



Reproductive Health in the K – 12 Curriculum as Perceived by Senior High School Students

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ABSTRACT

The objective of this study was to investigate the perception of senior high school students of sexual reproductive health (SRH) education. Researchers conducted a study at Laguna University Senior High School. Using purposive sampling and quantitative research, the study explored student views, LGU-provided material accessibility, and SRH education challenges. Notably, the result showed that only 15.2% of respondents reported access to information brochures and pamphlets, while a mere 4.8% received support for sexually transmitted infection prevention and treatment. Moreover, 59.2% of students lacked access to any government-supplied RH materials or programs. In terms of perceived challenges, family planning was identified as the most difficult RH topic by 35.11% of students. Other challenging topics included personal health and development (21.37%), prevention and control of diseases (16.03%), communicable and noncommunicable diseases (15.27%), and health trend issues and concerns (12.21%). Cultural sensitivities emerged as a significant barrier to effective RH learning, rated as "high" with a mean of 2.58. Gender biases and teacher influence were also identified as moderately high barriers with means of 2.65 and 2.66, respectively. These findings emphasize the need for comprehensive guidelines to improve RH education for senior high school students.

Keywords: *Sexual Reproductive Health (SRH), Students' Perception, SRH materials, SRH challenges and Sensitivity.*

1. INTRODUCTION

Around the world, one troubling fact stands out – one in every five young people ages 12 to 19 does not have access to safe contraception (World Health Organization, 2023). This leads to various reproductive health problems, when young people don't have access to safe contraception, it causes problems for them and society. Getting pregnant unexpectedly can make it hard for young people to go to school or find good jobs, creating a cycle of limited opportunities. In 2012, the Philippines took a bold step with the Responsible Parenthood and Reproductive Health Act (Republic Act 10354) to give young Filipinos the knowledge and skills for responsible reproductive health, aiming to address the alarming gap in access to safe contraception. However, making this vision a reality comes with challenges. Laguna University, like many places in the Philippines, faces difficulties in teaching Reproductive Health Education (RHE). This study looks into the experiences of senior high school students at Laguna University, trying to understand the details of their RHE journey. By listening to them, the researchers want to find out what challenges they face in understanding, where the curriculum needs improvement, and if they can easily access learning materials. Importantly, the researchers want to uncover hidden barriers that stop open discussions about reproductive health, taking into account the social and cultural factors affecting students' comfort and engagement. More than just figuring out the problems, this study wants to spark positive change. By highlighting the challenges in RHE at Laguna University, the researchers aim to give recommendations based on evidence for a better approach.

Keywords: *Sexual Reproductive Health (SRH), Students' Perception, SRH materials, SRH challenges and Sensitivity.*

Research Problem

This study aimed to investigate the perceptions of senior high school students on Reproductive Health in the K-12 Curriculum. The following questions were extensively addressed in this study:

1. Which are the difficult topics under Reproductive Health :

- 1.1 Personal Health Growth and Development;
- 1.2. Family Planning;
- 1.3. Prevention and Control of Diseases;
- 1.4. Health Trend Issues and Concerns; and

1.5. Non-Communicable and Communicable Diseases ?

2. What challenges are faced by the students among Reproductive Health Topics in terms of :
 - 2.1. Cultural Sensitivity; 2.2.
 - 2.2. Gender Sensitivity; and
 - 2.3. Influence of Teachers?
3. Which LGU-provided Reproductive Health services do senior high school students perceive as most easily attainable or regularly used?
4. What strategies may be proposed to address the challenges faced by students during the discussion of reproductive health topics?
5. Is there a significant relationship between the challenges faced by the students in Reproductive Health discussion and the perception of the students in the Reproductive Health resources provided by the LGU?

Research Framework

In the theory of perception by Richard Gregory also known as the "constructivist" or "active inference" theory, proposes that perception is not a passive process of receiving sensory information but an active process of constructing a model of the world based on limited sensory data and prior knowledge. According to Gregory, our brains constantly make predictions about what we should see or hear based on our past experiences and expectations, and then use the sensory information we receive to update these predictions (Martin, 2022). In addition, the students' pre-existing knowledge and expectations can help tailor instructions that perception is not a direct reflection of reality but rather an interpretation of sensory data shaped by our cognitive process.

Furthermore, the Health Belief Model suggests that a person's belief in a personal threat of an illness or disease together with a person's belief in the effectiveness of the recommended health behavior or action will predict the likelihood the person will adopt the behavior (The Health Belief Model, n.d.). By applying the HBM, researchers can assess how students perceive their susceptibility to reproductive health issues (like teenage pregnancy or sexually transmitted infections), their understanding of the severity of these issues, the perceived benefits of practicing safe and responsible behaviors, and the barriers they face in accessing reproductive health information or services. Understanding these perceptions through the lens of the HBM could guide the development of more effective educational programs, interventions, or curricula modified to address specific beliefs and barriers, ultimately aiming to promote responsible and informed reproductive health practices among senior high school students.

Methodology:

Research Design

To gain a deeper understanding on the perceptions of senior high school students regarding reproductive health education in the K-12 curriculum, the researchers employed a quantitative research approach. Quantitative research design is a systematic plan that outlines how to conduct research involving numerical data to test theories or hypotheses (Li et al., 2023).

Research Locale

The study was conducted at Laguna University in Santa Cruz, Laguna. The selection of this specific school is based on its strategic location, accessibility, and alignment with our research objectives. The researchers anticipated a diverse student population, a supportive school administration, and the convenience of recruiting a representative sample. This chosen environment is deemed ideal for gaining in-depth insights into perceptions of senior high school students on Reproductive Health in the K-12 Curriculum.

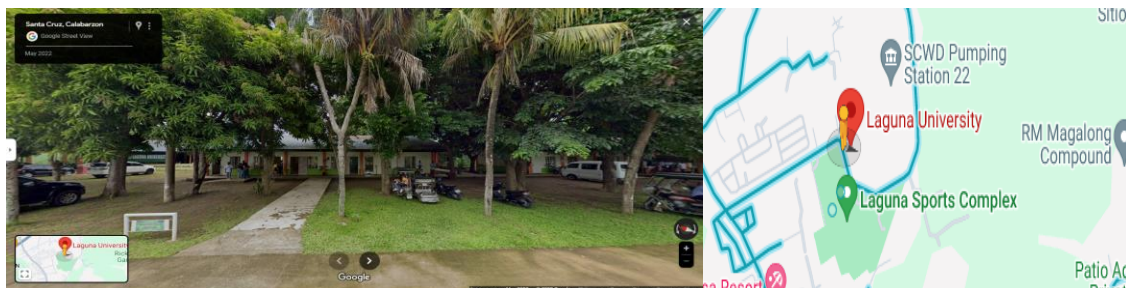


Figure 1. Location of Laguna University (via Google Maps)

Population of the Study

The population of the study consisted of 131 Grade 12 STEM students from Laguna University's Senior High School during the academic year 2023–2024, selected through purposive sampling.

Research Instrument

A survey questionnaire composed of two checklists and a Likert scale was used to gather primary data from the targeted student population. The first checklist identified difficult subjects for students to understand, while the second assessed access to sexual reproductive health materials provided by the LGU. The Likert scale sought to know the perceived challenges in sexual reproductive health discussions. The drafts of the questionnaire were drawn based on the readings, checking related published and unpublished theses and literature until the researchers found the most appropriate content suited to their research topic. The questionnaire that researchers created was adjusted and validated by the officials under the Office of Student Affairs and Services (OSAS) of Laguna University, which are the prefect of student activities, the guidance counselor, and the OSAS director, in certain ways to be ideal for collecting and analyzing accurate data.

Data Gathering Procedure

The researchers sent a letter of request to the target school to formally obtain consent to gather data from the target participants. After the approval of the letter of request and the validation of the questionnaire, the researchers utilized Google Forms to distribute the questionnaire conveniently. The researchers used total population sampling in choosing the respondents since they needed data from all the grade 12 STEM students at Laguna University. This sampling is also useful for decreasing the chance of overlooking important insights from excluded members. The researchers then personally delivered the questionnaire in the form of a Google Form to the involved institution. And gathered the data with the aid of mobile phones. The researchers also seized the chance to go over the specifics with the respondents in order to ensure that they completed the questionnaires accurately. On the same day, the researchers retrieved the data from the questionnaire.

Statistical Treatment of Data

The researchers used different statistical methods to analyze the data. The statistical methods that the researchers used are the following:

1. Percentage of Whole

The formula of percentage was utilized to determine the topic under reproductive health that is hardest for the students to understand as well as to identify the service that the most students have access to or receive.

$$P = \frac{f}{n} \times 100$$

where:

P - Percentage

f - Frequency

n – Size of Population

2. Mean

mean revealed which questions got the highest and lowest average scores, indicating which topics students find more challenging, confusing, or sensitive to discuss.

$$\bar{x} = \frac{\sum x}{n}$$

where:

x = mean

x = Science laboratory, tools, and equipment's quality, availability, and functionality

n = total number of x-variable

3. Average Deviation

of mean and Standard

The average mean and standard deviation were used to determine how signified the overall student sentiment towards that specific area and to measure how spread out the answers of senior high school students.

$$\text{Average Mean} = \frac{\text{SUM OF PRE - CALCULATED MEAN}}{\text{TOTAL NUMBER OF PRE - CALCULATED MEAN}}$$

$$\sigma = \frac{\sum (x_i - \bar{X})^2}{N}$$

Where:

σ = population standard deviation

\sum = means "sum of"

N= size of the population

x_i = each value from the population

\bar{X} = population mean

4. Pearson r

To find out how strong the relationship between the challenges faced by the students and their perceptions about the sexual reproductive health provided by the LGU, the researchers employed Pearson r.

$$r = \frac{n(\sum xy) - (\sum x)(\sum y)}{\sqrt{[n\sum x^2 - (\sum x)^2][n\sum y^2 - (\sum y)^2]}}$$

Where:

N = Number of pairs scores

$\sum xy$ = Sum of the product of paired scores

$\sum x$ = Sum of x scores

$\sum y$ = Sum of y scores

$\sum x^2$ = Sum of squared x scores

$\sum y^2$ = Sum of squared y scores

Additionally, in order to determine whether the hypothesis "there is no significant relationship between the challenges faced by the students and their perception of the sexual reproductive resources provided by the LGU, will be accepted or rejected, the researchers computed the critical value and p-value. The p-value determined whether the null hypothesis is accepted or rejected, and the r-value were compared to the critical value to determine that outcome.

Results

This study presents, analyzes, and interprets the data gathered that determined the significant relationship between challenges faced by the students in Reproductive Health discussion and the perception of the students in the Reproductive Health resources provided by the LGU.

Table 1

Reproductive health topic that are hard to understand

Criteria	Mean	SD	Interpretation
Cultural Sensitivity	2.58	1.33	High
Gender Sensitivity	2.65	1.40	Moderately High
Influence of Teachers	2.66	1.36	Moderately High
Weighted Mean	2.63	1.36	Moderately High

Note. $n = 131$

According to Table 1, 46 students, or 45.11%, stated that Family Planning was the hardest topic, and in that number, Family Planning emerged as the most difficult topic for the students to comprehend. This finding aligns with research by Nmadu et al. (2020), which highlights the impact of cultural taboos and stigma on open discussions and information seeking about family planning. These barriers can hinder young people's ability to understand and grow interested in the contents of the subject. On the study of Kassim and Ndumbaro (2022), participants expressed conflicting perspectives regarding how schooling influences their family planning literacy. On the one hand, many of the women who participated in the focus groups attributed their lack of family planning literacy to low levels of education among themselves and their male partners. The ladies claimed that their low levels of education made it difficult for them to understand family planning advice from various sources. As a result, many of them neglected to use available family planning options. Some women reported difficulties following the calendar strategy to prevent unwanted pregnancies.

While Personal Growth and Development got a vote of 28 students (21.37%). It is supported by the open observations given by the teachers regarding reproductive health, where students often find it uncomfortable to accept their bodily changes during puberty, which makes the students harder to understand personal growth and development, and the other factor is that the current teaching of RHE at schools is inadequate (Joseph et al., 2021).

On the other hand, 21 students (16.23%) voted for Prevention and Control of Diseases. It is a good sign because, according to the study of Goldfarb (2021), discussing reproductive health is crucial in preventing and controlling diseases. Without education on topics like contraception, sexually transmitted infections, and safe reproductive practices, individuals may be more susceptible to health risks.

Moreover, the Communicable and Non-communicable diseases had 20 students (15.27%) who confirmed that they struggled in this topic. It can be highlighted by the study of Akseer et al. (2020), which stated that students give importance to discussing both non-communicable diseases (NCDs) and communicable diseases because the students are at risk in poor diet, smoking, and alcohol use in their adolescence stage.

Finally, Health Trend Issues and Concerns is the most easily understood subject, with only 16 students (12.21%) stating that they struggled in this topic. This suggests a heightened interest in current health topics and personal safety. As highlighted by Hatami et al. (2021), high school students' knowledge and practices regarding COVID-19 were generally positive and satisfactory, reflecting their concern; it made it easier for the students to understand the topic if the issues are currently occurring.

Table 2

Instructors Level of Challenges in Reproductive Health Topic in Terms of Cultural Sensitivity, Gender Sensitivity, and Influence of Teachers

Reproductive Health Topic	Frequency	Percentage
Personal Health Growth and Development	28	21.37%
Family Planning	46	35.11%
Prevention and Control of Diseases	21	16.03%
Health Trend Issues and Concerns	16	12.21%
Non-Communicable and Communicable Diseases	20	15.27%
TOTAL	131	100%

Legend: 4.20-5.00= Very Low; 3.40-4.19=Low; 2.60-3.39=Moderately High; 1.80-2.59=High; 1.00-1.79= Very High

The mean score for cultural sensitivity was 2.58, labeled as "High," showing that cultural challenges strongly affect students when discussing reproductive health topics. Gender sensitivity had a mean of 2.65, rated as "Moderately High," indicating that gender roles and expectations somewhat influence students' comfort and participation in these discussions. Lastly, the influence of teachers had the mean of 2.66, also a "Moderately High," suggesting that teachers' approach and role moderately impact students' understanding and willingness to engage with the subject.

The findings show that cultural factors significantly impact students' ability to discuss reproductive health topics openly. In a study by Wudineh et al.(2021), it was found that cultural norms and taboos, especially regarding sexuality and reproductive health, greatly affect how young people engage in these discussions. Many students avoid asking questions or engaging in conversation because of cultural beliefs that stigmatize discussions about reproductive organs and contraception. This is supported by Ninsiima et al. (2018), who identified that cultural barriers often lead to misinformation or discomfort in reproductive health classes.

In addition to cultural factors, gender roles moderately influence students' participation in reproductive health discussions. Azarraga (2021) explains, traditional gender expectations, particularly in the Philippines, often prevent women and LGBTQ+ individuals from fully engaging in these discussions. Furthermore, Picardal (2022) highlighted that teachers' comfort levels and personal views on reproductive health can result in inconsistent teaching, which may affect how well students understand and feel confident in these discussions. This shows that the way teachers approach these topics directly influences student engagement.

Table 3*Services that Received or Access from the LGU*

Services that Received or Access from the LGU	Frequency	Percentage (%)
Information brochures and pamphlets on various reproductive health topics.	19	15.2%
Reproductive Health seminars or workshops.	15	12%
Availability of Contraceptives and other family planning methods.	17	13.6%
Support for Sexually Transmitted Infection prevention and treatment.	6	4.8%
Reproductive Health Education programs for adolescents.	21	16.8%
Access to youth-friendly health centers or clinics.	18	14.4%
None	74	59.2%
TOTAL	131	100%

Note. n = 131

Based on the result, many students are not receiving any services from LGUs about RHE, among the services and materials provided by the LGU, reproductive health education programs for adolescents were the most accessible resource, utilized by 21 respondents (16.8%). However, information brochures and pamphlets (19 respondents, 15.2%) and youth-friendly centers or clinics (18 respondents, 14.4%) were also relatively accessible. The low percentage of respondents accessing youth-friendly centers or clinics aligns with the findings of Odo et al. (2018), suggesting that the availability of such facilities may be limited in the study area. This, in turn, could negatively impact adolescents' access to sexual and reproductive health services (SRHS).

Contraceptives and other family planning methods were utilized by 17 respondents (13.6%). This is not unexpected, given the provisions of Republic Act No. 10354, which generally requires minors to obtain written consent from their parents or guardians before accessing modern family planning methods. However, exceptions exist, such as when the minor is already a parent or has experienced a miscarriage.

Reproductive health seminars and workshops were also accessed by a very low number of respondents (15, 12%). However, support for sexually transmitted infection prevention and treatment remained the least accessible resource, utilized by only 6 students or 4.8% of respondents. This may be one of the reasons why there are high rates of STIs among adolescents and young adults aged 15–24 years, as reported in the 2022 Transmitted Infections Surveillance.

However, despite the presence of these resources, a significant portion of respondents (74 respondents, 59.2%) still lacked access to any government-supplied RH materials or programs. The study Kim et al. (2023) highlighted the challenges in implementing Reproductive Health Education (RHE) in the Philippines. The DoH's short-term funding and reliance on external donors have created an unstable environment for RHE implementation. Additionally, the fragmentation of policy implementation among various government agencies has hindered its effectiveness. Despite RHE being implemented, Filipino students still have limited access to RH materials. The conflict between the Department of Education and the Department of Health further underscores the importance of stakeholder endorsement for successful RHE implementation. These findings suggest that policy making alone is insufficient and that collaboration among various stakeholders is crucial for effective RHE implementation.

Table 4*Proposed strategies to address the challenges faced by students during the discussion of reproductive health topics*

Strategies	Objectives
Develop a repository of digital and physical resources that provide clear, age-sensitive content, ensuring that it covers a range of reproductive health topics to promote more open discussions in class.	Enhance the accessibility of reproductive health education by creating comprehensive, age-appropriate materials.
Incorporate diverse, hands-on activities such as role-playing, group discussions, and multimedia presentations to make learning about reproductive health more engaging and to reduce discomfort or hesitation among students.	Foster student engagement in reproductive health education through interactive learning.

The table presents targeted strategies based on the survey data, each aligned with an objective to address specific challenges in reproductive health education. The strategies aim to improve the quality of educational materials, increase student engagement, enhance teacher facilitation skills, create

Conduct regular workshops and training programs that focus on communication skills, conflict resolution, and effective facilitation techniques tailored to sensitive topics like reproductive health.	Improve teachers' effectiveness in facilitating reproductive health discussions by offering specialized training.
Foster a non-judgmental and supportive classroom culture by implementing group norms that promote respect and active listening, ensuring that students feel safe to voice their thoughts and concerns about reproductive health.	Create a classroom atmosphere that encourages open participation in reproductive health discussions.
Design initiatives to engage parents through workshops and informational sessions, encouraging them to discuss reproductive health topics at home in a manner that complements school-based education.	Strengthen parental involvement in reproductive health education to extend the conversation beyond the classroom.

supportive learning environments, and encourage parental involvement. These interventions are designed to foster a more comprehensive, inclusive, and effective approach to reproductive health discussions, reflecting the respondents' feedback and areas of moderate agreement.

Table 5

Relationship between the challenges faced by the students and the perception of the students in the Reproductive Health resources provided by the LGU

Challenges faced by students	Perception of the students in the Reproductive Health resources provided by the LGU				
	Computed r-value	Critical Value	p-value	t-value	Analysis
Cultural Sensitivity	0.6342		0.0000	9.3163	Significant
Gender Sensitivity	0.7359	0.2167	0.0000	12.3443	Significant
Influence of Teachers	0.6204		0.0000	8.9844	Significant

$p < 0.05$,

significant

The table reveals that the computed r-computed value of 0.6342, 0.7359 and 0.6204 is greater than the r-critical value of ± 0.2167 with a p-value of 0.00 at 0.05 level of significance. Based on the study of Jeong et al. (2023), most health teachers reported and found out that, deeply rooted cultural values, especially the patriarchal beliefs in Korean society, create significant challenges in talking about gender and sexuality in schools. Traditional views make it hard for sex education to be effective. Quick fixes do not work because these cultural norms are deeply ingrained. To solve this, we need bigger changes in society, not just in classrooms. Tackling the patriarchal beliefs is crucial. This could involve promoting equality, encouraging open conversations about sex, and getting rid of unfair practices. Only with these broader efforts can we make real progress in having open discussions about gender and sexuality in schools and Korean society overall.

According to De Jesus et al. (2019) case study, the devolution of health services in the Philippines revealed disparities in the spending and, consequently, quality of health services among LGUs. Particularly, LGUs with weak absorptive capacities are at risk of not being able to meet the necessary standards for delivering health services. Building on these insights, Saquing and Nordan (2021) further emphasize how these disparities impact educational outreach efforts. While LGUs strive to increase awareness of health resources, inconsistent outreach efforts can leave students in remote areas feeling underserved and disconnected from essential information. Students respond better to information that is age-appropriate, culturally sensitive, and gender-inclusive, as it feels more relevant to them. Schools also affect students' views of these resources; a lack of trained staff or resources can make them seem insufficient. Reaching students through familiar channels, like social media, can improve engagement and make students more receptive to the information.

A study in Ethiopia revealed that high school students aren't using sexual and reproductive health services as much as the global goal (SDG 3.7) suggests. Older students with more education, knowledge about these services, and sexual experience are more likely to use them. To increase usage, the health and education ministries should focus on these factors (Delie et al., 2024).

Insights into the negotiating processes that women engage in would help to understand how cultural norms, gender dynamics, relationship inequities, and women's position influence contraceptive decisions. Equally unknown are the mechanisms of contraceptive decision-making among women and men who are unmarried but sexually active, and those in polygamous relationships. Though some research exists on how decisions are made about contraceptive use among couples, there is less understanding about the nuances of couple communication (or a lack thereof) regarding family size, fertility preferences, and contraceptive decision-making, particularly from studies that obtain accounts (Namasivayam et al., 2022).

Gender ideology refers to beliefs that see disparities between males and females in terms of social justice and nature, specifically rights and obligations, freedoms and constraints, boundaries and possibilities, strength and subjugation. Men are frequently valued more highly in society than women. According to research, education can help to alleviate some forms of gender inequality. Gender equality-based reproductive education can improve motivation and self-control, shift attitudes and ideas about traditional gender roles, lessen the influence of sexuality, and boost young empowerment hence that gender-equal health education improved adolescent girls' knowledge and attitudes towards reproductive health (Artanty Nisman et al., 2020).

Local stakeholders have a different idea of RH and present their own perception of RH. Teachers lack RH pedagogy and training, and they prefer to limit and modify their teaching in order to avoid arousing student interest in sex. Finally, a dispute between the Departments of Education and Health was discovered that policymaking alone is insufficient for effective RHE implementation. The support of numerous local stakeholders is required to achieve proper RHE (Kim et al., 2023).

Conclusion

The researchers concluded that there is a significant relationship between the challenges faced by the students in Reproductive Health discussion and the perception of the students in the Reproductive Health resources provided by the LGU; hence, the hypothesis is rejected.

Recommendations

Based on the findings and conclusion of this research study, the following recommendations are hereby suggested:

1. Given that the study focuses on students' perceptions, which involve personal experiences and subjective viewpoints, the researchers recommend to employ a qualitative research approach. This method will allow for a more in-depth exploration of students' thoughts and attitudes toward reproductive health education, providing richer, more nuanced insights.
2. Since reproductive health topics are commonly introduced and covered in the Grade 9 curriculum, the researchers advise to target this group of students in future studies. Doing so will yield more relevant and accurate data, as these students are actively engaging with the subject matter during this phase of their education.
3. To better capture the complexity of students' perceptions and experiences, the use of open-ended questions in future surveys is recommended by the researchers. These questions will allow respondents to express their thoughts in more detail, offering deeper insights into their understanding of and attitudes toward the reproductive health topics discussed in their curriculum.

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