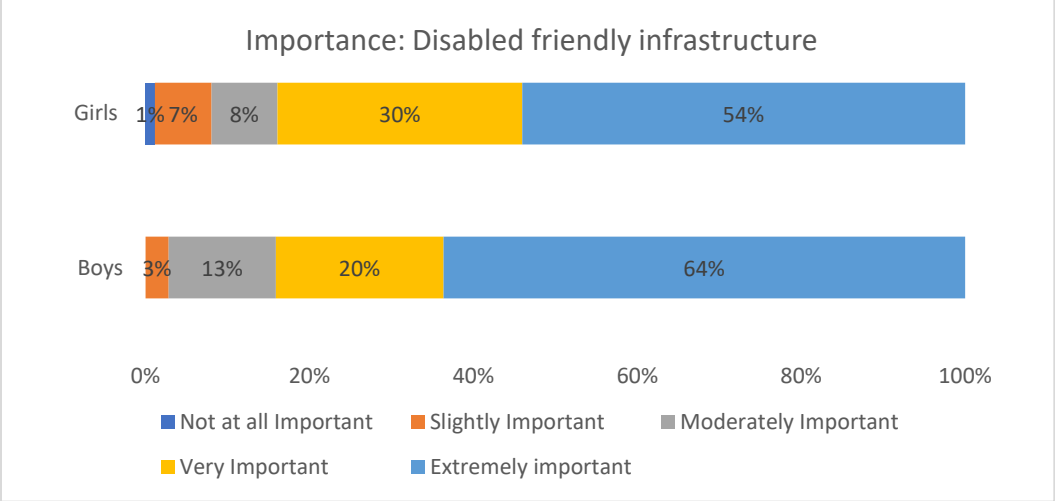

Figure 5(m). Importance Disabled friendly infrastructure

6. Resource - Understand, Interpret Plan/Imagine and Think

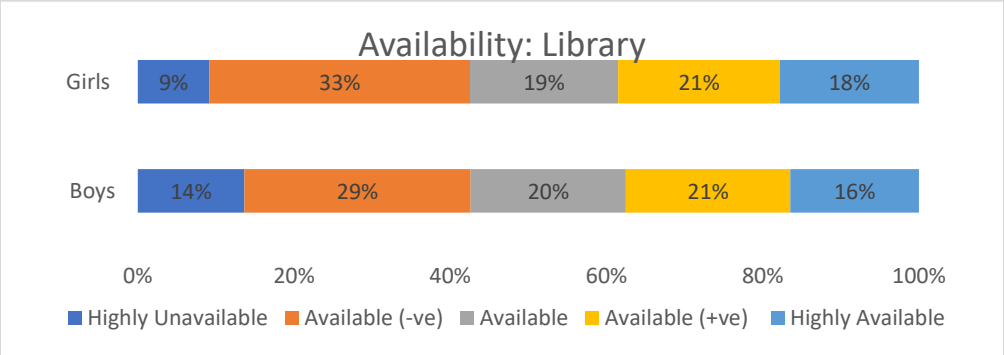

Figure 6(a). Availability Library

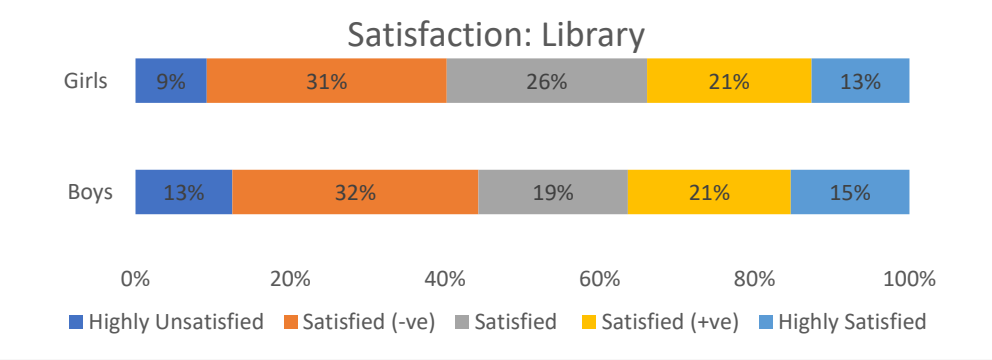

Figure 6(b). Satisfaction: Library

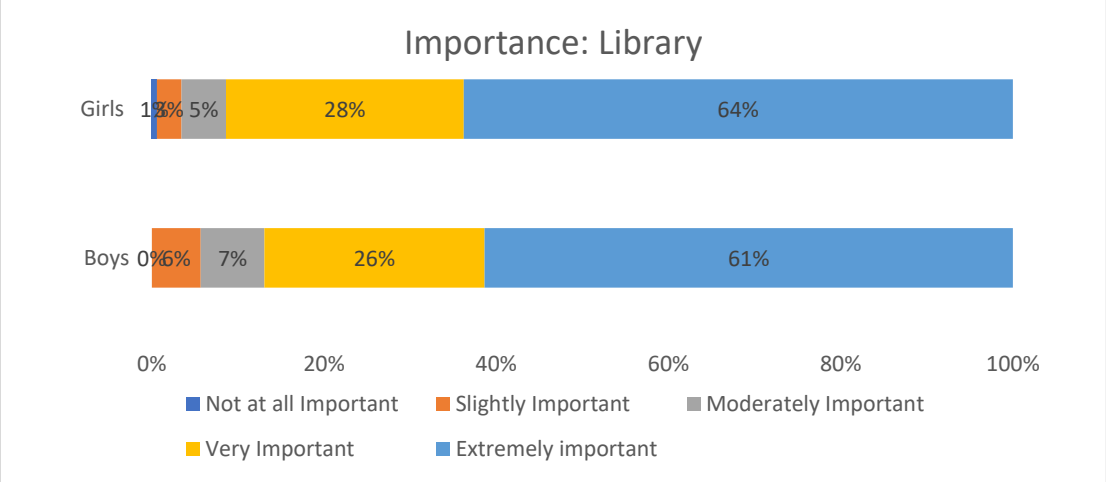

Figure 6(c). Importance: Library

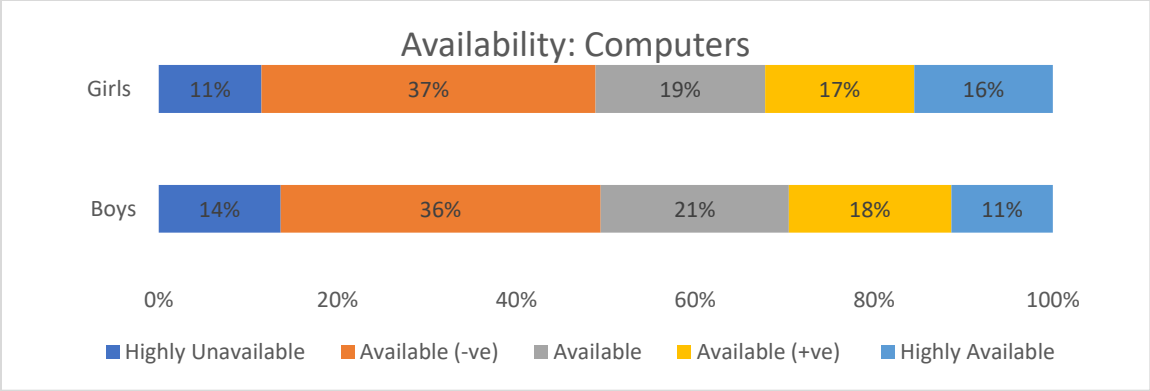

Figure 6(d). Availability Computers

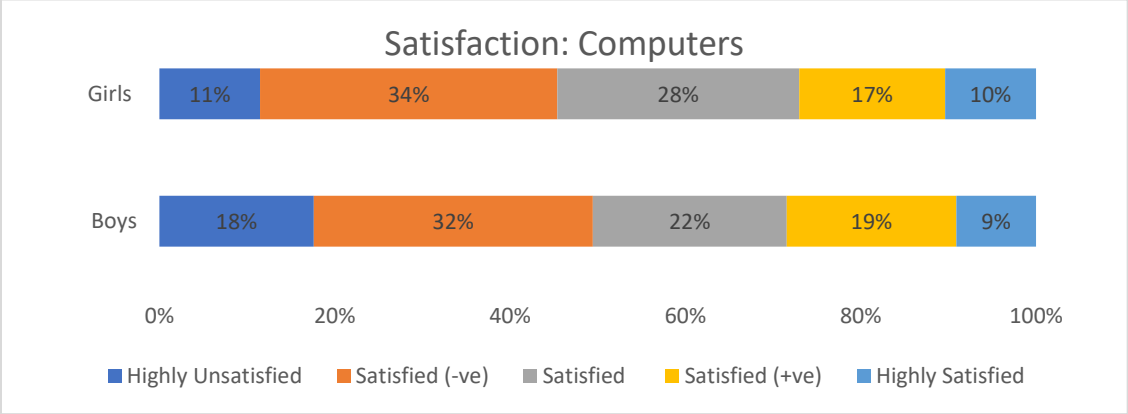

Figure 6(e). Satisfaction Computers

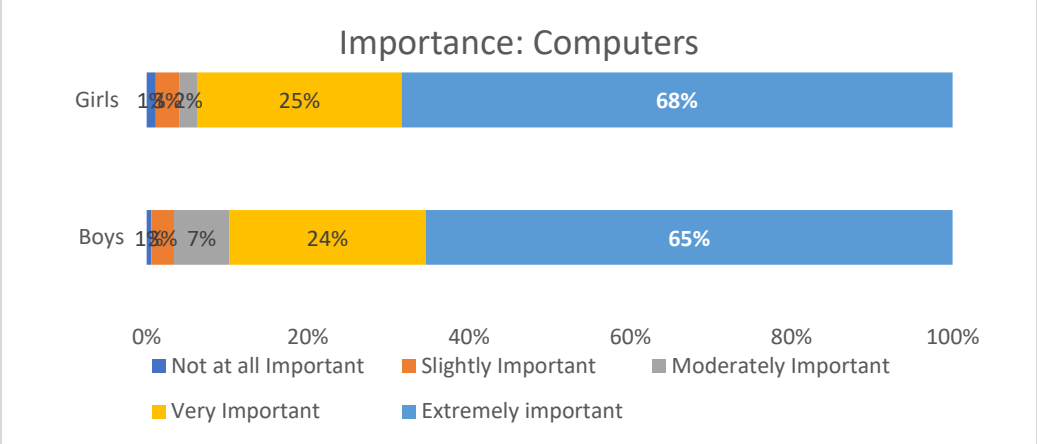

Figure 6(f). Importance of Computers

7. Resource - Religion and Identity

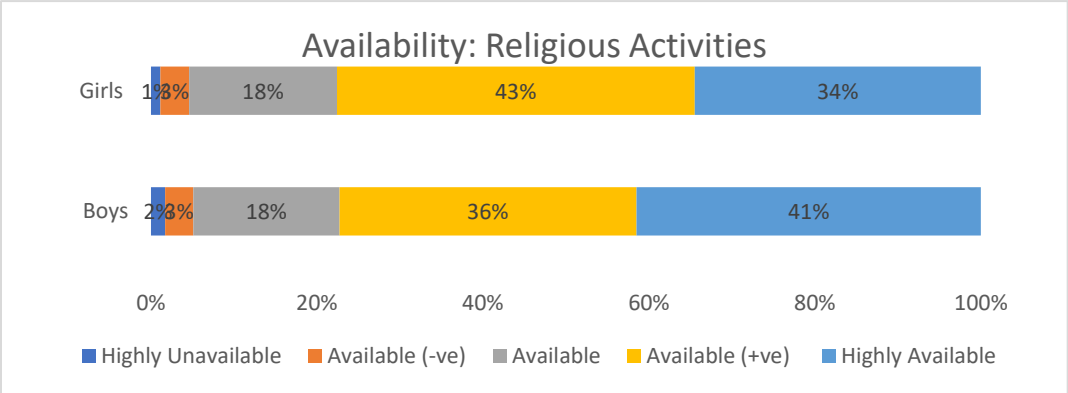

Figure 7(a). Availability Religious Activities

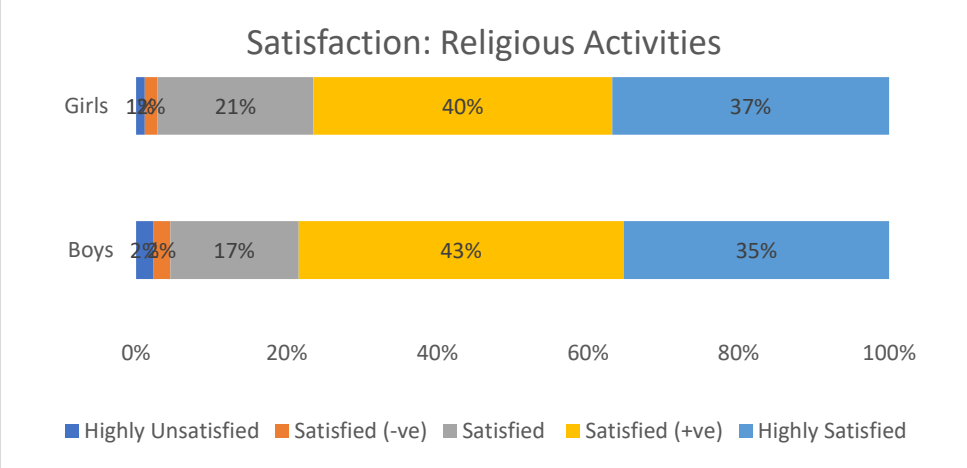

Figure 7(b). Satisfaction: Religious Activitie

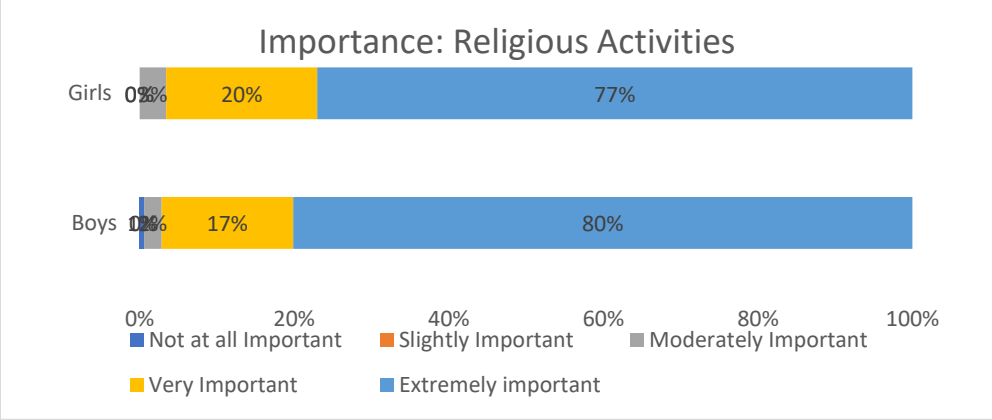

Figure 7(c). Importance: Religious Activities

8. Resource - Shelter and Environment

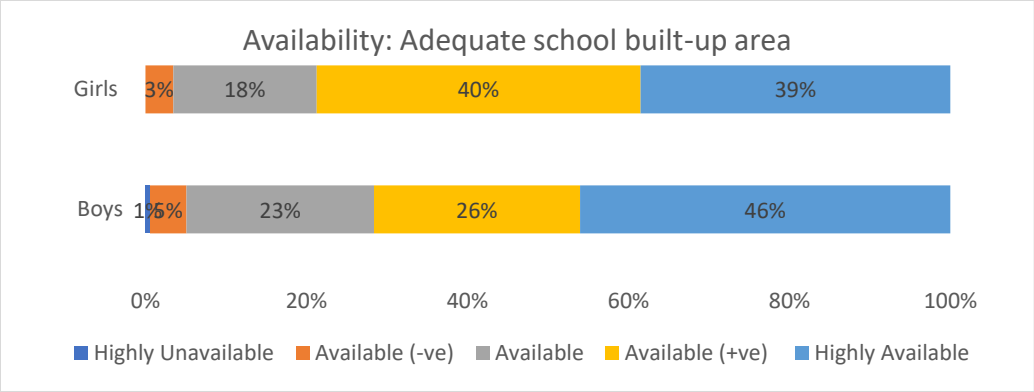

Figure 8(a). Availability: Adequate school built-up area

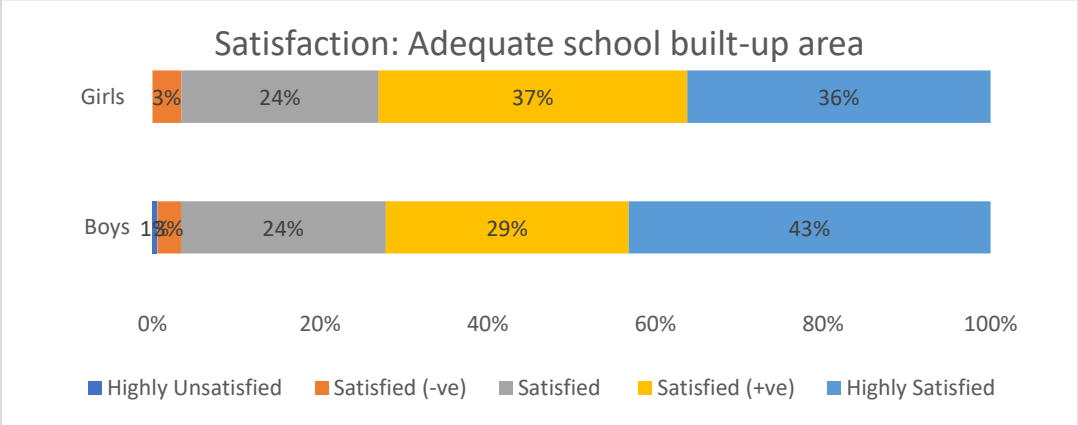

Figure 8(b). Satisfaction: Adequate school built-up area

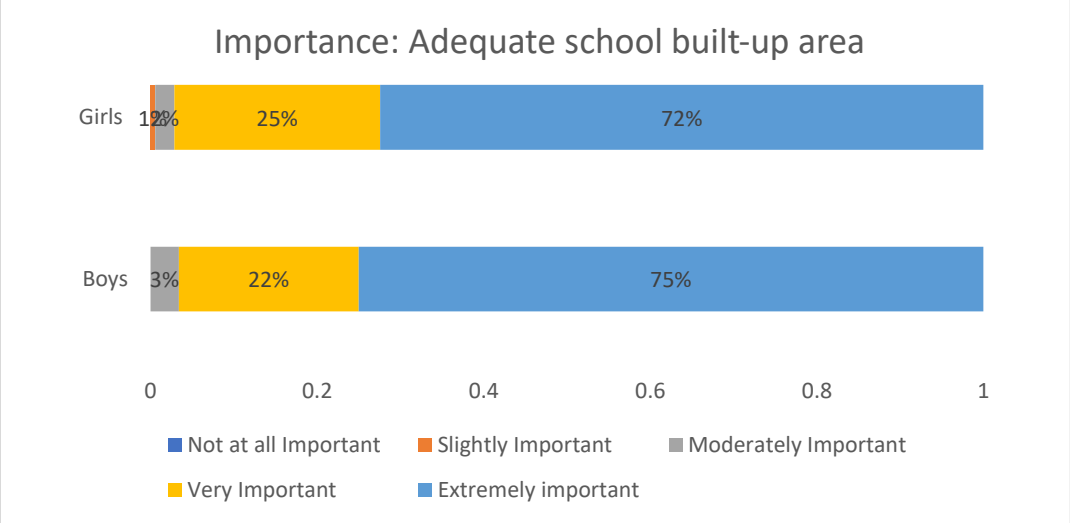

Figure 8(c). Importance: Adequate school built-up area

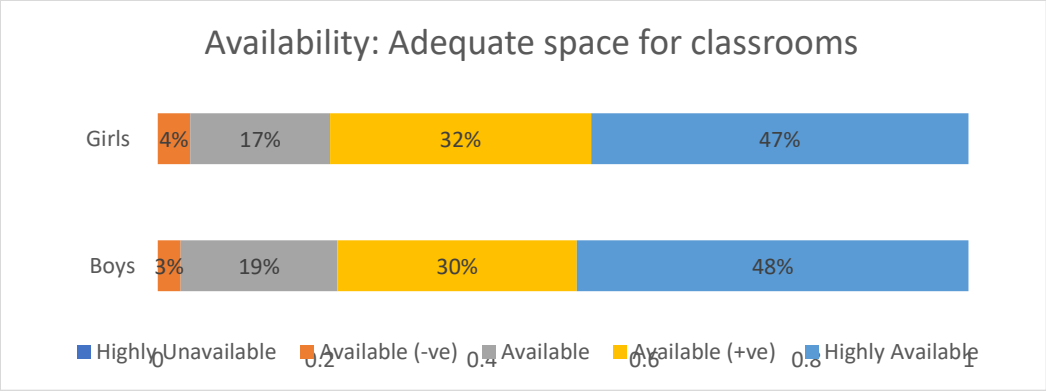

Figure 8(d). Availability: Adequate space for classrooms

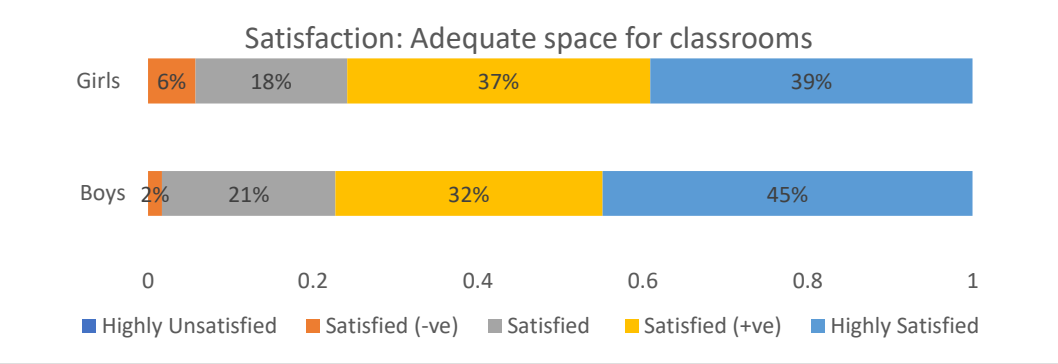

Figure 8(e). Satisfaction Adequate space for classrooms

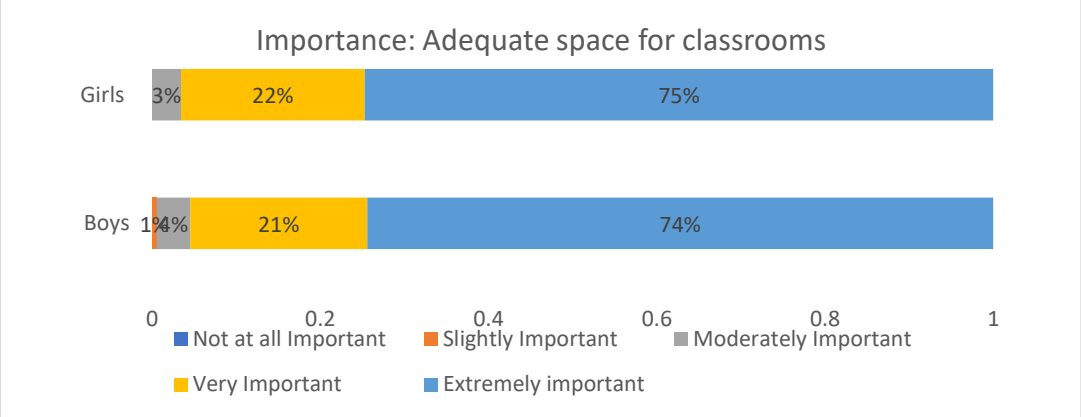

Figure 8(f). Importance: Adequate space for classrooms

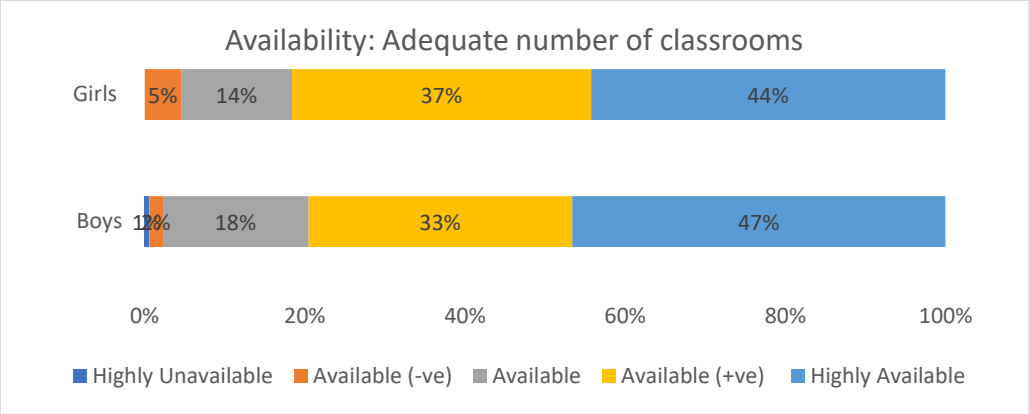

Figure 8(g). Availability: Adequate number of classrooms

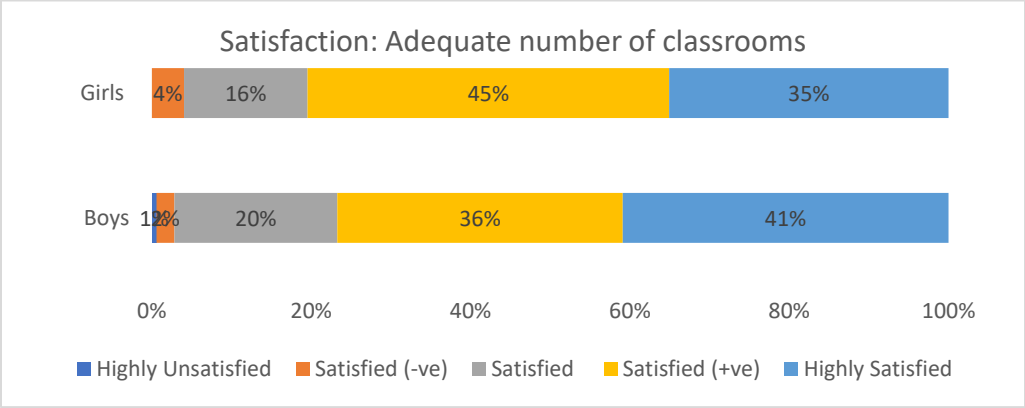

Figure 8(h). Satisfaction: Adequate number of classrooms

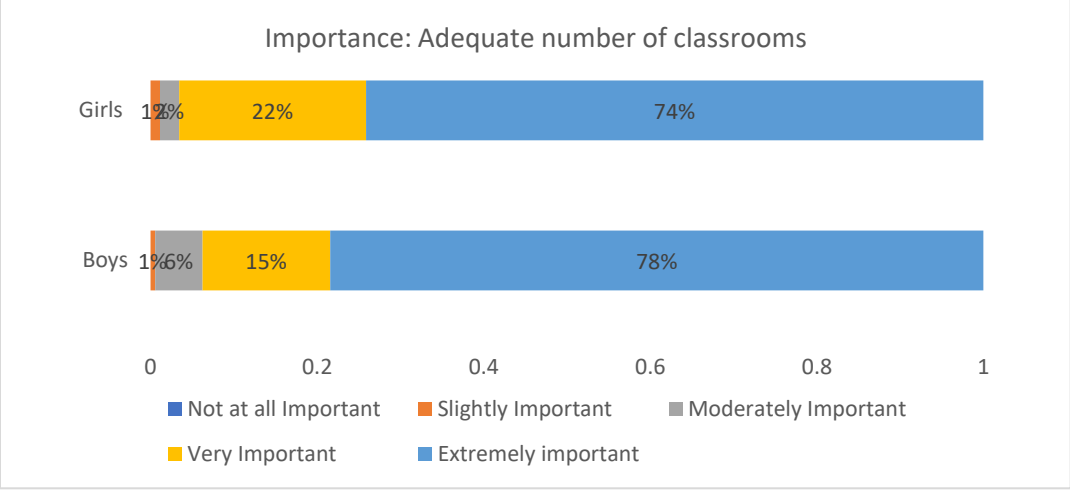

Figure 8(i). Importance Adequate number of classrooms

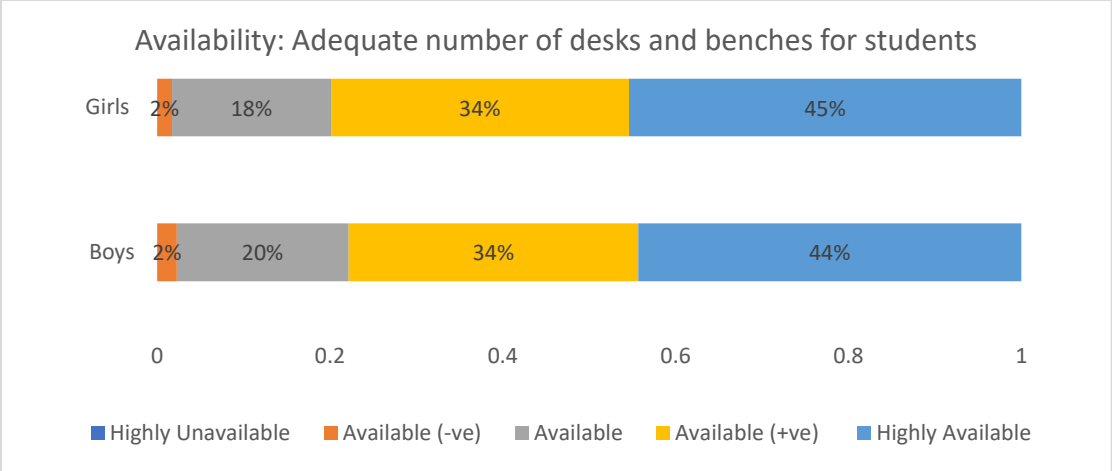

Figure 8(j). Availability: Adequate number of desks and benches for students

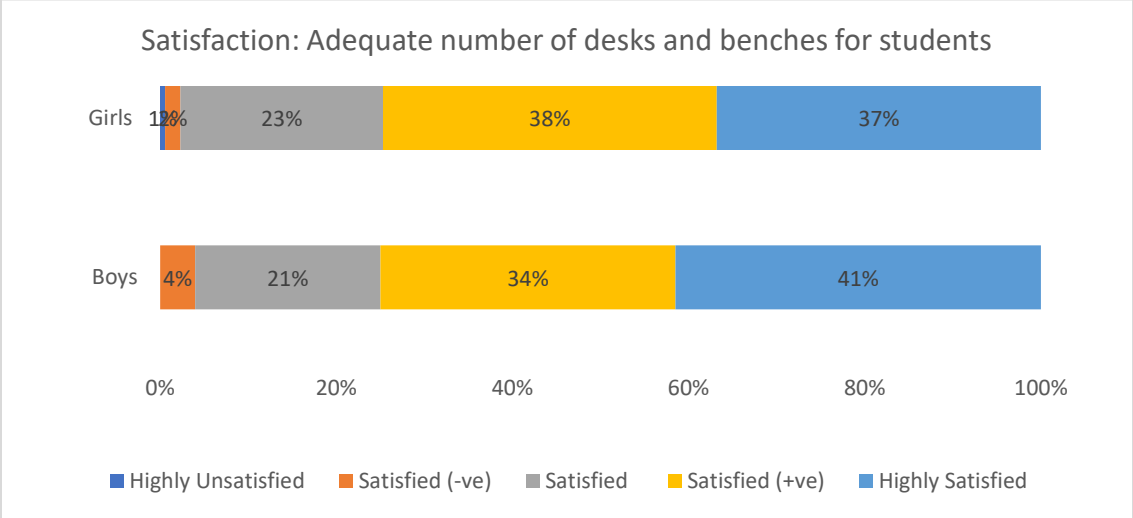

Figure 8(k). Satisfaction: Adequate number of desks and benches for students

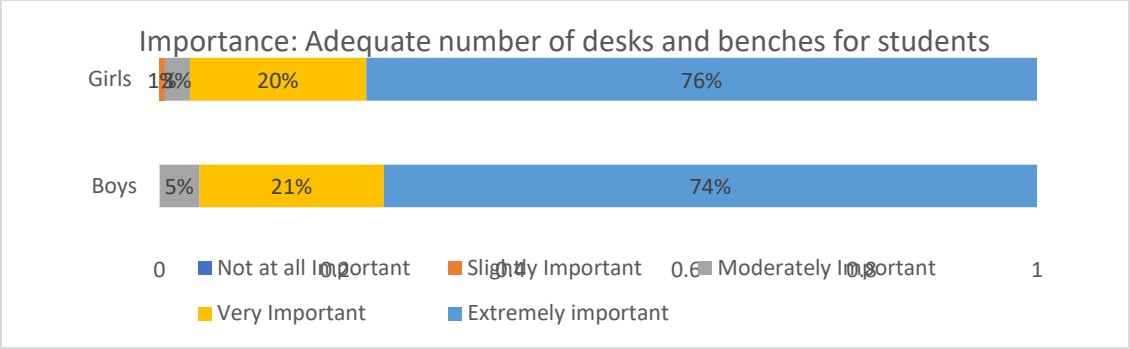

Figure 8(l). Importance: Adequate number of desks and benches for students

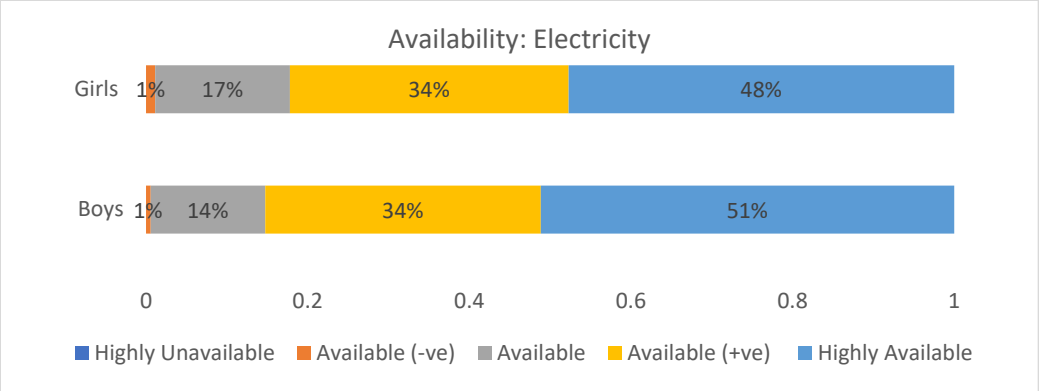

Figure 8(m). Availability: Electricity

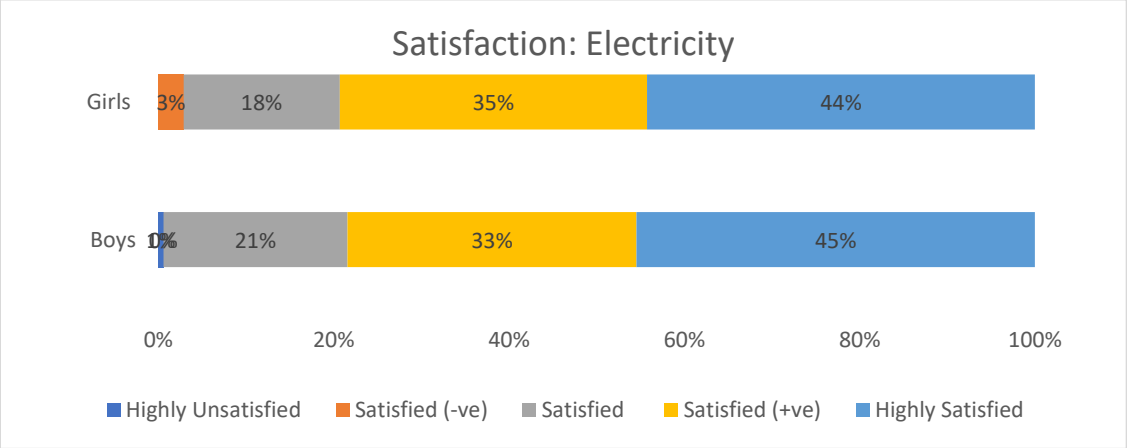

Figure 8(n). Satisfaction: Electricity

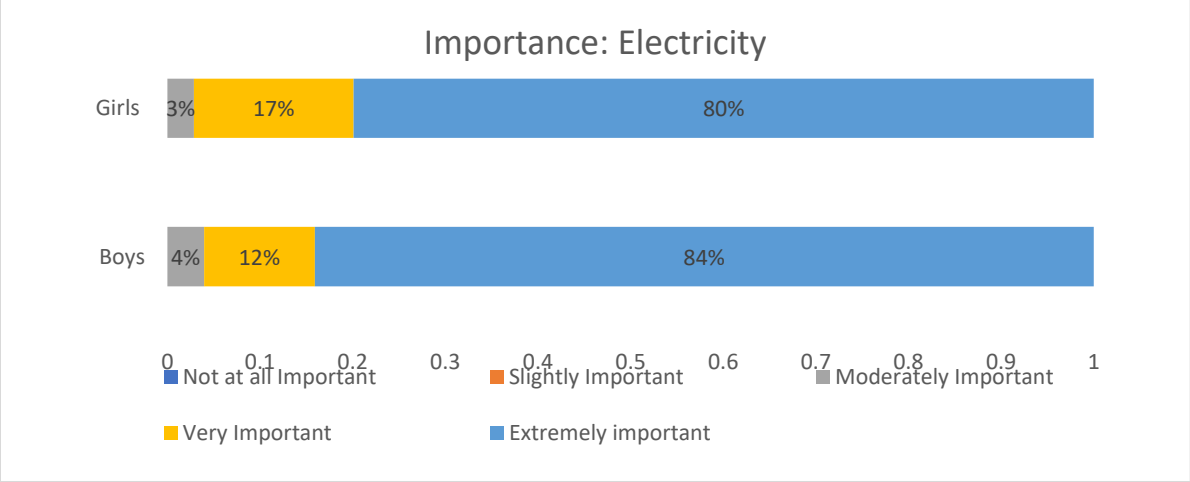

Figure 8(o). Importance Electricity

9. Resource - Mental Well-being

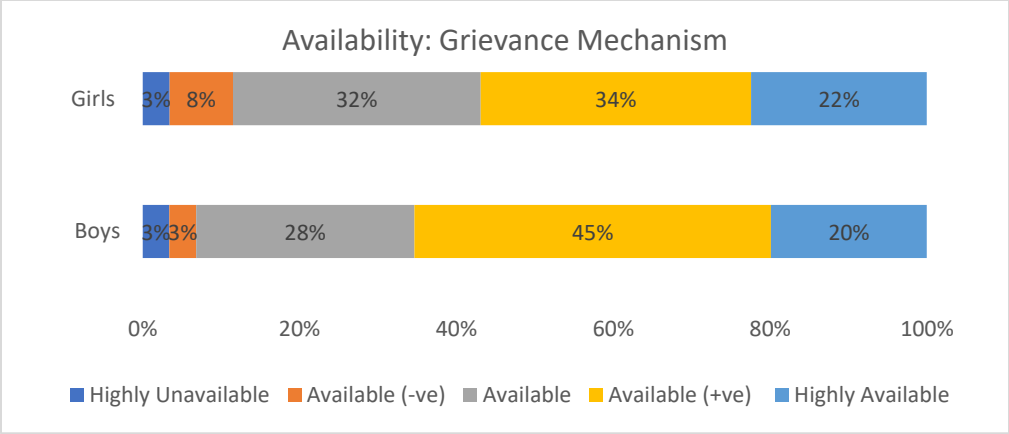

Figure 9(a). Availability Grievance Mechanism

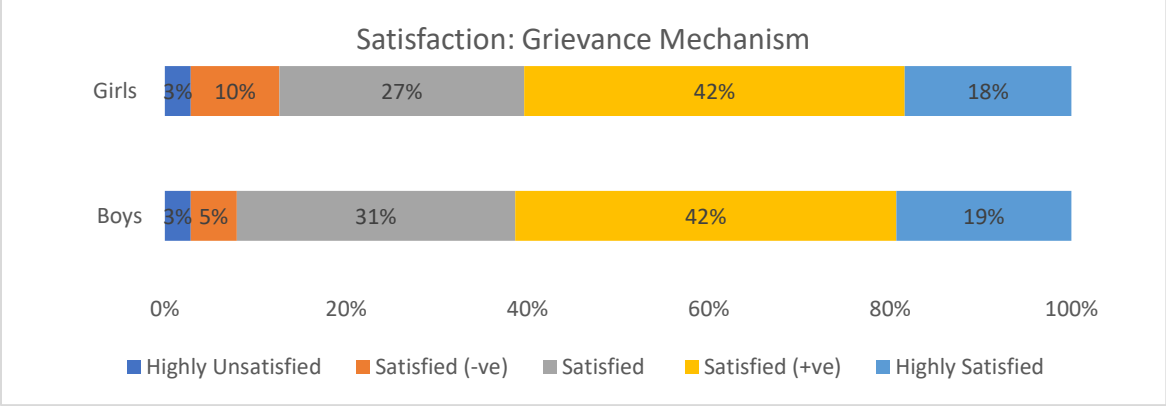

Figure 9(b). Satisfaction Grievance Mechanism

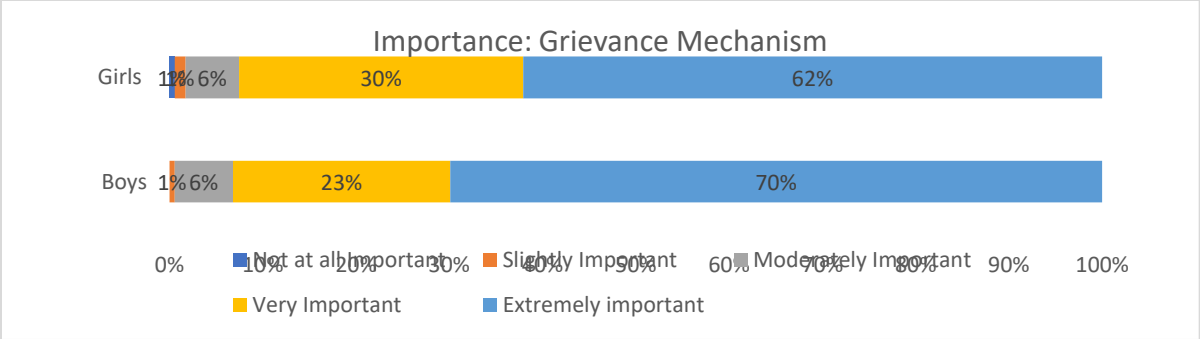

Figure 9(c). Importance Grievance Mechanism

10. Resource - Social Relations

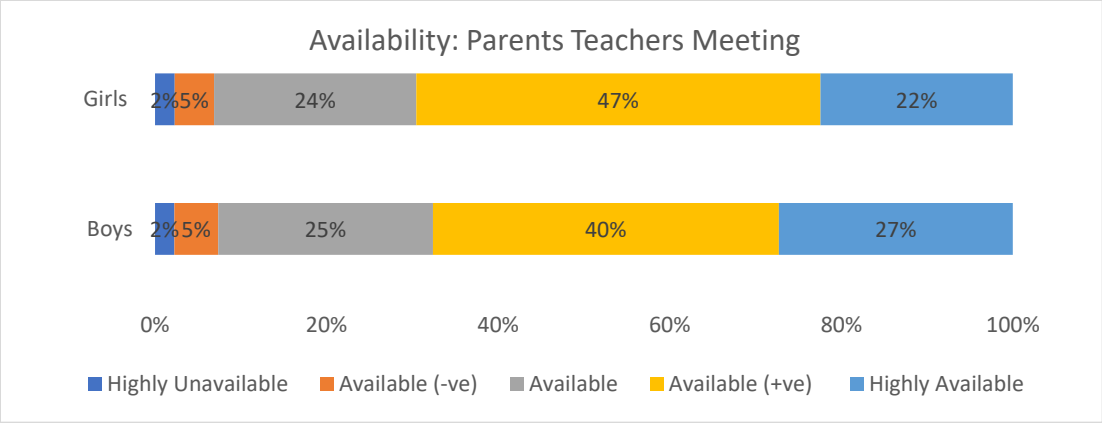

Figure 10(a). Availability Parents Teachers' Meeting

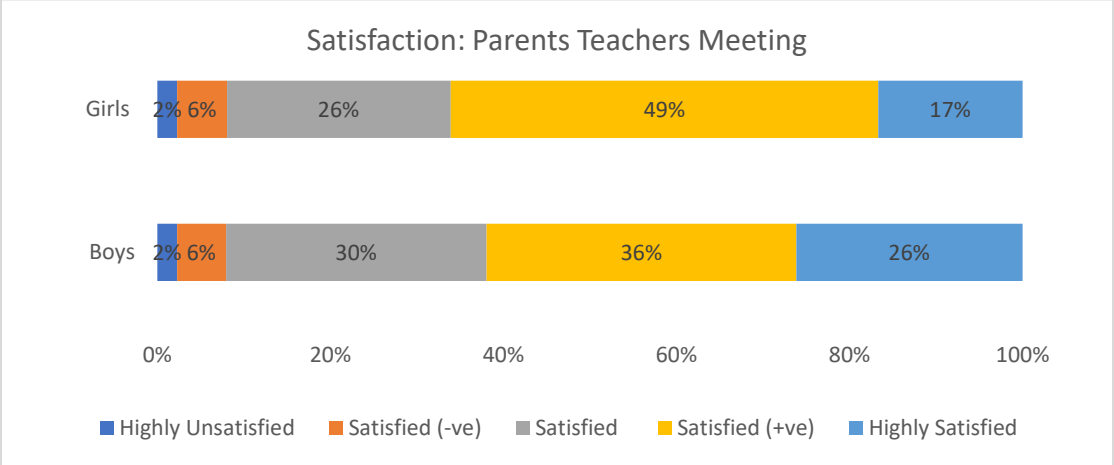

Figure 10(b). Satisfaction: Parents Teachers Meeting

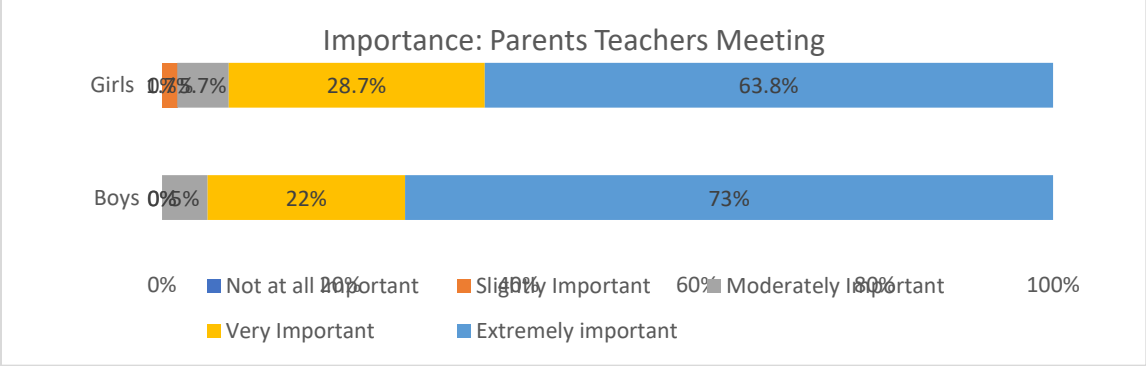

Figure 10(c). Importance: Parents Teachers Meeting

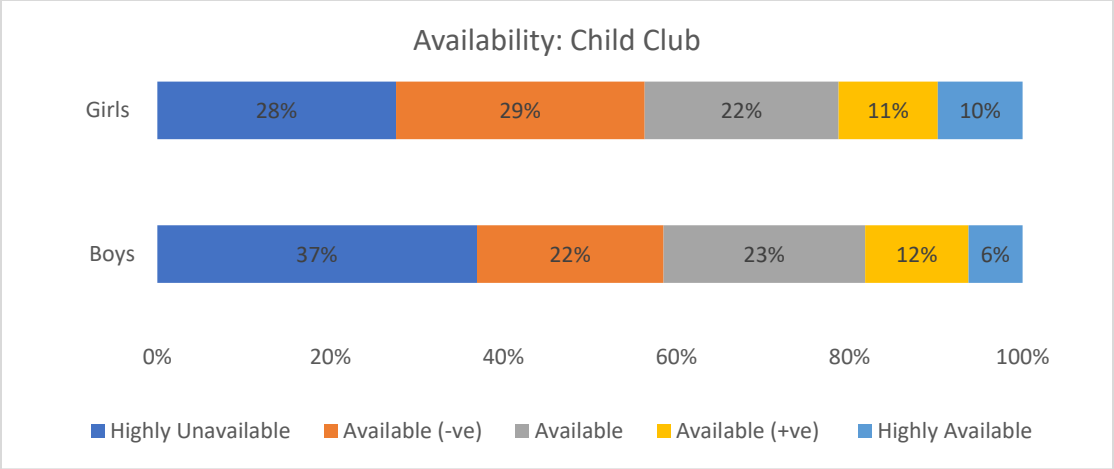

Figure 10(d). Availability Child Club

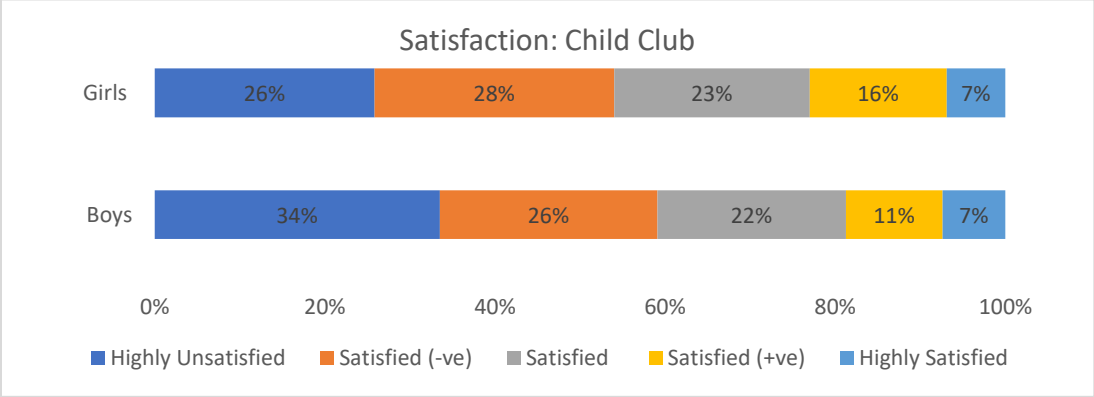

Figure 10(e). Satisfaction Child Club

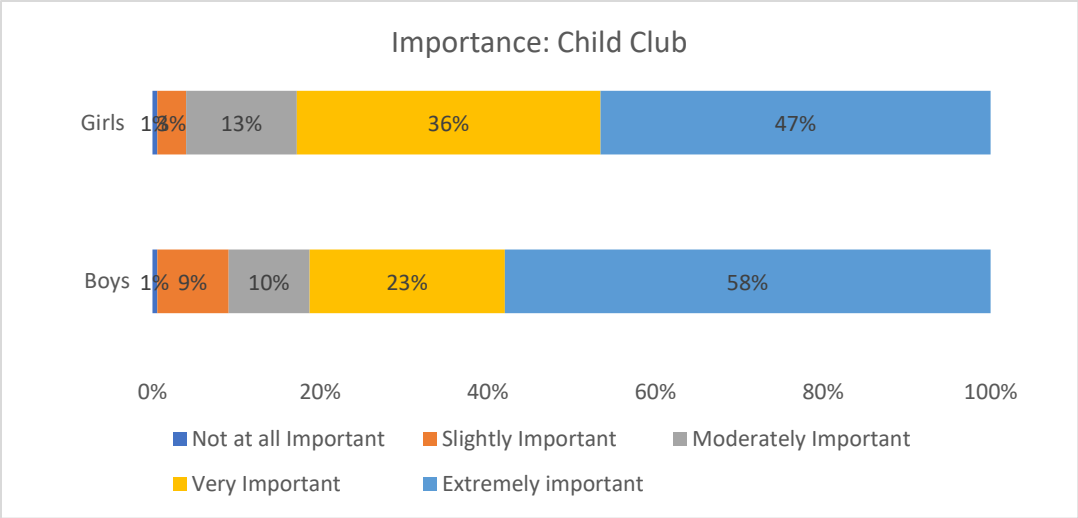

Figure 10(f). Importance Child Club

11. Resource - Autonomy

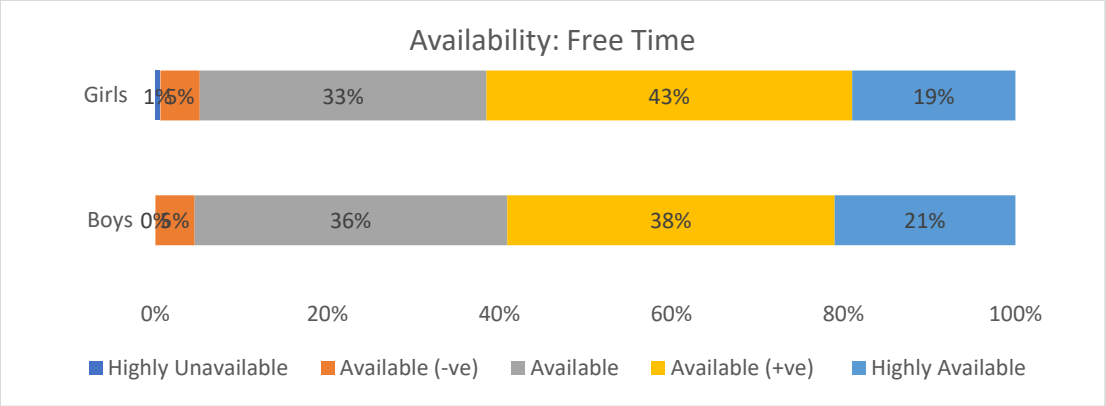

Figure 11(a). Availability Free Time

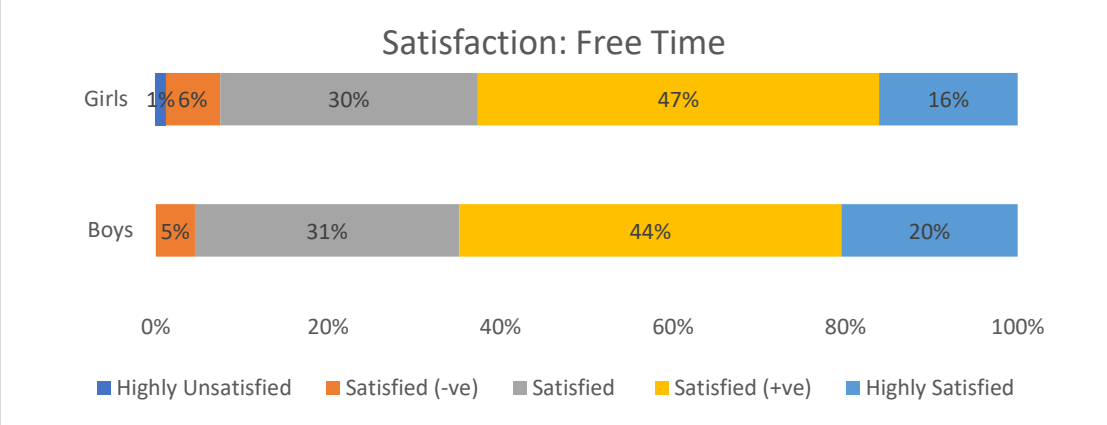

Figure 11(b). Satisfaction Free Time

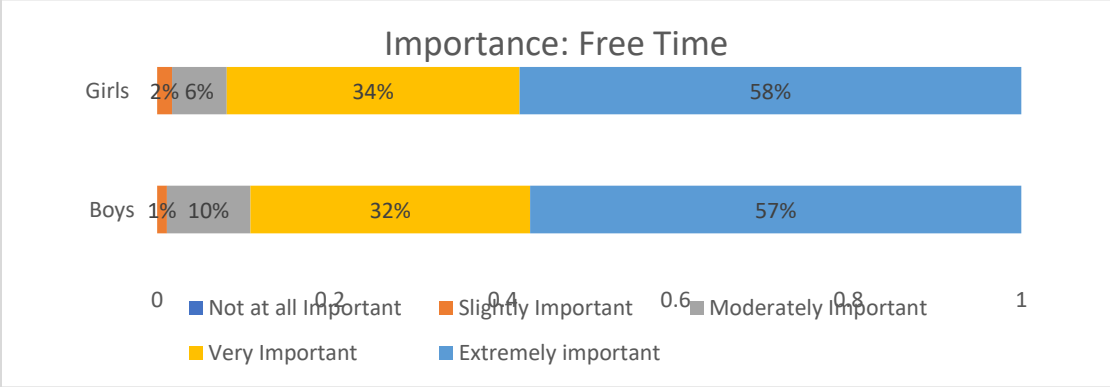

Figure 11(c). Importance: Free Time

12. Resource - Participation

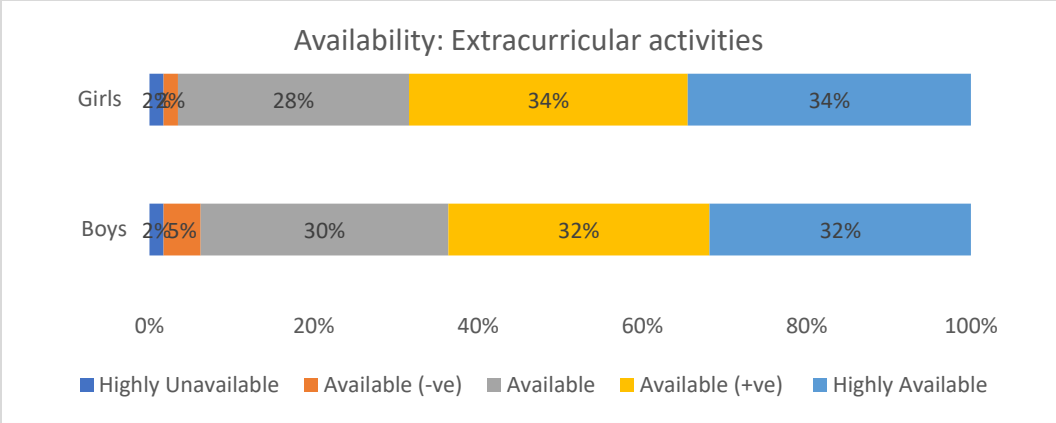

Figure 12(a). Availability: Extracurricular activities

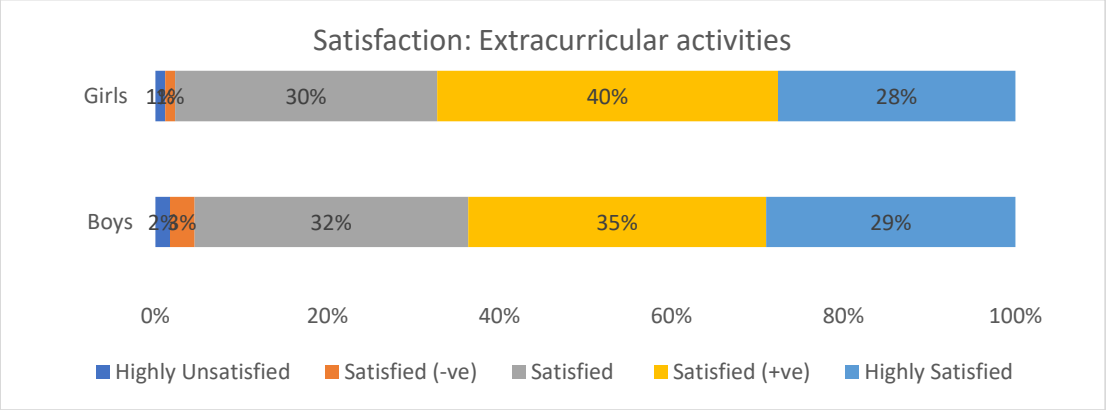

Figure 12(b). Satisfaction Extracurricular activities

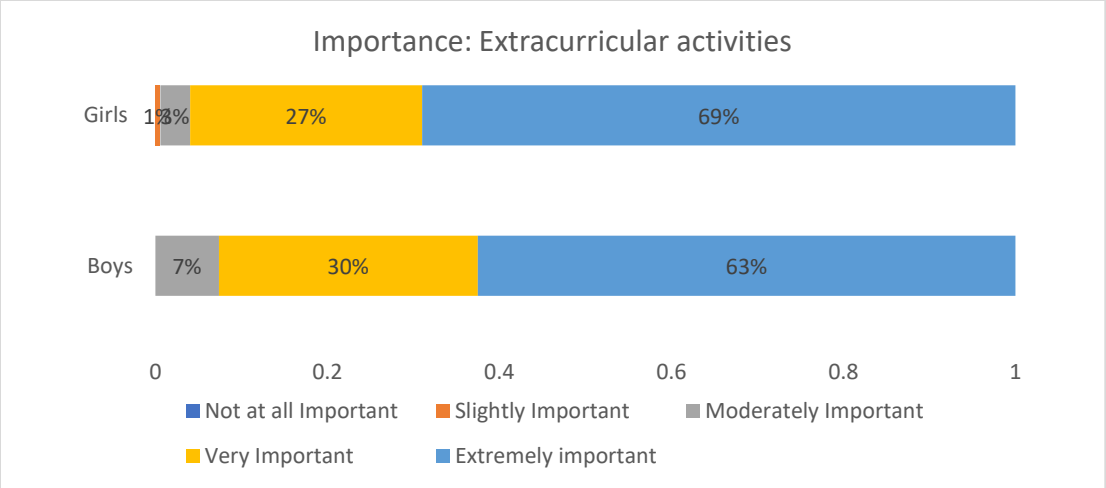

Figure 12(c). Importance of Extracurricular activities

Annex 2:

Children's Perceptions of Resources for Capabilities by Category of Classes

1. Resources - Education

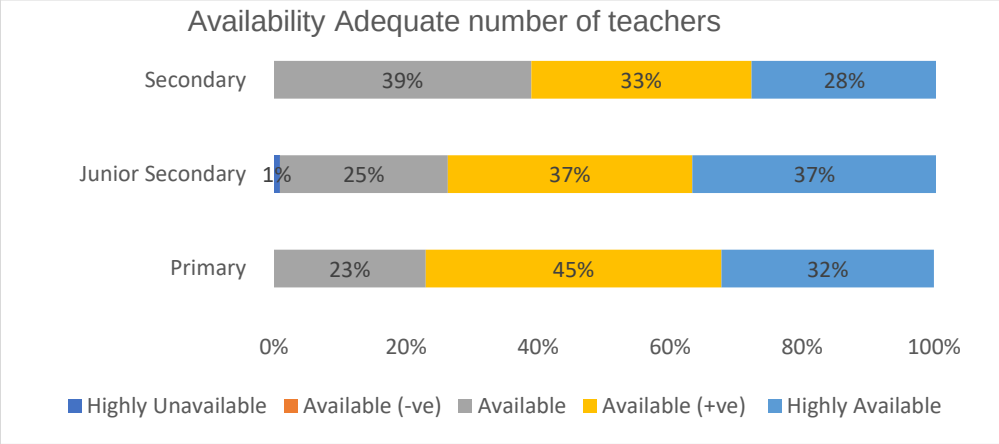

Figure 1(a). Availability: Adequate number of teachers by classes

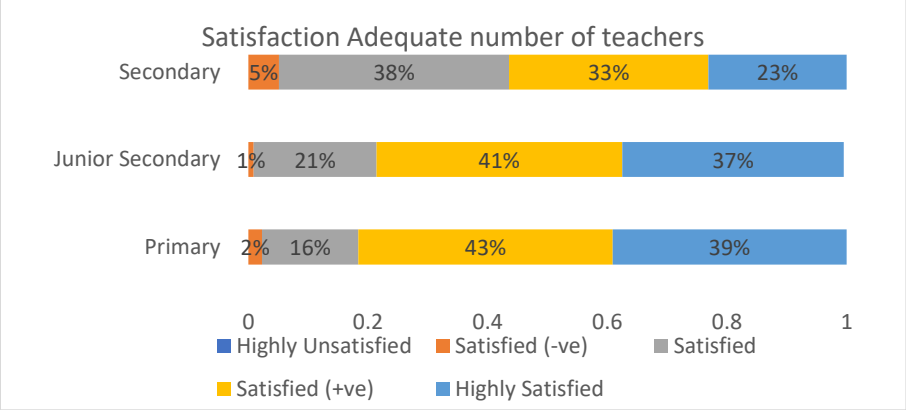

Figure 1(b). Satisfaction: Adequate number of teachers by classes

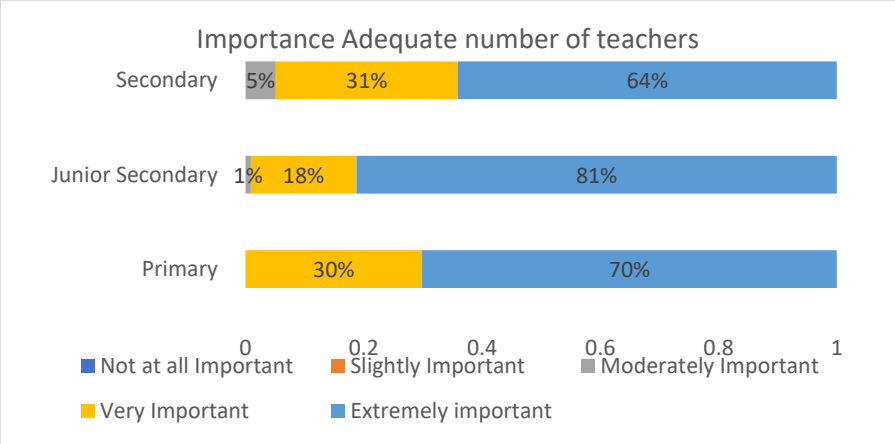

Figure 1(c). Importance: Adequate number of teachers by classes

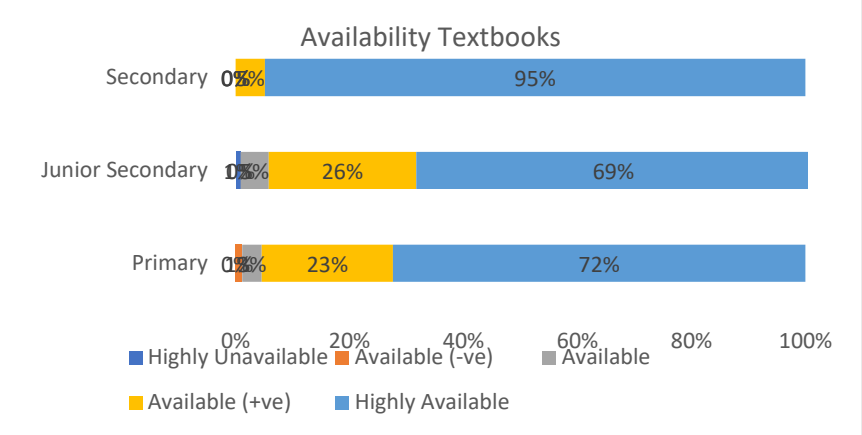

Figure 1(d). Availability: Textbooks

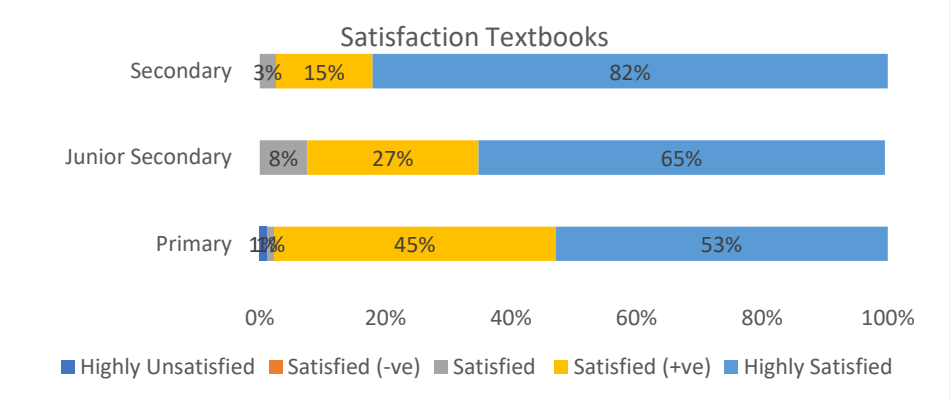

Fig 1(e). Satisfaction: Textbooks

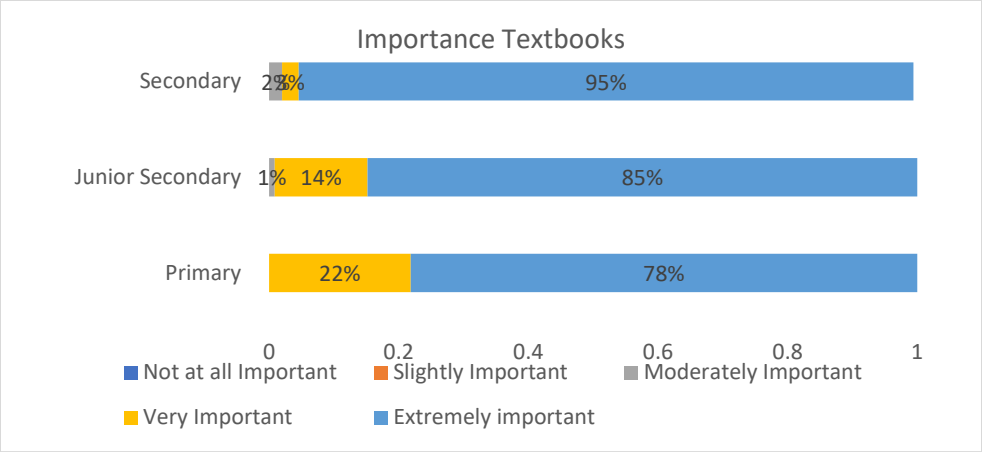

Figure 1(f). Importance of Textbooks by Classes

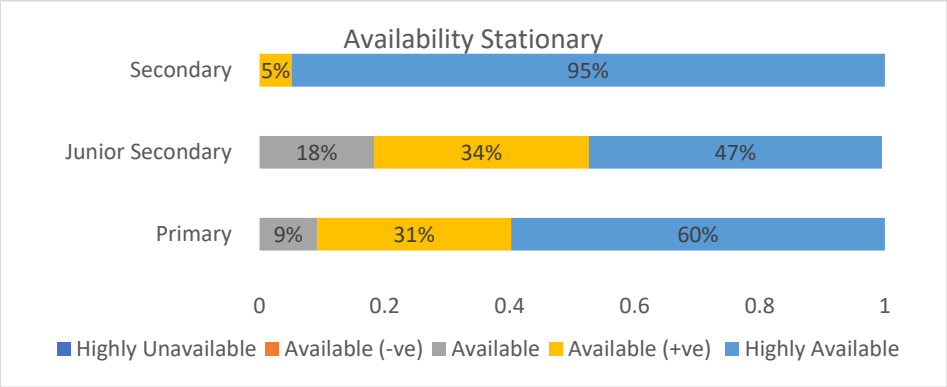

Figure 1(g). Availability: Stationary

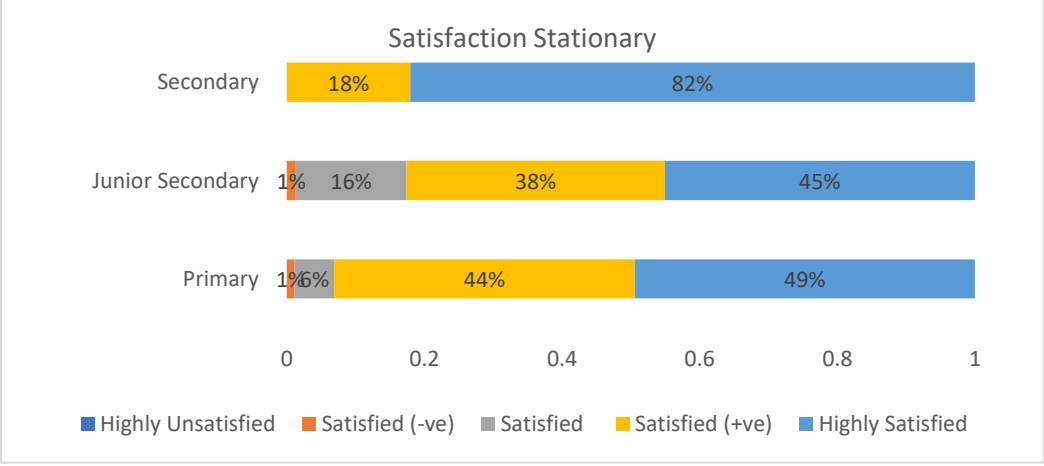

Figure 1(h). Satisfaction: Stationary

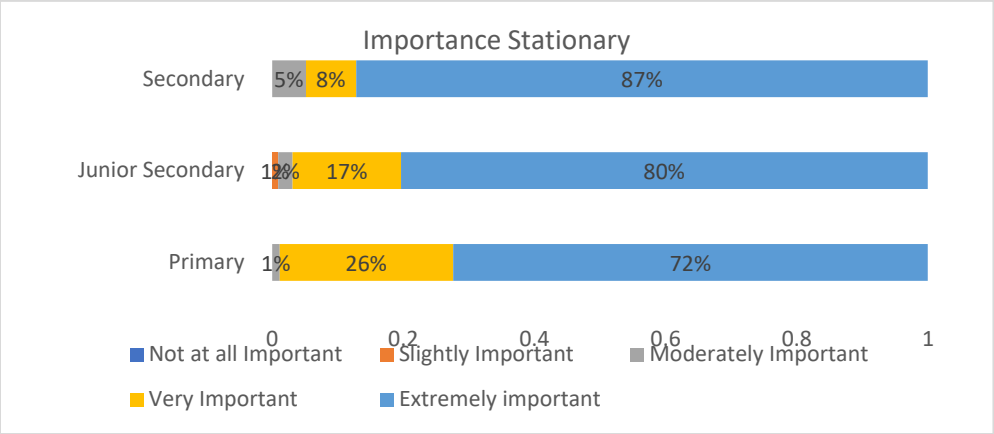

Figure 1(i). Importance Stationary

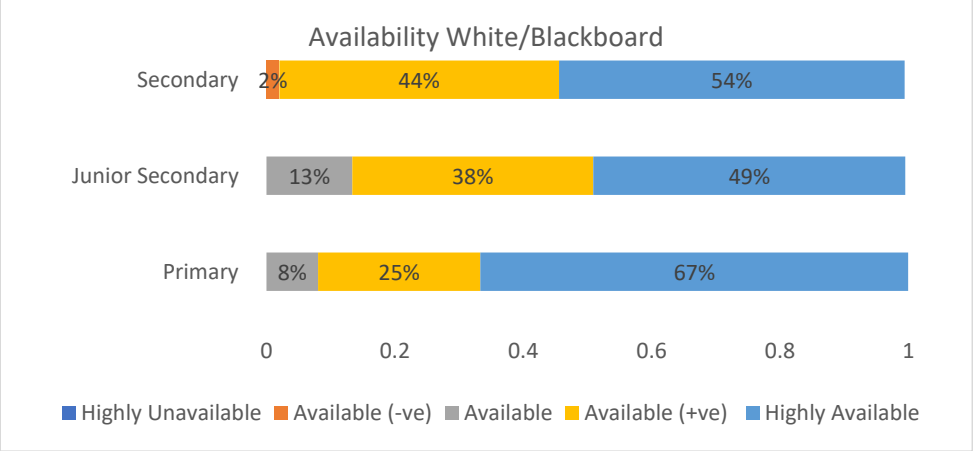

Figure 1(j). Availability White/Blackboard

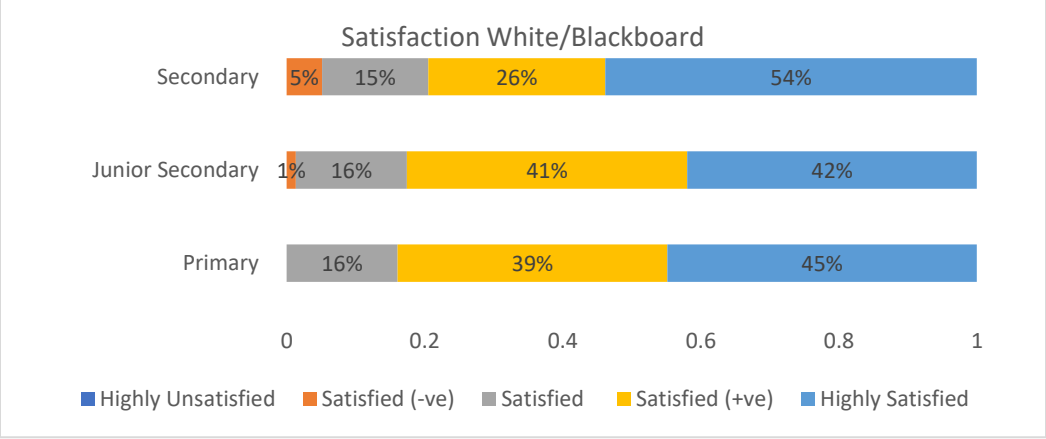

Figure 1(k). Satisfaction White/Blackboard

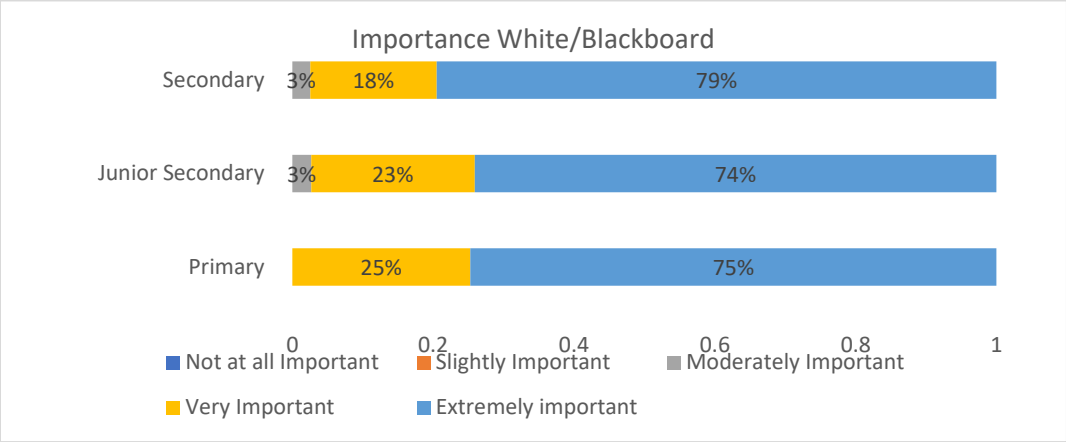

Figure 1(l). Importance White/Blackboard

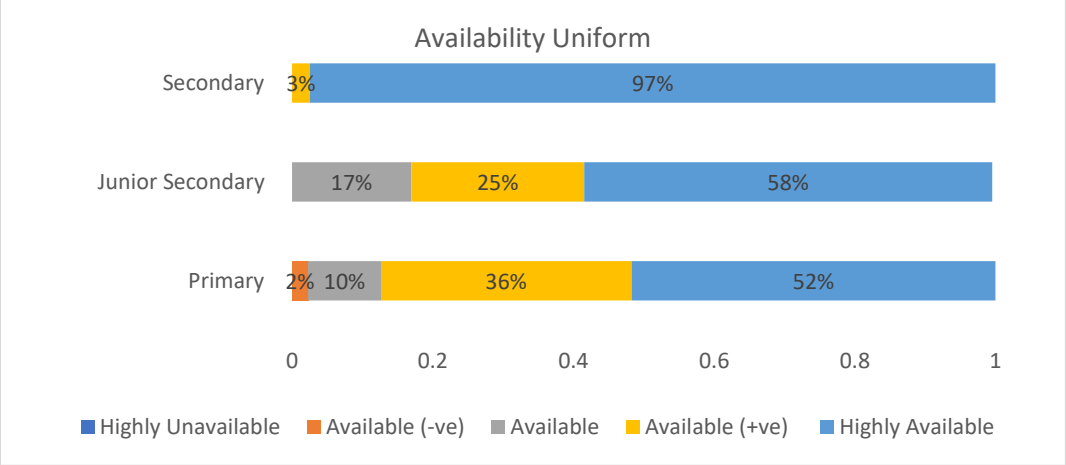

Figure 1(m). Availability: Uniform

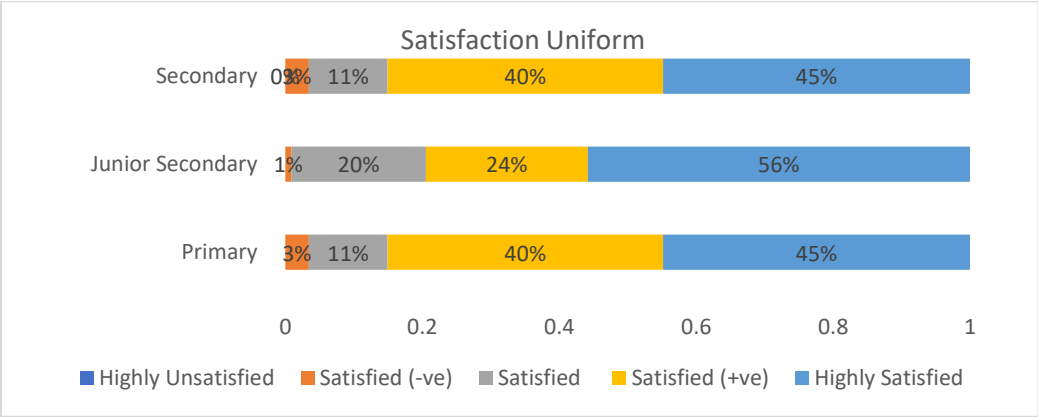

Fig 1(n). Satisfaction: Uniform

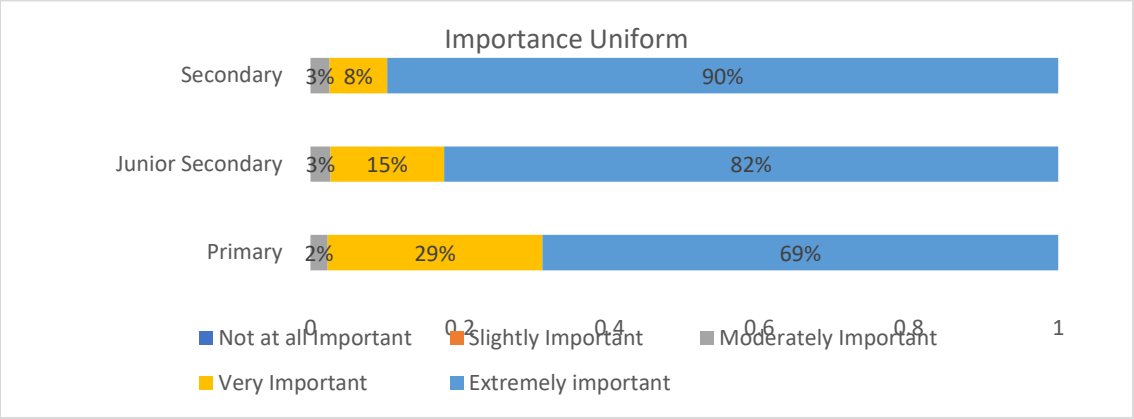

Fig 1(o). Importance: Uniform

2. Resources - Nutritional Well-being

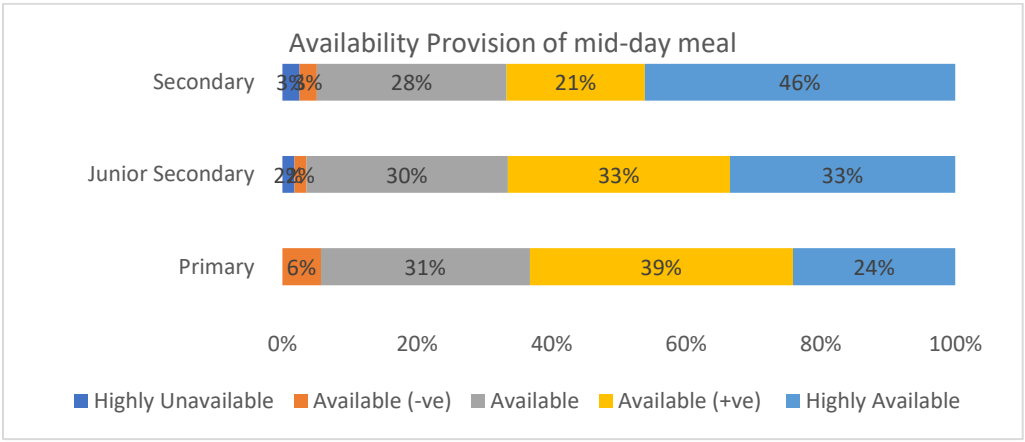

Fig 2(a). Availability: Provision of mid-day meal

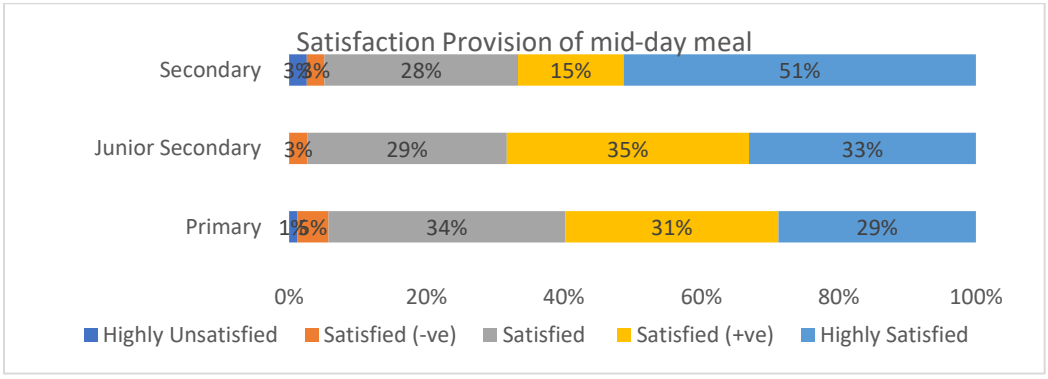

Fig 2(b). Satisfaction Provision of mid-day meal

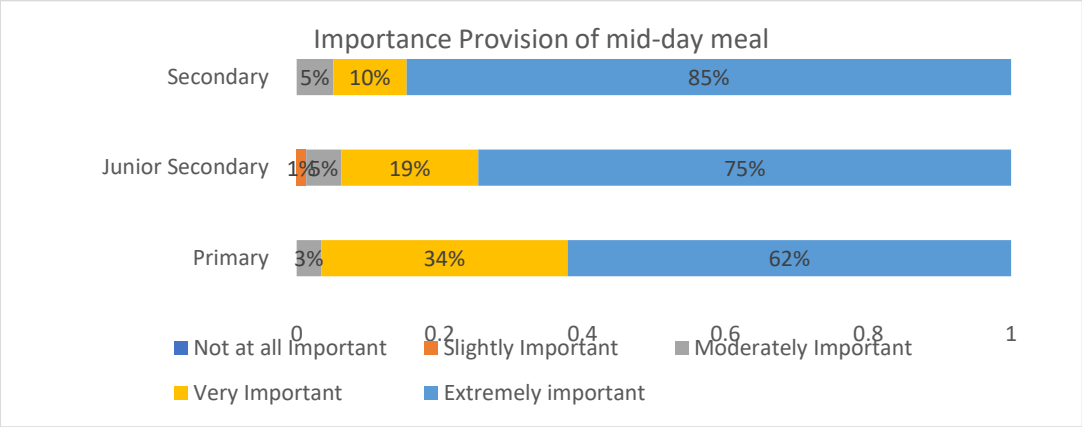

Fig 2(c). The importance Provision of mid-day meals

3. Resources – Aspiration

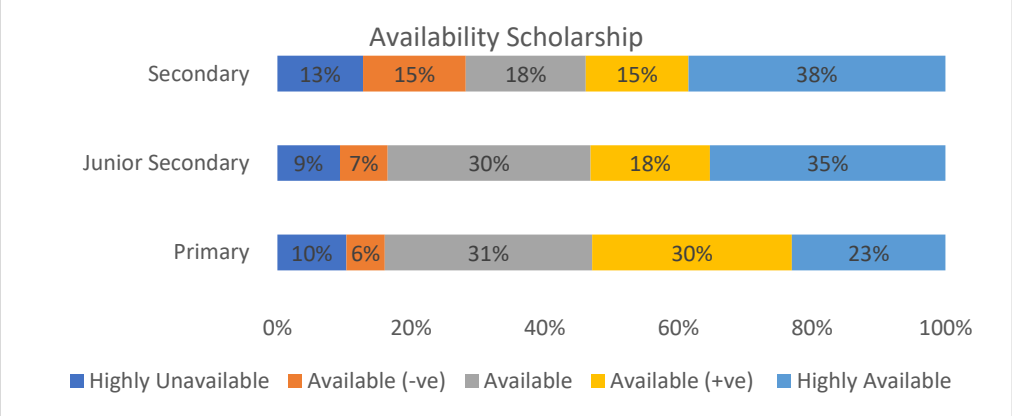

Fig 3(a). Availability Scholarship

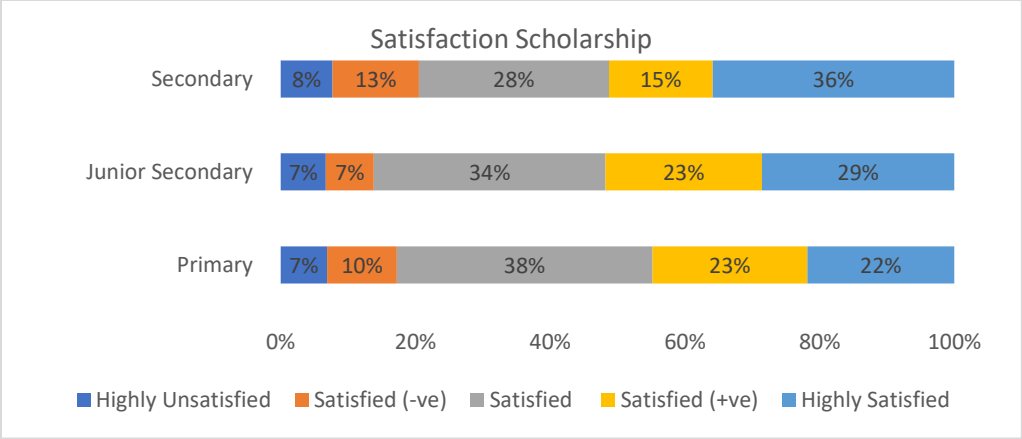

Fig 3(b). Satisfaction Scholarship

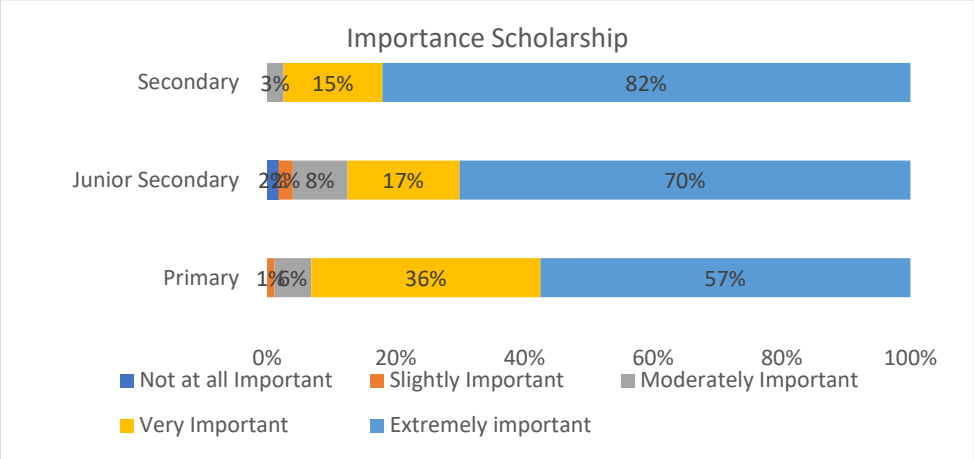

Fig 3(c). Importance Scholarship

4. **Resource - Physical Health/ Gender Equality and Social Inclusion Curriculum**

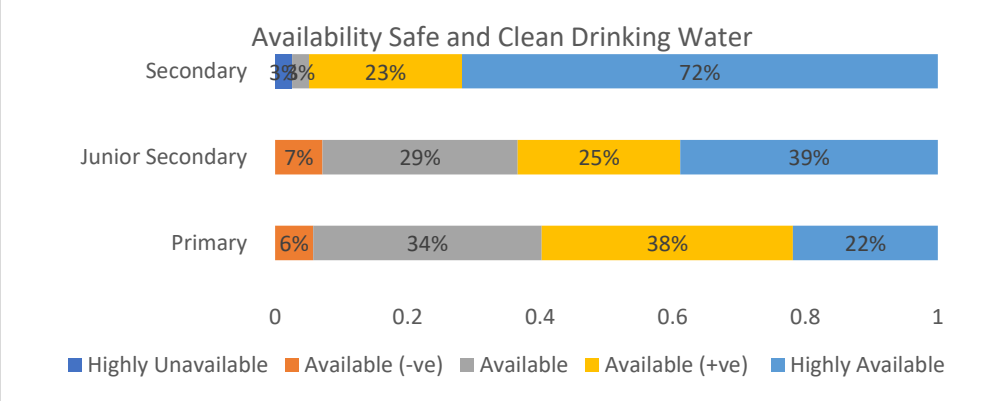

Fig 4(a). Availability Safe and Clean Drinking Water

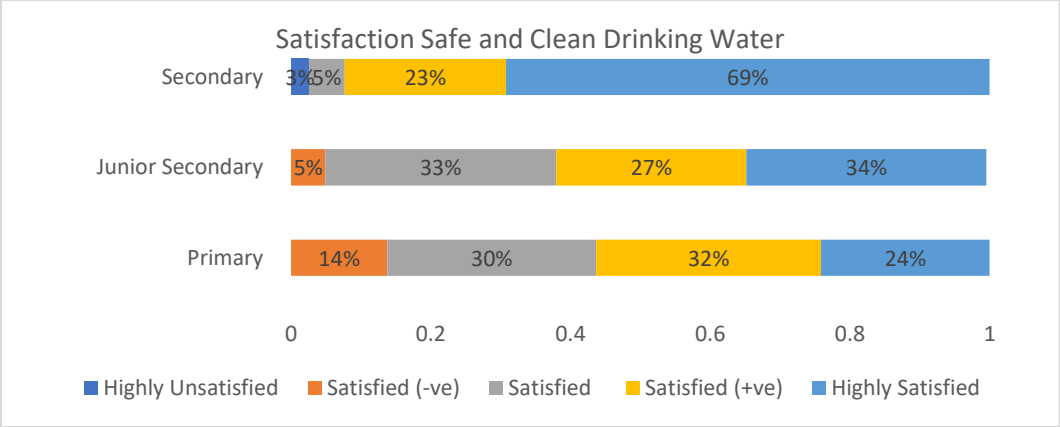

Fig 4(b). Satisfaction Safe and Clean Drinking Water

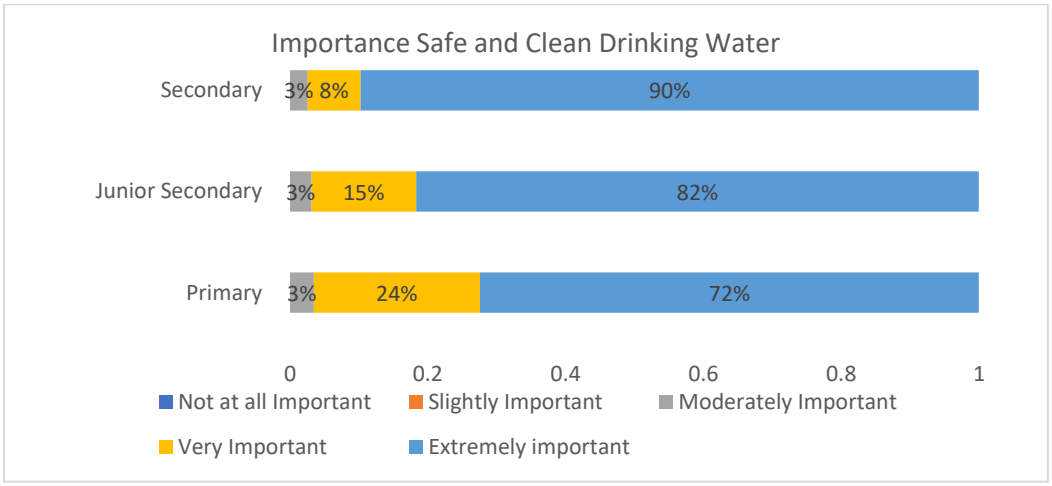

Figure 4(c). Importance Safe and Clean Drinking Water

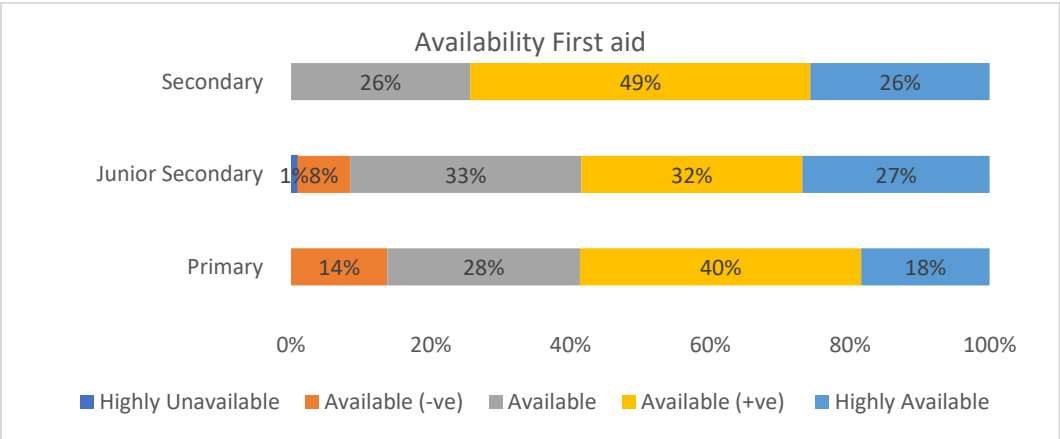

Figure 4(d). Availability First aid

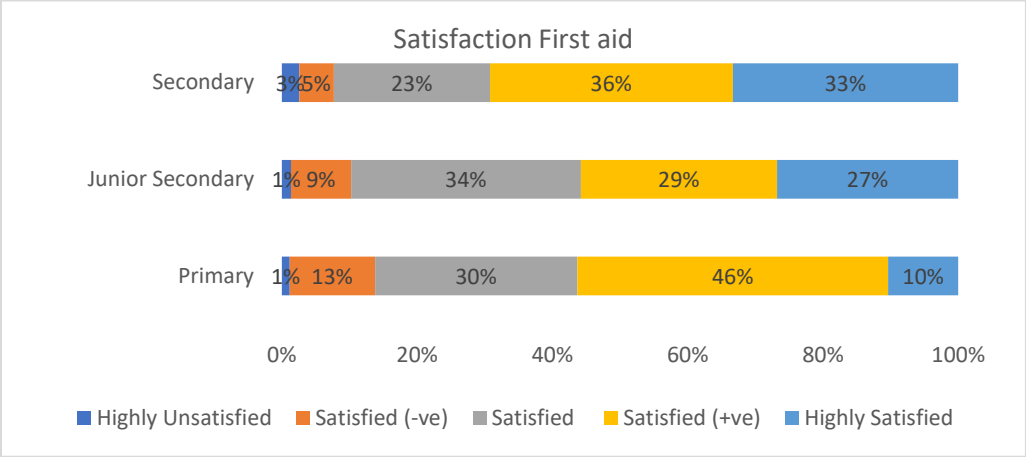

Figure 4(e). Satisfaction First aid

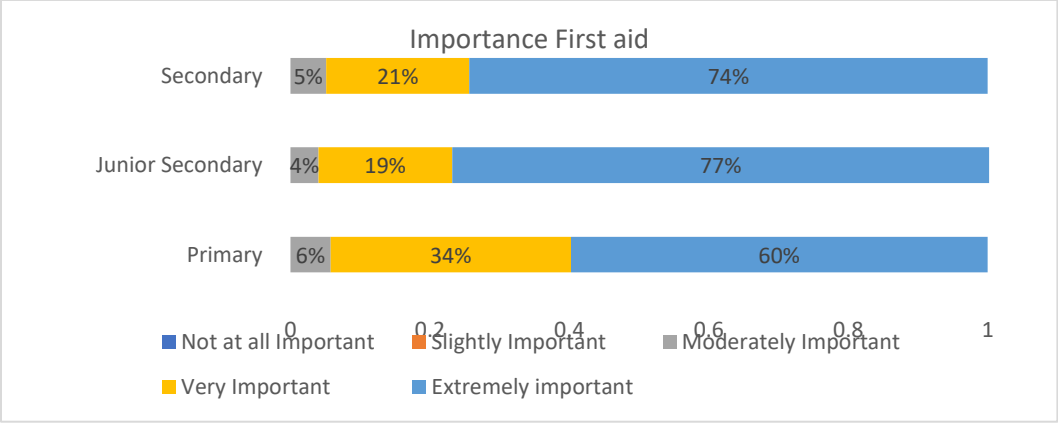

Figure 4(f). Importance First aid

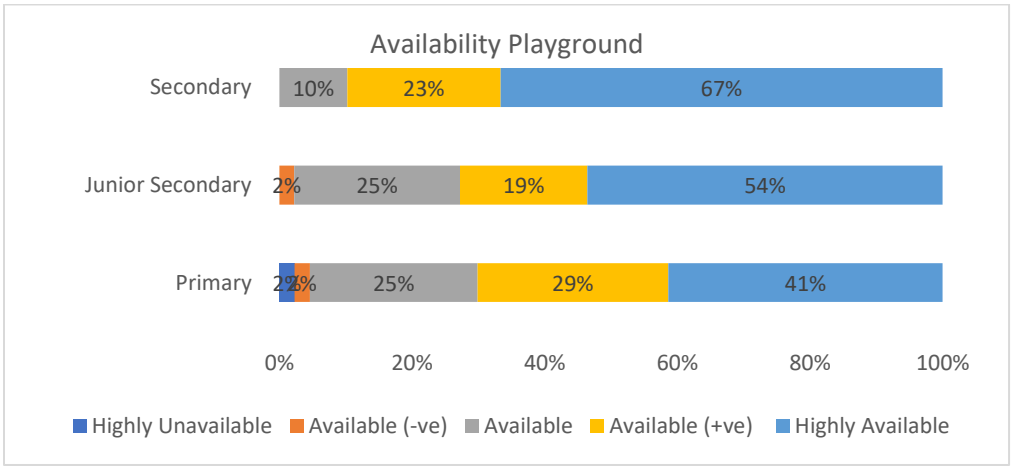

Figure 4(g). Availability Playground

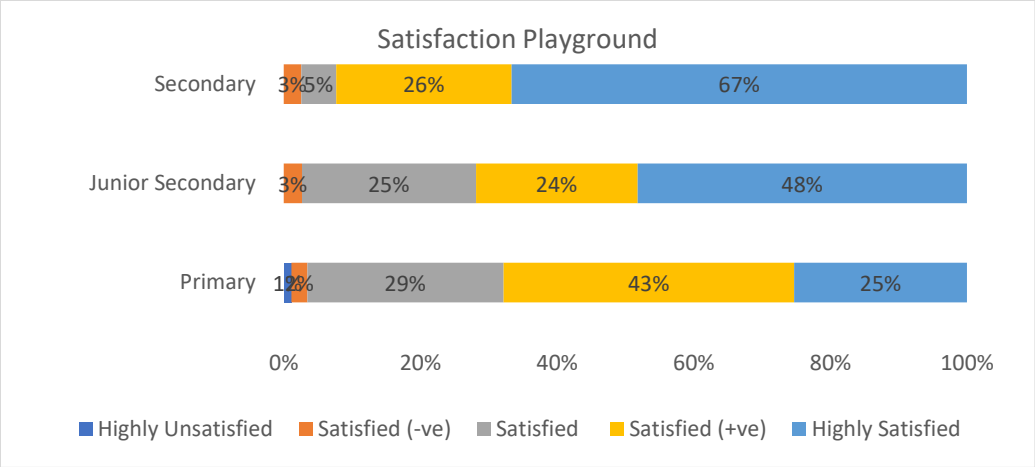

Figure 4(h). Satisfaction Playground

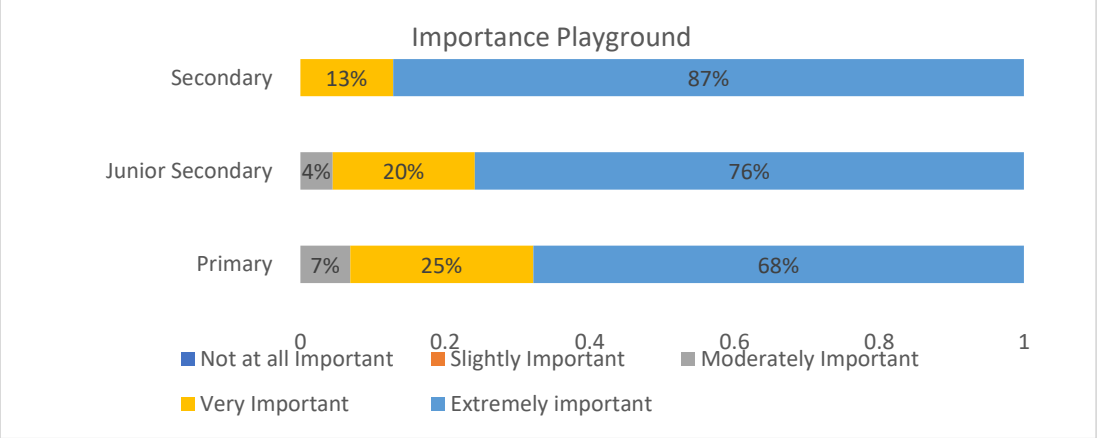

Figure 4(i). Importance of Playground

5. **Resource - Bodily Integrity/ Gender Equality and Social Inclusion Curriculum**

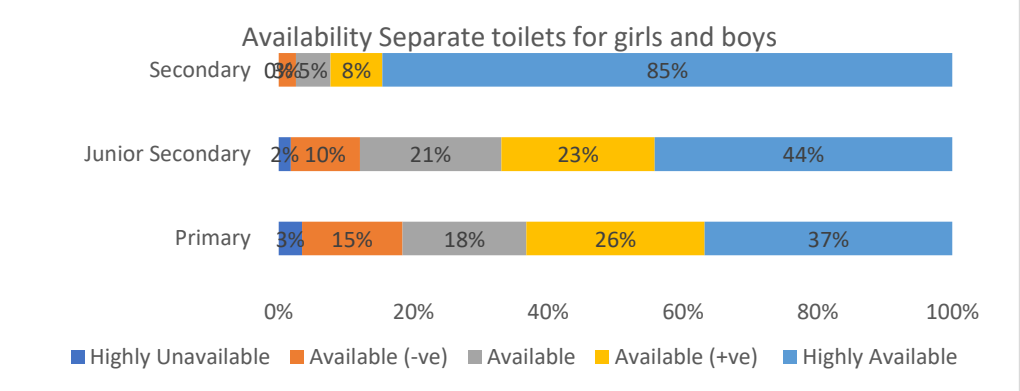

Figure 5(a). Availability: Separate toilets for girls and boys

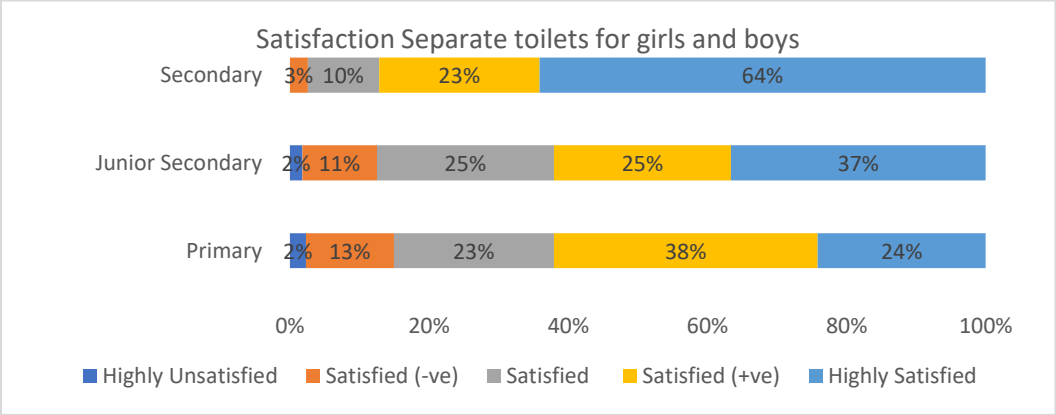

Figure 5(b). Satisfaction Separate toilets for girls and boys

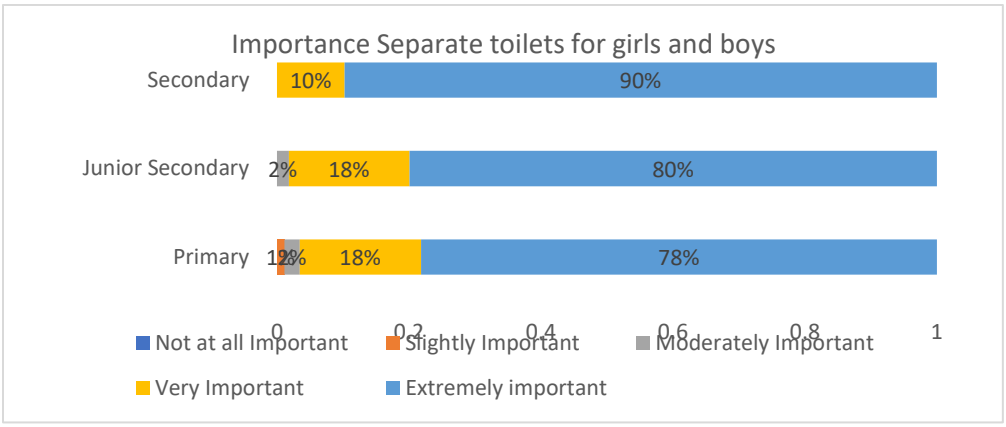

Figure 5(c). Importance: Separate toilets for girls and boys

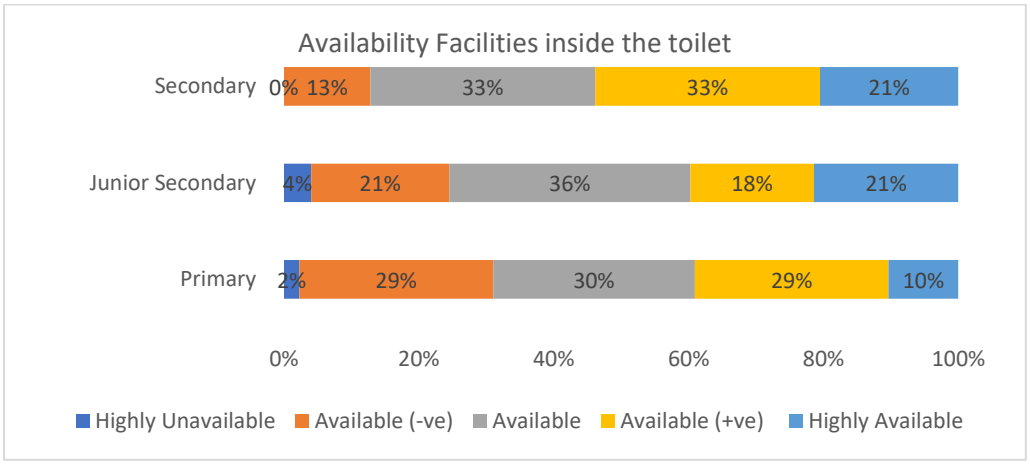

Figure 5(d). Availability: Facilities inside the toilet

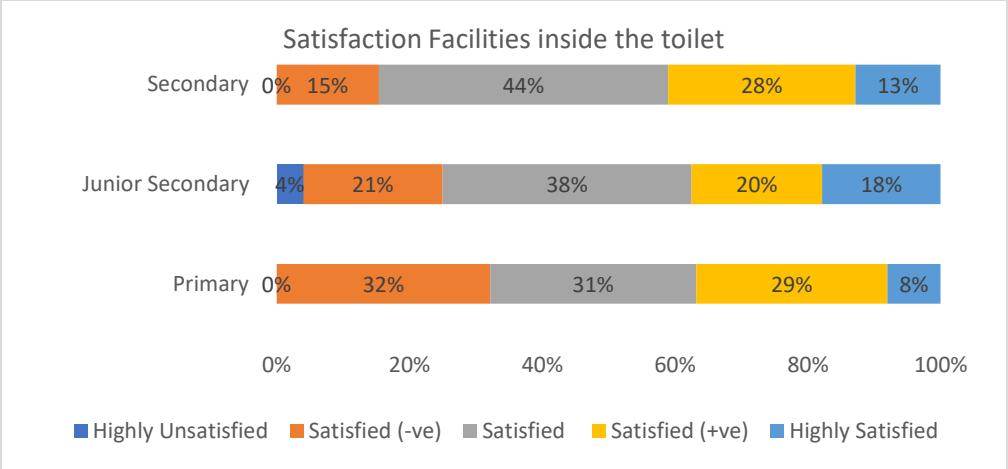

Figure 5(f). Satisfaction: Facilities inside the toilet

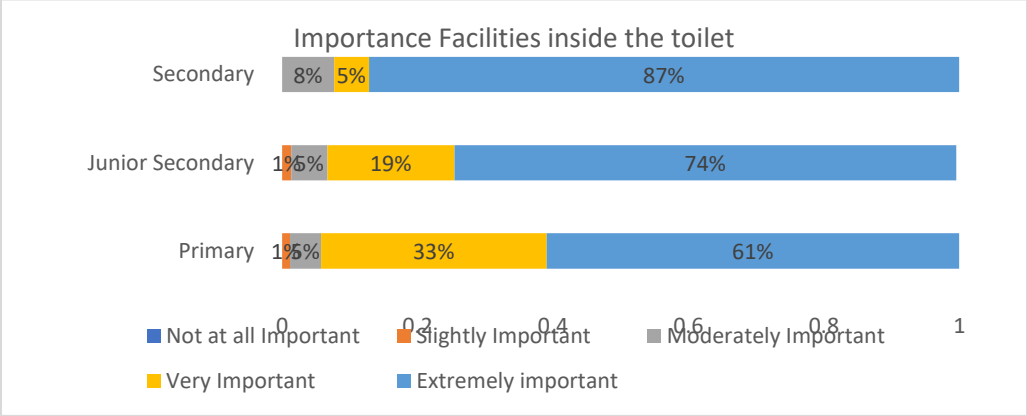

Figure 5(g). Importance: Facilities inside the toilet

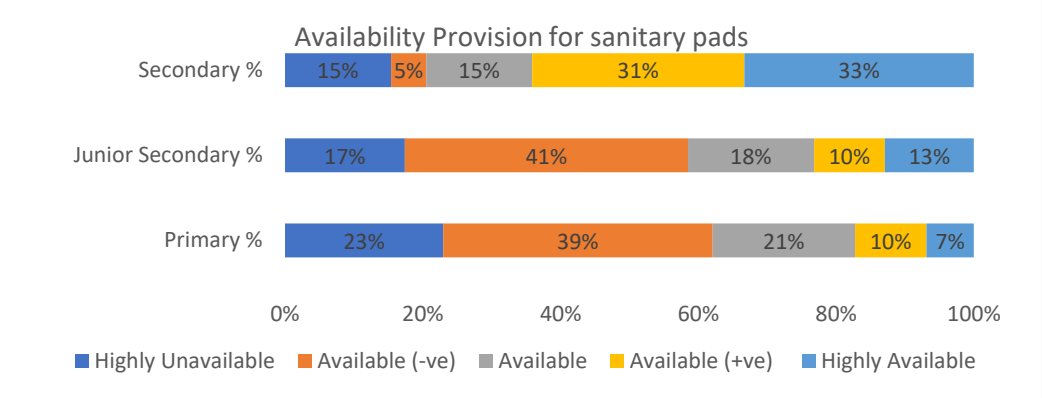

Figure 5(h). Availability: Provision for Sanitary Pads

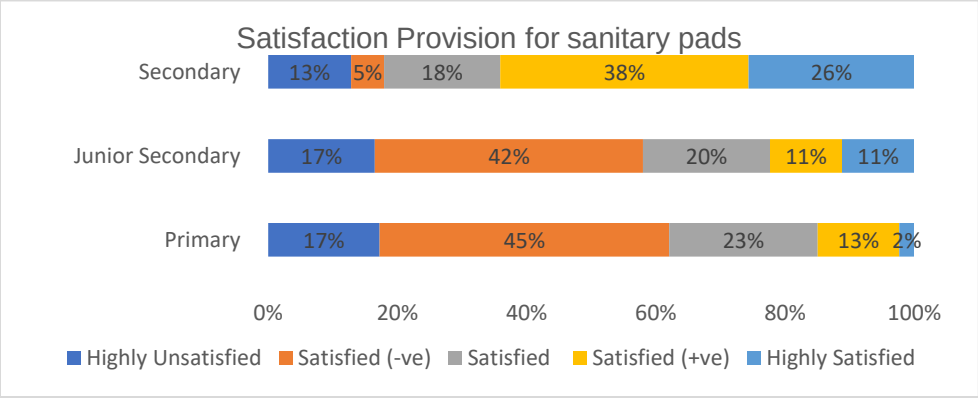

Figure 5(i). Satisfaction Provision for sanitary pads

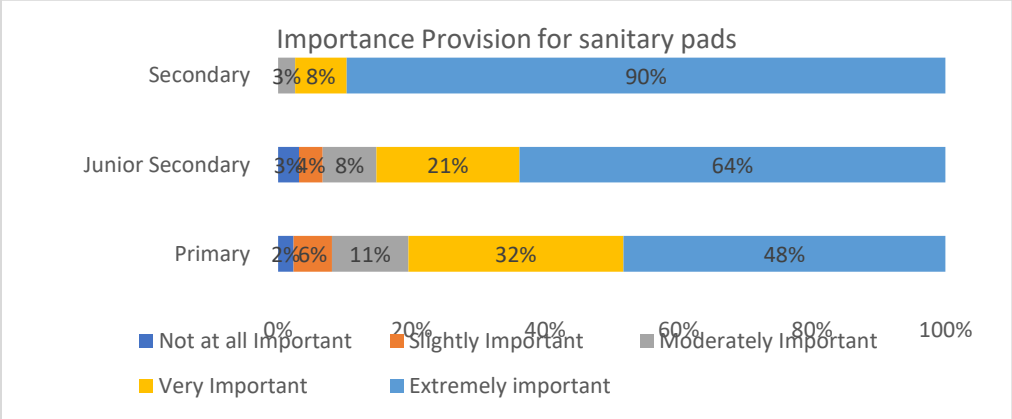

Figure 5(k). Availability Disabled friendly infrastructure

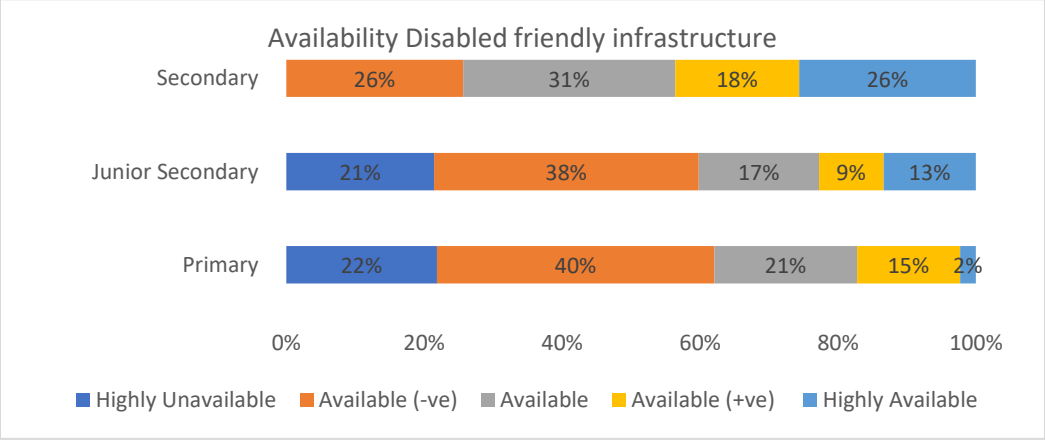

Figure 5(l). Satisfaction with Disabled-friendly infrastructure

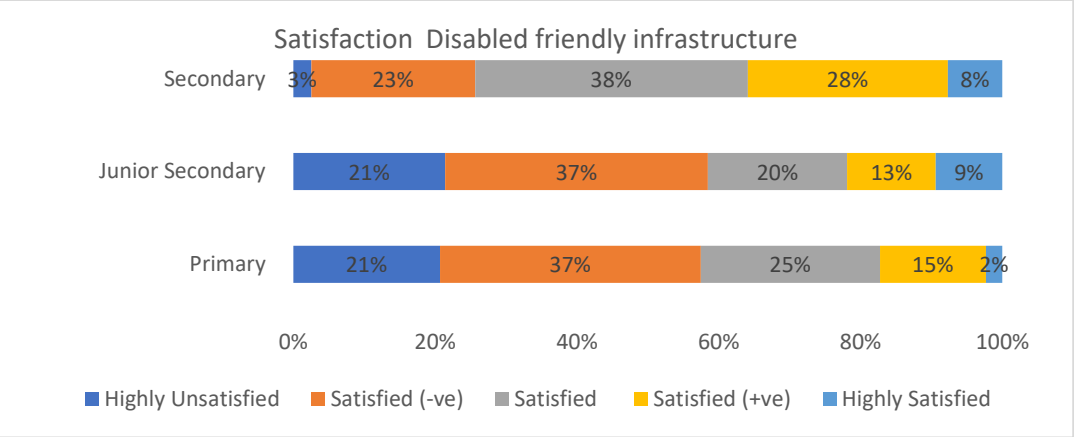

Figure 5(m). Importance Disabled friendly infrastructure

6. Resource - Understand, Interpret Plan/Imagine and Think

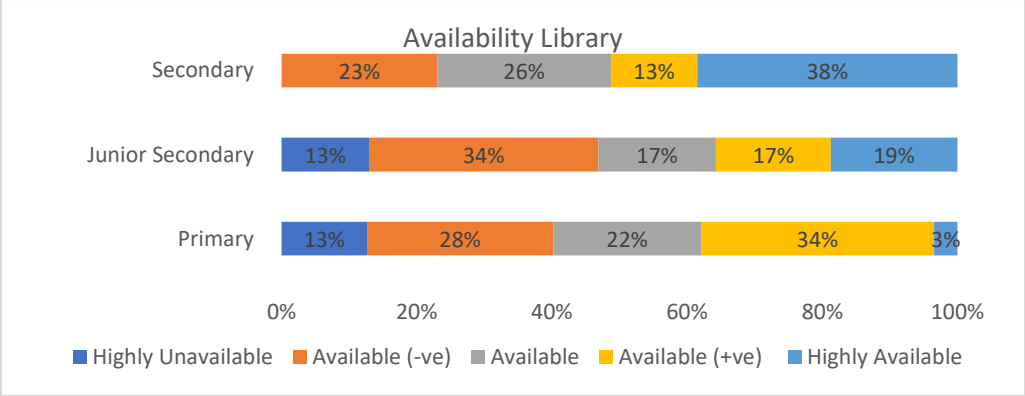

Figure 6(a). Availability Library

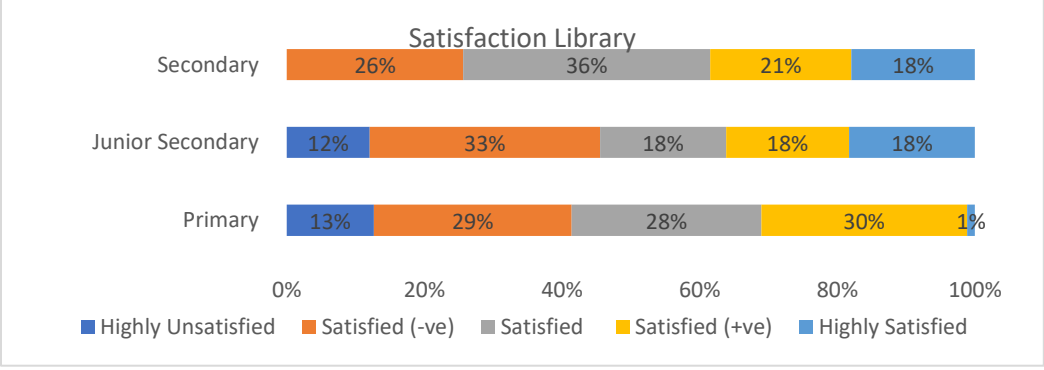

Figure 6(b). Satisfaction: Library

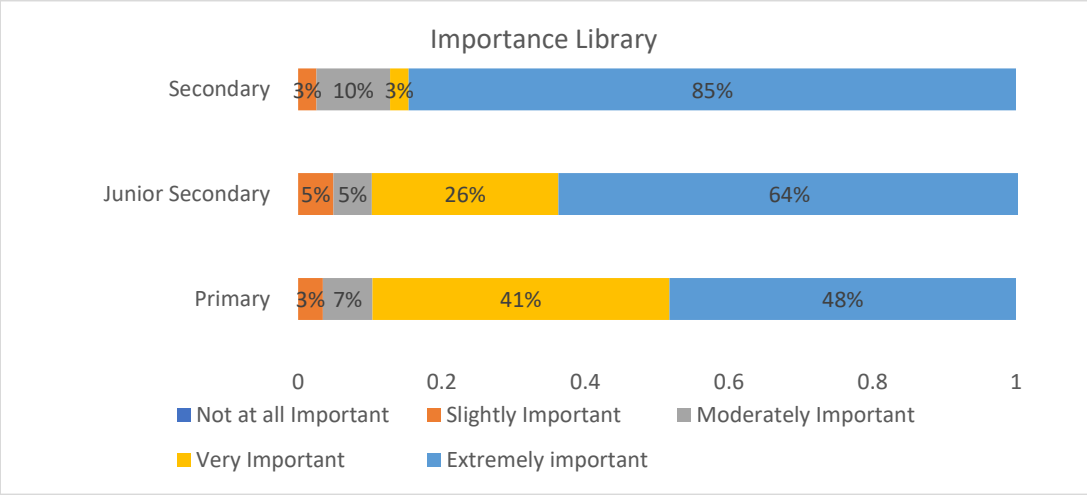

Figure 6(c). Importance: Library

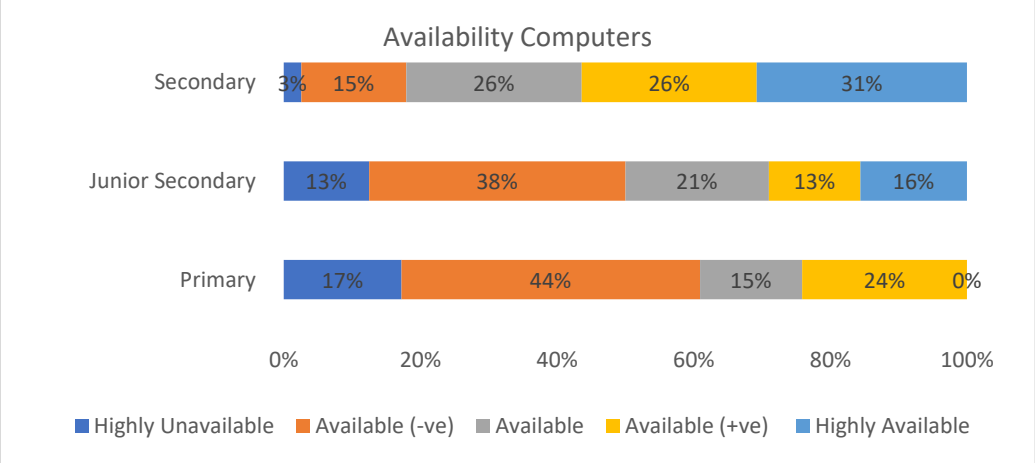

Figure 6(d). Availability Computers

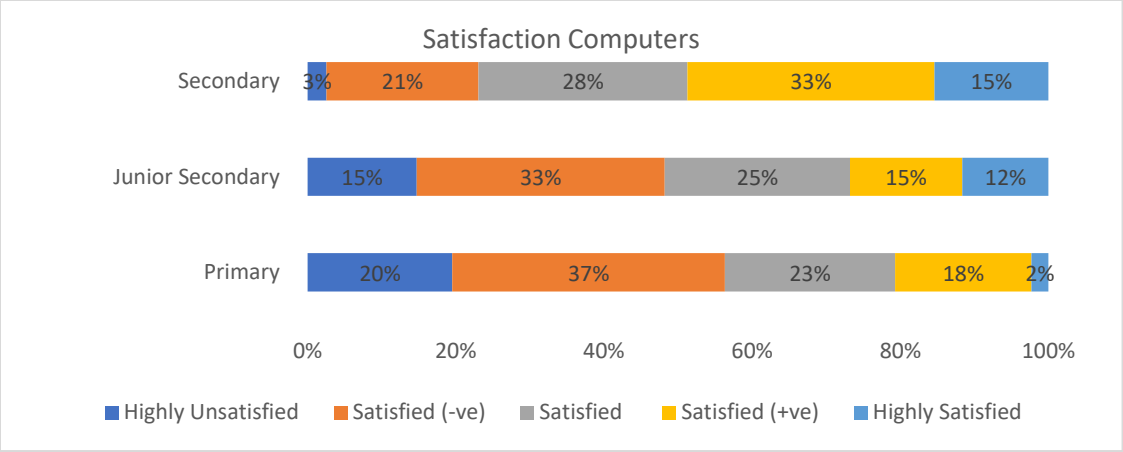

Figure 6(e). Satisfaction Computers

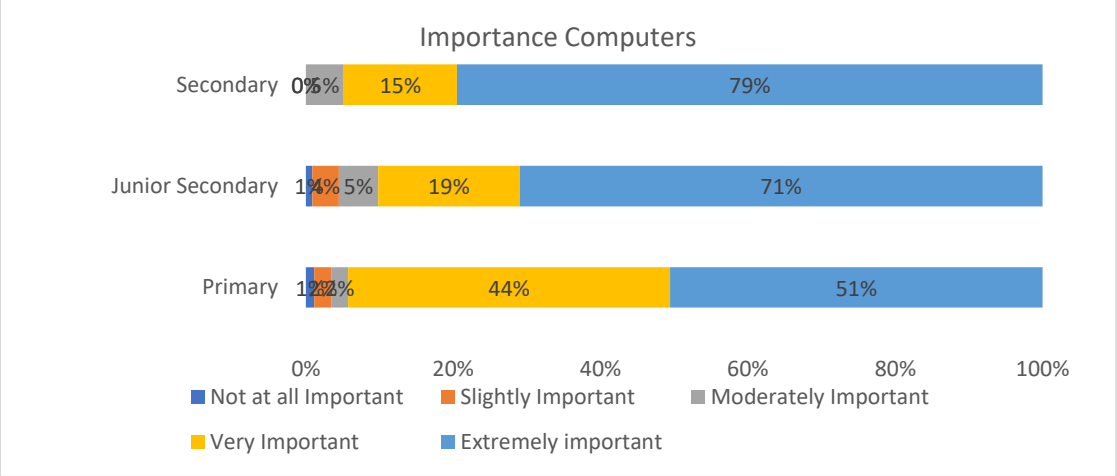

Figure 6(f). Importance of Computers

7. Resource - Religion and Identity

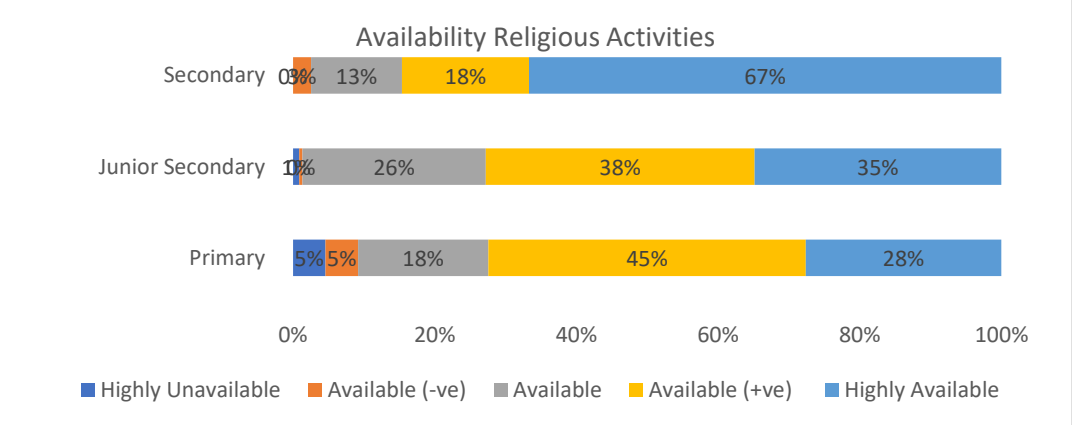

Figure 7(a). Availability Religious Activities

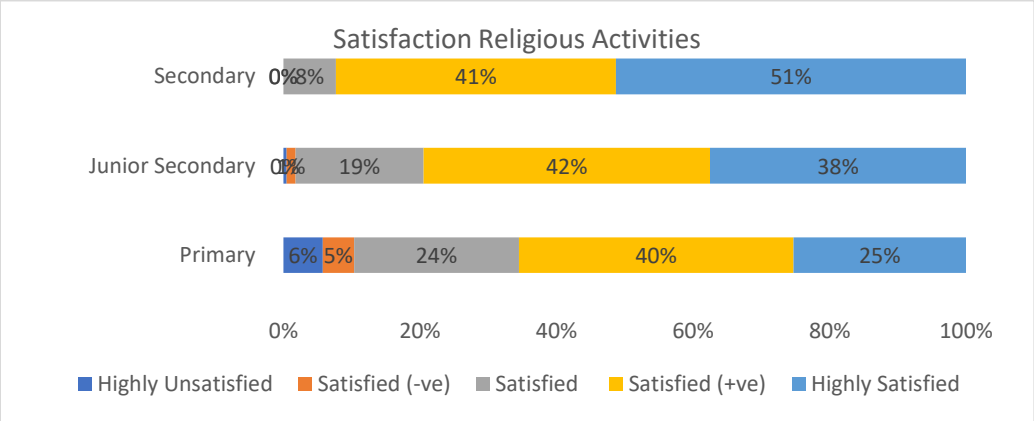

Figure 7(b). Satisfaction: Religious Activitie

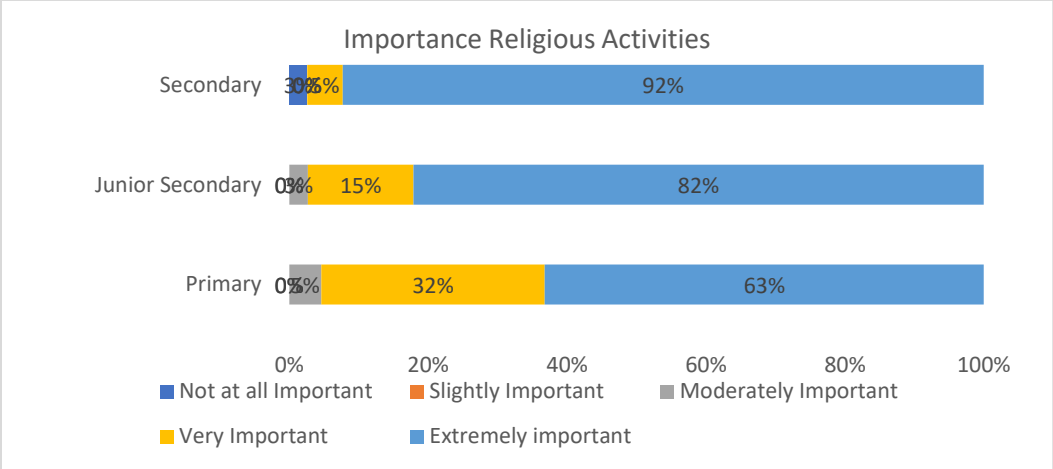

Figure 7(c). Importance: Religious Activities

8. Resource - Shelter and Environment

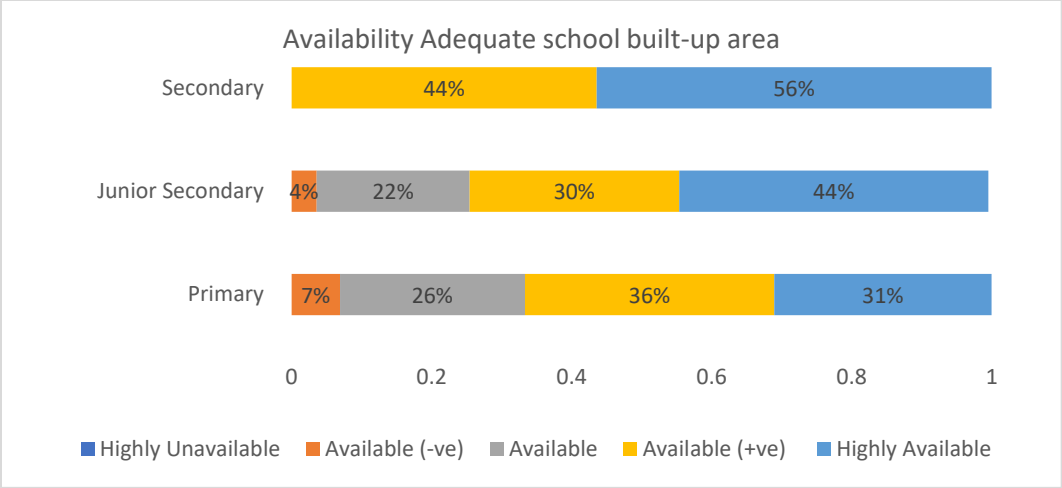

Figure 8(a). Availability: Adequate school built-up area

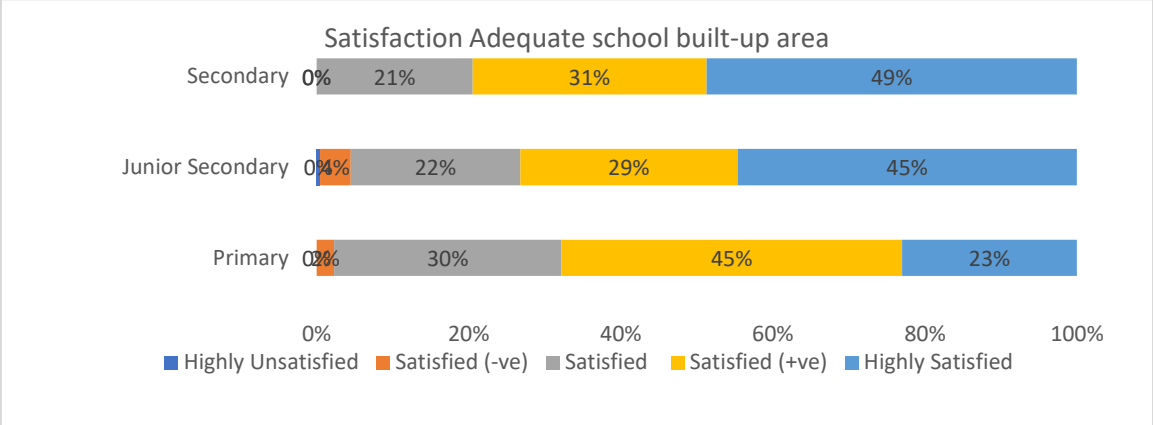

Figure 8(b). Satisfaction: Adequate school built-up area

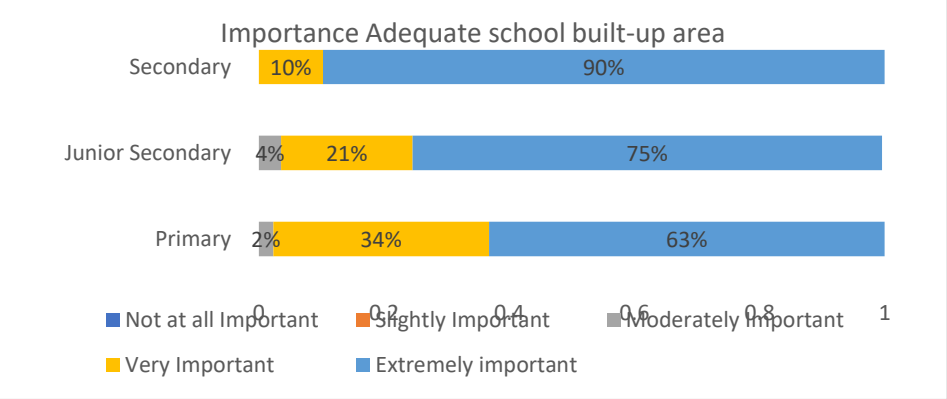

Figure 8(c). Importance: Adequate school built-up area

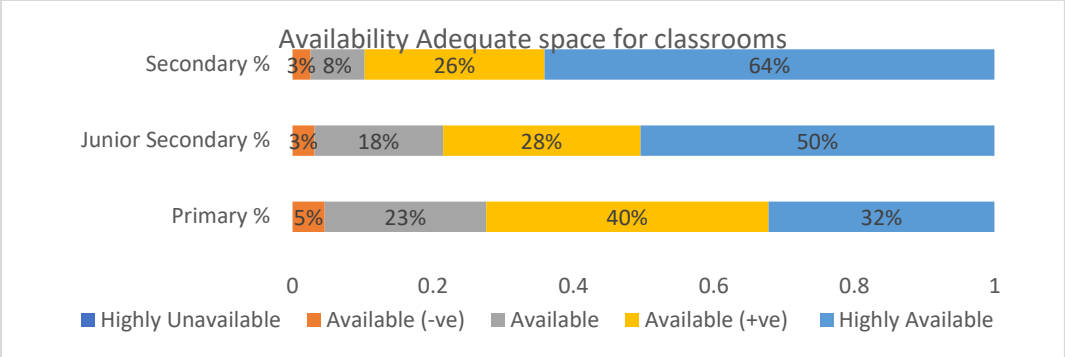

Figure 8(d). Availability: Adequate space for classrooms

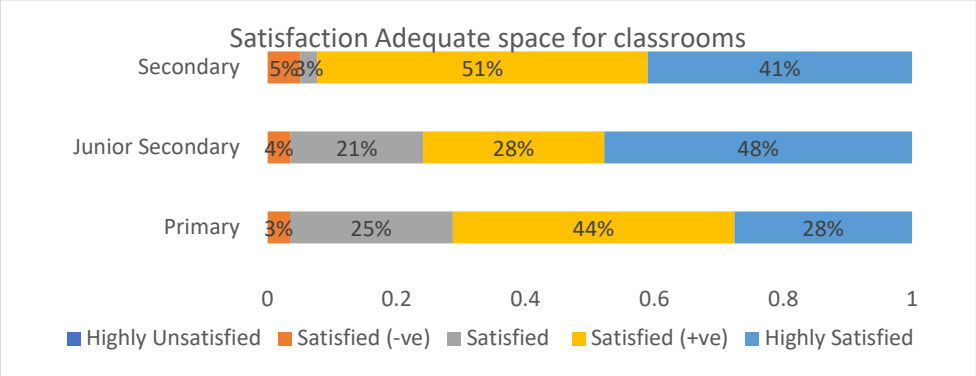

Figure 8(e). Satisfaction Adequate space for classrooms

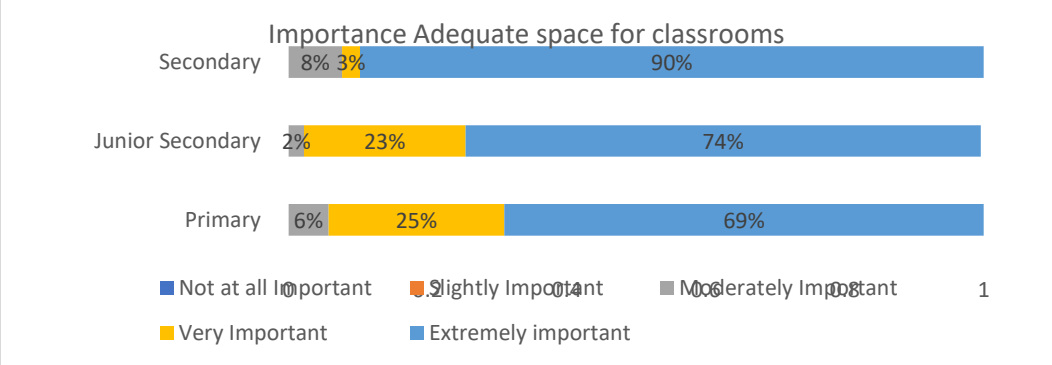

Figure 8(f). Importance: Adequate space for classrooms

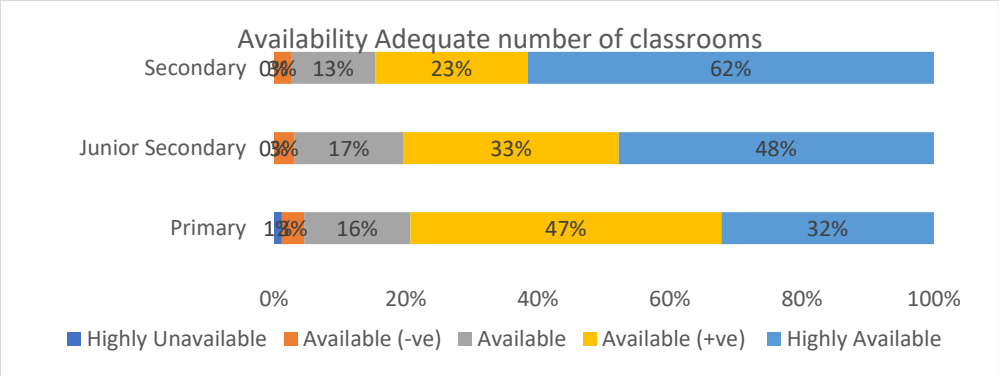

Figure 8(g). Availability: Adequate number of classrooms

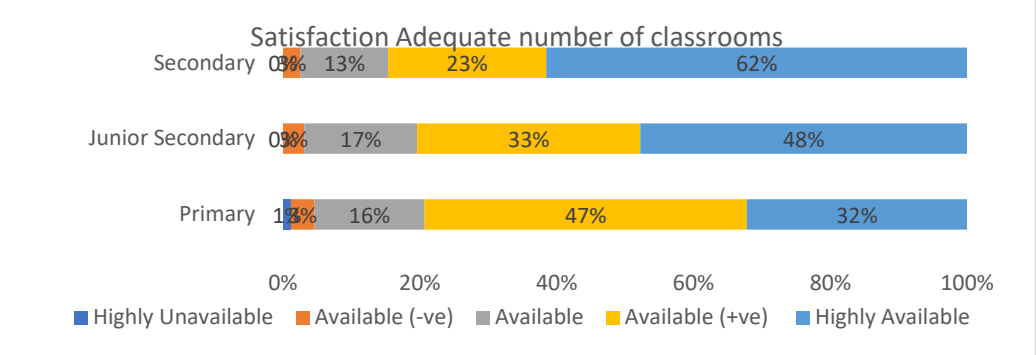

Figure 8(h). Satisfaction: Adequate number of classroom

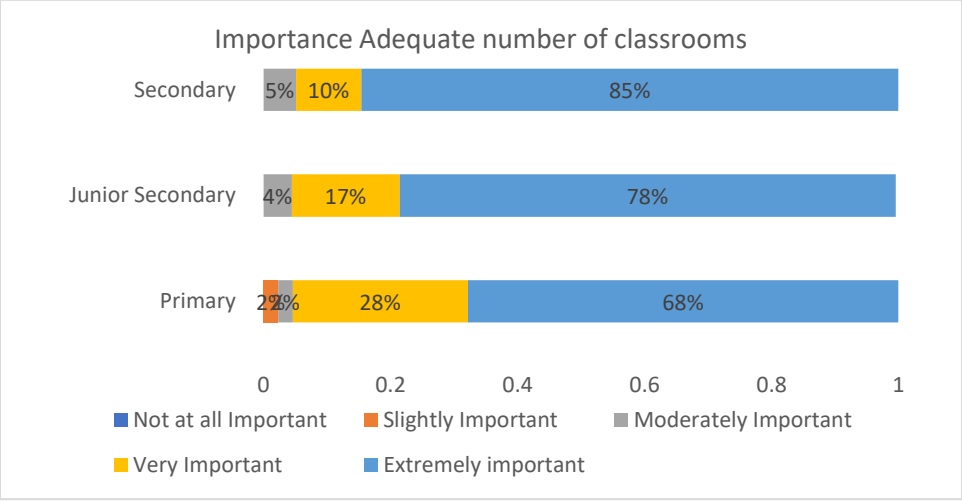

Figure 8(i). Importance Adequate number of classrooms

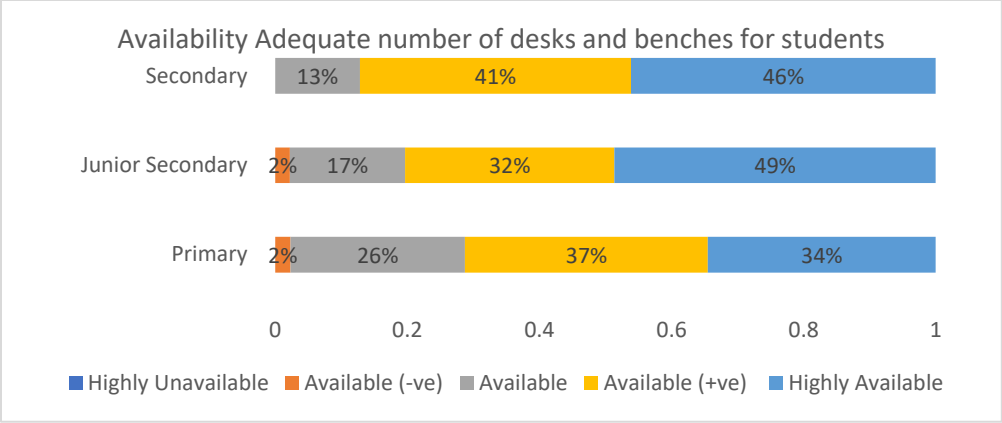

Figure 8(j). Availability: Adequate number of desks and benches for students

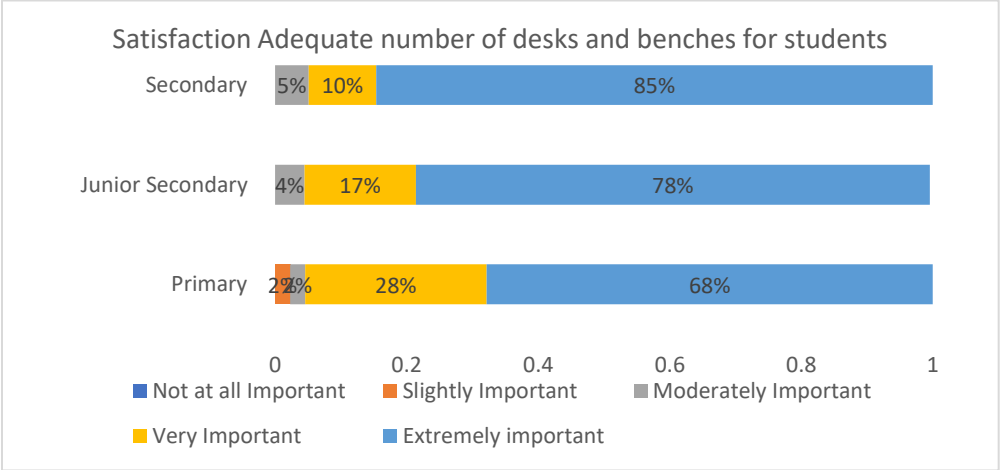

Figure 8(k). Satisfaction: Adequate number of desks and benches for students

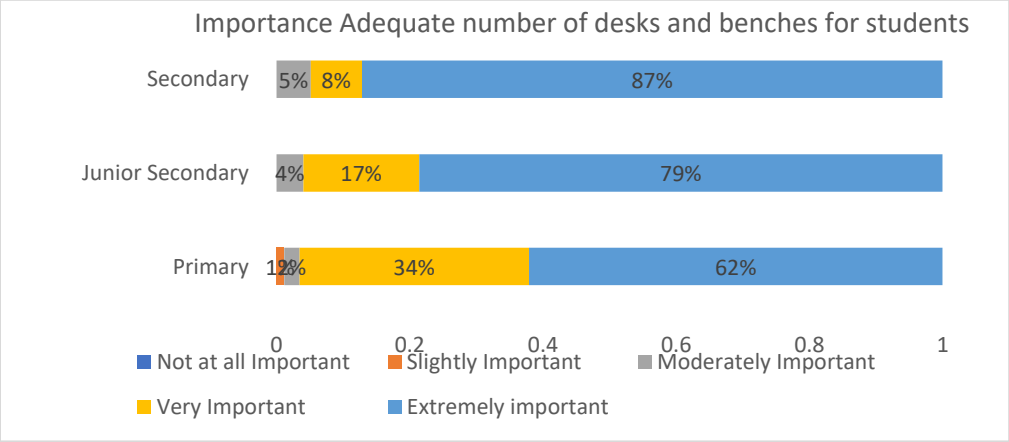

Figure 8(l). Importance: Adequate number of desks and benches for students

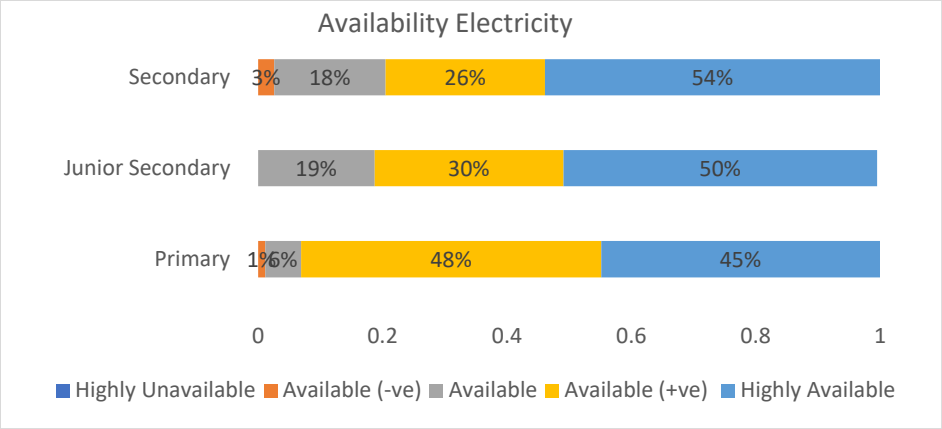

Figure 8(m). Availability: Electricity

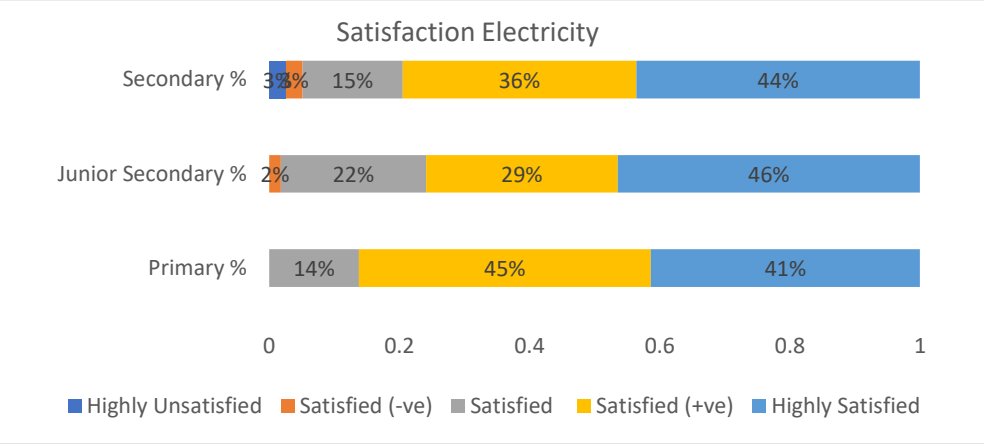

Figure 8(n). Satisfaction: Electricity

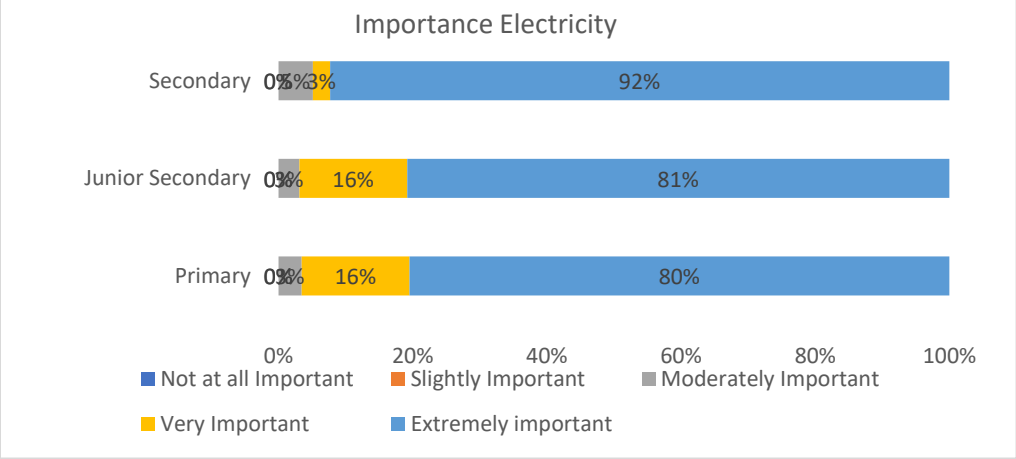

Figure 8(o). Importance: Electricity

9. Resource - Mental Well-being

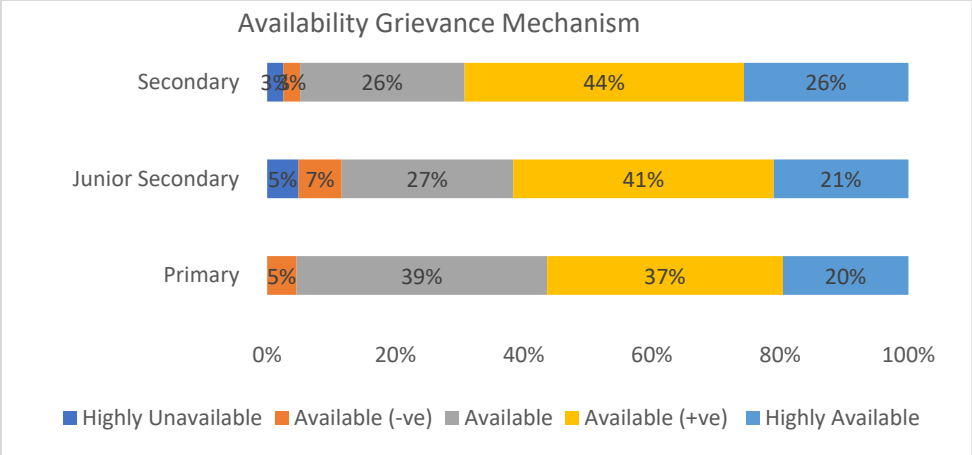

Figure 9(a). Availability Grievance Mechanism

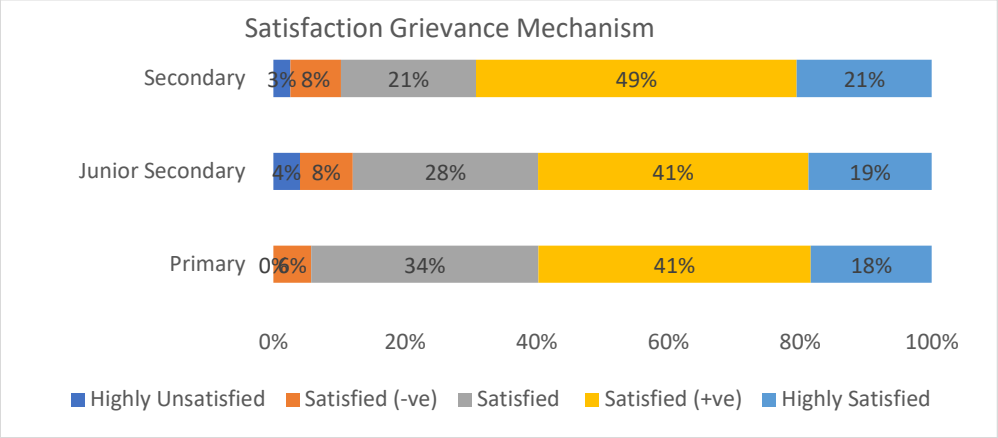

Figure 9(b). Satisfaction Grievance Mechanism

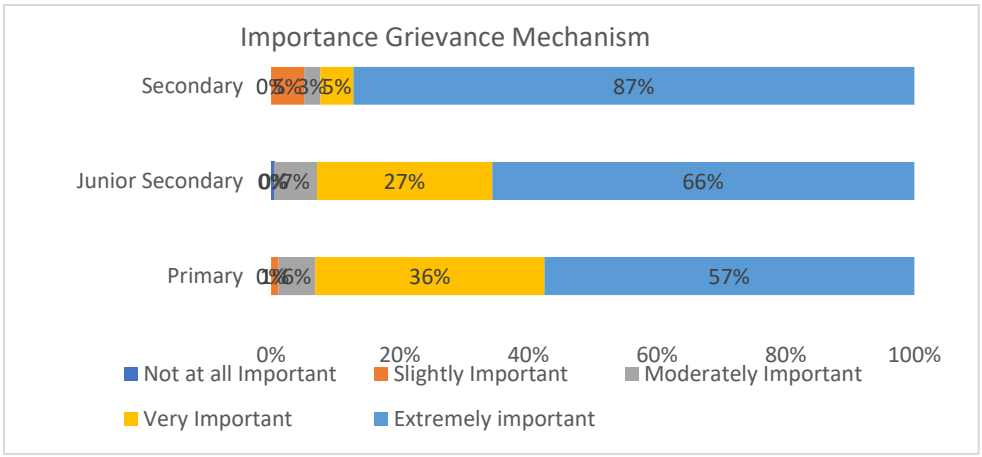

Figure 9(c). Importance Grievance Mechanism

10. **Resource - Social Relations**

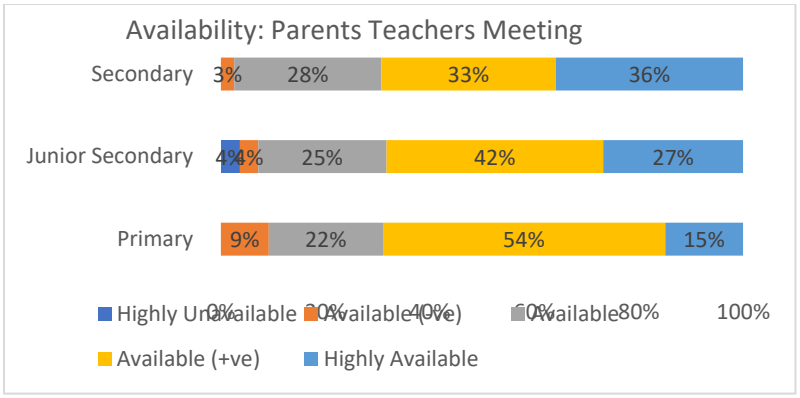

Figure 10(a). Availability Parents Teachers' Meeting

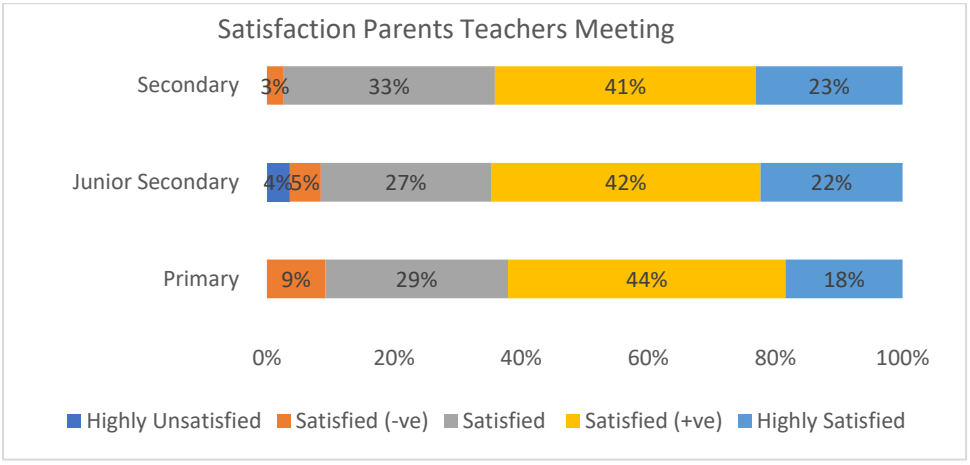

Figure 10(b). Satisfaction: Parents Teachers Meeting

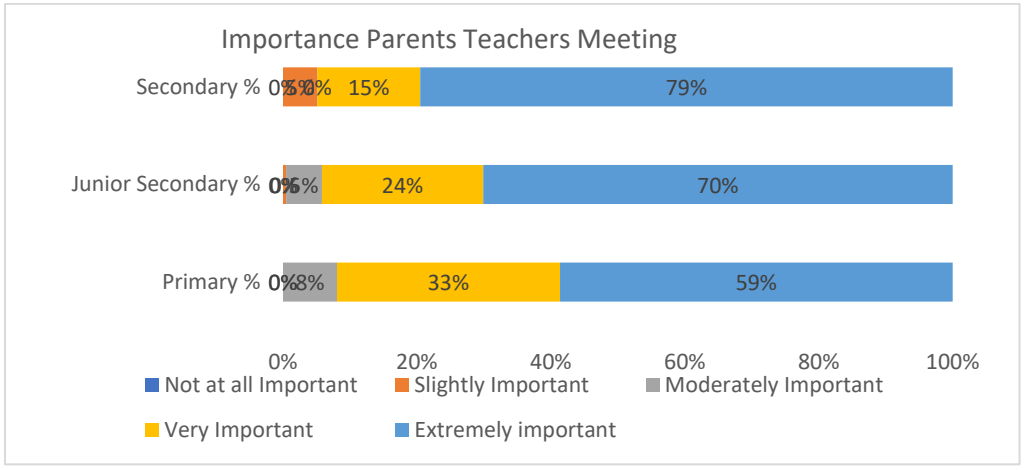

Figure 10(c). Importance: Parents Teachers Meeting

Figure 10(d). Availability Child Club

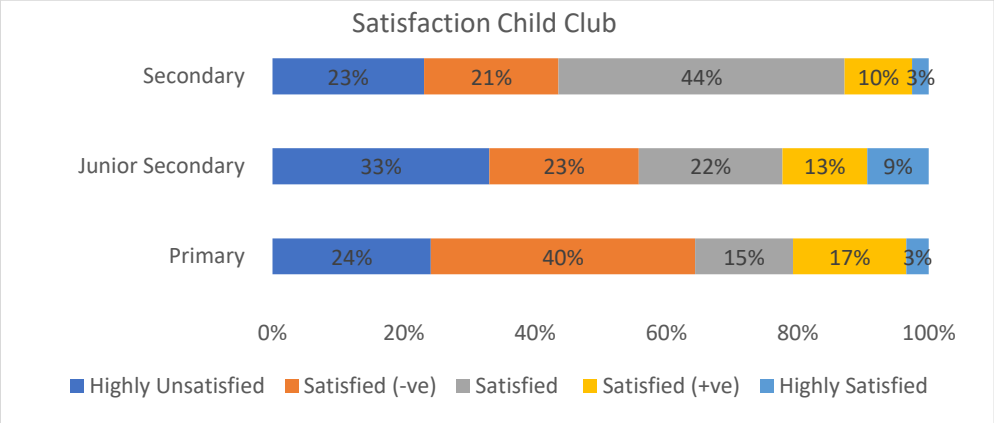

Figure 10(e). Satisfaction: Child Club

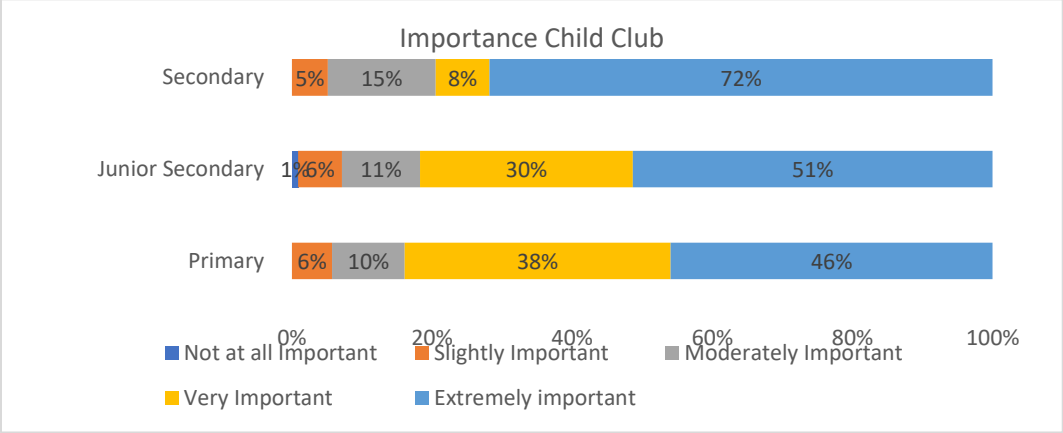

Figure 10(f). Importance: Child Club

11. Resource - Autonomy

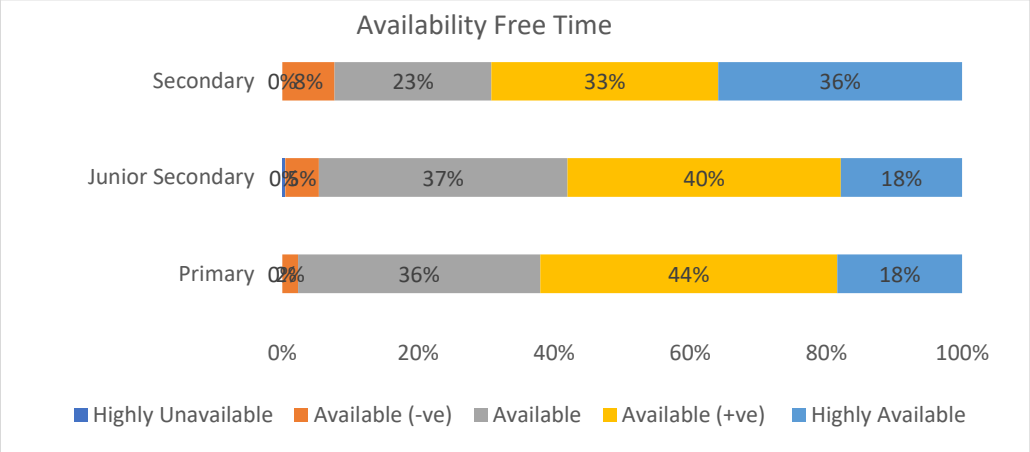

Figure 11(a). Availability Free Time

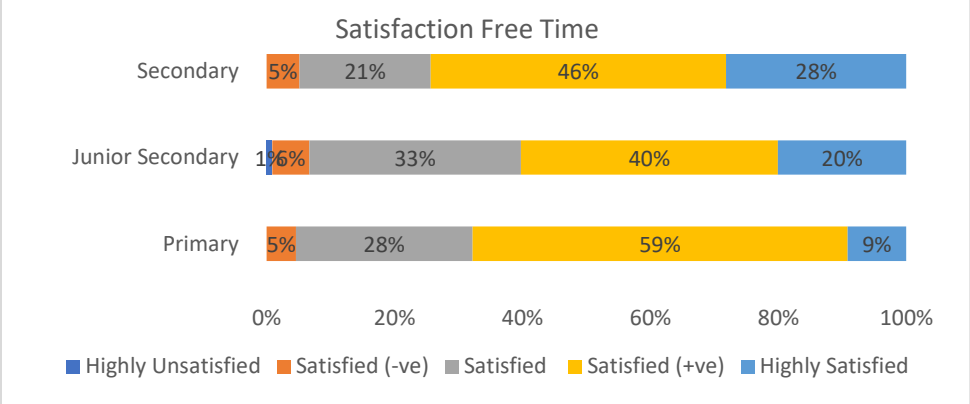

Figure 11(b). Satisfaction Free Time

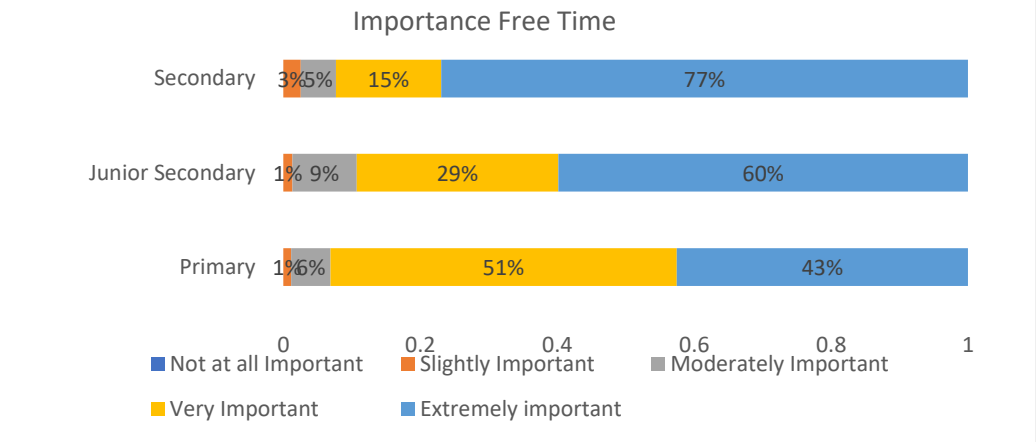

Figure 11(c). Importance: Free Time

12. **Resource - Participation**

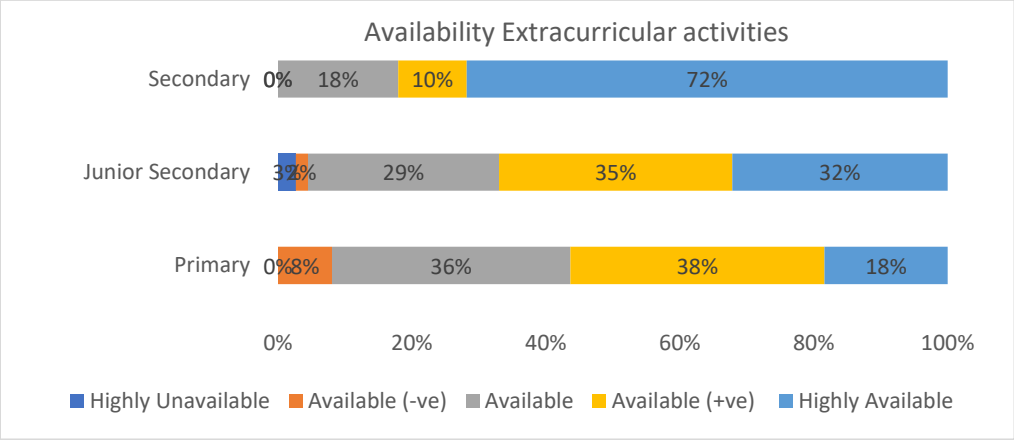

Figure 12(a). Availability: Extracurricular activities

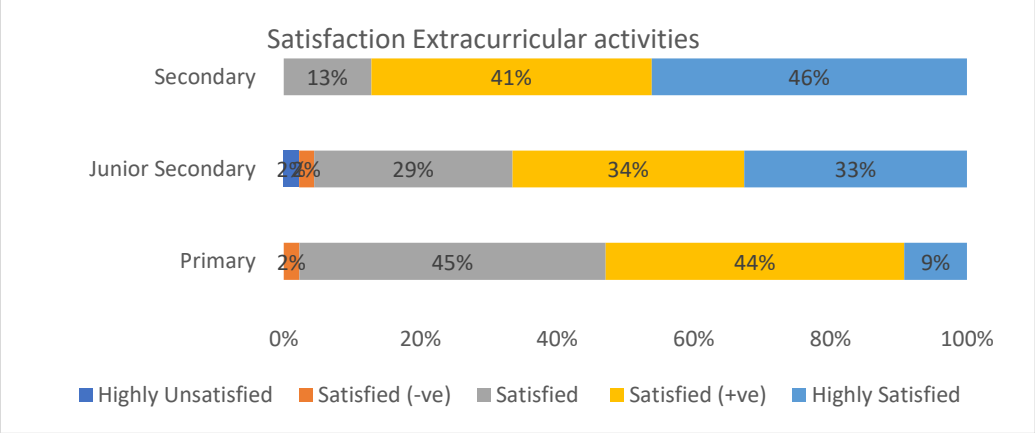

Figure 12(b). Satisfaction: Extracurricular activities

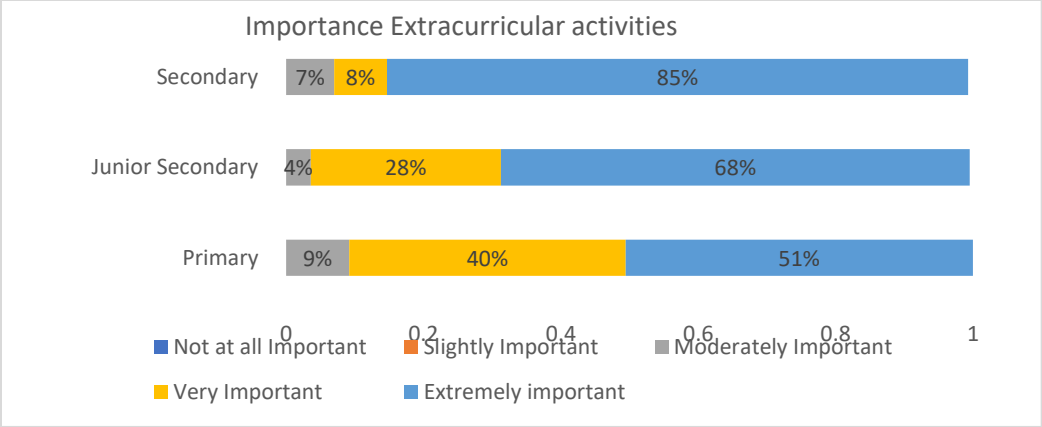

Figure 12(c). Importance of Extracurricular activities