To Assess the Knowledge, Attitude, And Beliefs Towards the Lesbian, Gay, Bisexual, and Transgender (LGBT) Community Among Students of Various Professional Backgrounds in Vijayapura

By

Dr. KAVIMALAR T MBBS

Dissertation submitted to

B.L.D.E. DEEMED TO BE UNIVERSITY VIJAYAPURA, KARNATAKA



In partial fulfillment of the requirements for the degree of

DOCTOR OF MEDICINE

In

COMMUNITY MEDICINE

Under the guidance of

Dr. M R Gudadinni

M.D. Community Medicine

Professor

Department Of Community Medicine

Shri B. M. Patil Medical College Hospital and Research Centre, Vijayapura 2024

DOI 10.5281/zenodo.15494031 https://zenodo.org/records/15494032

B.L.D.E. (DEEMED TO BE UNIVERSITY) SHRI B. M. PATIL MEDICAL COLLEGE, HOSPITAL & RESEARCH CENTRE, VIJAYAPURA

DECLARATION BY THE CANDIDATE

I, Dr. KAVIMALAR T, hereby declare that this dissertation entitled "To Assess the Knowledge, Attitude, And Beliefs Towards the Lesbian, Gay, Bisexual, and Transgender (LGBT) Community Among Students of Various

Professional Backgrounds in Vijayapura" is a bonafide and genuine research work carried out by me under the guidance of Dr. M R GUDADINNI, M.D.,

Professor, Department of Community Medicine, B.L.D.E.(DU), Shri. B. M.

Patil Medical CollegeHospital and Research Centre, Vijayapura.

Date: 26-06-2024

Place: Vijayapura

Dr. KAVÍMALAR T

Post graduate Student,

Department of Community medicine,

B. L. D. E. (DU)

Shri B. M. Patil Medical College, Hospital & Research Centre,

Vijayapura.

B.L.D.E. (DEEMED TO BE UNIVERSITY)

SHRI B. M. PATIL MEDICAL COLLEGE, HOSPITAL & RESEARCH CENTRE, VIJAYAPURA

CERTIFICATE BY THE GUIDE

This is to certify that the dissertation entitled — "To Assess the Knowledge, Attitude, And Beliefs Towards the Lesbian, Gay, Bisexual, and Transgender (LGBT) Community Among Students of Various Professional Backgrounds in Vijayapura" is a bonafide research work done by Dr. KAVIMALAR T, under my overall supervision and guidance, in partial fulfillment of the requirements for the degree of M.D. in Community Medicine.

Date:26 -06-2024

Place: Vijayapura

Dr. M R GUDADINNI M.D.

MRC

Professor

Department of Community Medicine,

B. L. D. E (DU)

Shri B. M. Patil Medical College,

Hospital & Research Centre,

Vijayapura.

B.L.D.E. (DEEMED TO BE UNIVERSITY)

SHRI B. M. PATIL MEDICAL COLLEGE, HOSPITAL &

RESEARCH CENTRE, VIJAYAPURA

ENDORSEMENT BY THE HEAD OF DEPARTMENT

This is to certify that the dissertation entitled— "To Assess the Knowledge,

Attitude, And Beliefs Towards the Lesbian, Gay, Bisexual, and Transgender

(LGBT) Community Among Students of Various Professional Backgrounds

in Vijayapura" is a bonafide research work done by Dr. KAVIMALAR T

under the guidance of Dr. M R GUDADINNI, M.D. Professor, Department of

Community Medicine at B.L.D.E (DU), Shri. B. M. Patil Medical College

Hospital and Research Centre, Vijayapura.

Date: 26-06-2024

Place: Vijayapura

Dr. M. C. YADAVANNAVAR M.D.

Department of Community Medicine,

B. L. D. E (D.U)

Professor & Head

Shri B. M. Patil Medical College,

Hospital & Research Centre,

My

Vijayapura

IV

B.L.D.E. (DEEMED TO BE UNIVERSITY)

SHRI B. M. PATIL MEDICAL COLLEGE, HOSPITAL &

RESEARCH CENTRE, VIJAYAPURA

ENDORSEMENT BY THE PRINCIPAL

This is to certify that the dissertation entitled- "To Assess the

Knowledge, Attitude, And Beliefs Towards the Lesbian, Gay, Bisexual,

and Transgender (LGBT) Community Among Students of Various

Professional Backgrounds in Vijayapura" is a bonafide research work

done by Dr. KAVIMALAR T, under the guidance of Dr. M R

GUDADINNI, M.D. Professor, Department of Community Medicine at

B.L.D.E (DU), Shri. B. M. Patil Medical CollegeHospital and Research

Centre, Vijayapura.

Date: 26-06-2024

Place: Vijayapura

(Moles)

DR. ARAVIND V PATIL M.S.

Principal,

B. L. D. E (D.U)

Shri B. M. Patil Medical College,

Hospital & Research Centre,

Vijayapura

٧

B.L.D.E. (DEEMED TO BE UNIVERSITY) SHRI B. M. PATIL MEDICAL COLLEGE, HOSPITAL & RESEARCH CENTRE, VIJAYAPURA

COPYRIGHT

DECLARATION BY THE CANDIDATE

I hereby declare that the BLDE (DEEMED TO BE UNIVERSITY) VIJAYAPURA, KARNATAKA, shall have the rights to preserve, use and disseminate this dissertation/thesis in print or electronic format for academic/research purposes.

Date: 26-06-2024

Place: Vijayapura

Dr. KAVI MALAR T

Your

Post Graduate Student,
Department of Community
Medicine, B.L.D.E. (D.U),
Shri B. M. Patil Medical College,
Hospital & Research Centre,
Vijayapura

© BLDE UNIVERSITY VIJAYAPURA, KARNATAKA

ACKNOWLEDGEMENT

I express my heartfelt gratitude to the Lord Almighty for granting me the strength and wisdom necessary to complete this dissertation, and for accompanying me throughout this remarkable journey.

I am delighted to extend my sincere thanks to **Dr. M R Gudadinni M.D.,**Professor in the Department of Community Medicine at Shri. B. M. Patil Medical
College, Vijayapura, for his outstanding guidance, unwavering support,
continuous encouragement, and approachable demeanor have played a crucial
role in the completion of this study.

I also wish to extend my heartfelt appreciation to **Dr. M C Yadavannavar M.D.,**Professor & Head of the Department of Community Medicine at Shri. B. M. Patil
Medical College, Vijayapura, for his consistent support throughout the preparation of this dissertation.

My gratitude extends to **Dr. Aravind V Patil M.S.**, Principal of Shri. B. M. Patil Medical College, Vijayapura, for permitting me to conduct this study.

I am honored and privileged to extend my sincere respect, regards, and Gratitude to **Dr. Shailaja S Patil M.D.**, and **Dr. Rekha Udgiri M.D.**, Professors, for their guidance and timely counsel.

I wish to express my heartfelt gratitude to **Dr. Praveen Ganganahalli M.D., Dr. Santosh D. Patil M.D., Dr. Chandrika Doddihal M.D., Dr. Tanuja P Pattankar M.D.,** Associate Professors, and **Dr. Sandeep Yankanchi M.D., Dr. Rahmi Hullali, and Dr. Pooja Todalabagi,** Assistant Professors, for their invaluable suggestions and support.

I am deeply thankful to Mrs. Vijaya Sorganvi and Mr. Murugesh Math, statisticians, for their valuable assistance in data analysis.

My appreciation also goes to my postgraduate colleagues, **Dr. A Nagendra, Dr. Bhoomika**, **Dr. Shanoon Sharaf Ali**, **Dr. Arun P Sasi**, **Dr. Fyroose E**, as well as to my seniors, **Dr. Arathy V**, **Dr. Rupayan Kapri**, **Dr. Vijay Singh**, and **Dr. K Priyanga**, and juniors, **Dr. Subhajit Giri**, **Dr. Shimona Nadar**, **Dr. Shamin E**, **Dr. Navarathna Kumari V M**, **Dr. Rachel S Daniel**, **Dr. Jafeya Rekanaah** for their unwavering support and well wishes.

DocuSign Envelope ID: EADD546A-F9B9-4452-AD94-8E84462B7216

I extend my gratitude to all the non-teaching and clerical staff members of the

Department of Community Medicine, Shri. B.M. Patil Medical College,

Vijayapura, for their cooperation. I also acknowledge the non-teaching staff of

RHTC, Ukkali, the Principal, and the staff of all Colleges in Vijayapura for their

immense cooperation and support during the data collection process.

I am deeply thankful to my parents, Mr. Thirulogachandran and Mrs.

Shanthi, for their constant encouragement, inspiration, and sacrifices, without

which I would not have reached where I am today. I am also grateful to my sister,

Dr. Keerthi, and my brother, Mr.Srinivas, and my friends, Dr. Agilan, Dr.

Vivek, and **Mr.Chanakian P**, for their unwavering love and support.

Finally, I express my heartfelt appreciation to all the Study participants who

voluntarily participated and generously contributed their time to provide the

necessary information. Without their participation, this study would not have

IX

been possible.

Date: 26-06-2024

Dr. KAVIMALAR T

Place: Vijayapura

LIST OF ABBREVIATIONS

| LGBTQIA+ | QIA+ Lesbian, Gay, Bisexual, Transgender, Queer, | |
|----------|--|--|
| | Intersexual, Asexual | |
| IPSOS | Institut Public de Sondage d'Opinion Secteur | |
| GLAAD's | Gay and Lesbian Alliance Against Defamation | |
| BCE | Before common era | |
| UNESCO | United Nations Educational, Scientific and Cultural | |
| | Organization. | |
| IPC | Indian Penal Code | |
| CJI | Chief Justice of India | |
| PIL | Public Interest Litigation | |
| NCT | National Capital Territory | |
| SEKHQ | Sex Education, Knowledge about homosexuality questionnaire | |
| AHQ | Attitudes toward Homosexuality Questionnaire | |
| CSUN | California State University, Northridge questionnaire | |
| SES | Socio economic status | |
| SPSS | Statistical Package for the Social Sciences. | |

ABSTRACT

Introduction:

In the 21st century, social attitudes toward gender, sexuality, and identity are evolving. However, despite constitutional provisions for equality, discrimination against the LGBTQIA+ community persists in various forms across Indian society. The discourse surrounding LGBT+ rights and acceptance is dynamic, reflecting ongoing debates and discussions about equality, human rights, and social justice.

The current study focuses on understanding heterosexual perceptions of homosexuality and cultural attitudes toward the LGBTQIA+ community, aiming to address the limited research on this sensitive topic in India, particularly in Northern Karnataka. By understanding these perspectives, the study seeks to contribute to fostering a more supportive and accepting environment for LGBTQIA+ individuals.

Objectives

- To study the knowledge, attitude, and beliefs of students toward the LGBT community.
- Compare and Correlate the Knowledge, attitudes, and beliefs of students with respect to social-demographic variables and their professional background.

Materials & Methodology:

This is a cross-sectional study conducted in the colleges of Vijayapura among students aged above 18 years. All participants who met the inclusion criteria were included in the study. In-person interviews were conducted using semi-structured questionnaires to collect socio-demographic data and information on cultural practices. Additionally, Riddles and CSUN scales were utilized to assess the knowledge, attitudes, and beliefs (KAB) of the respondents regarding the LGBTI community.

Statistical Analysis:

The data was entered into an Excel spreadsheet and then analyzed using SPSS version 26. Descriptive statistics such as frequencies, percentages, and diagrams were employed to analyze the data. The chi-square test was utilized to examine the statistical associations between the knowledge, attitudes, and beliefs (KAB) and other independent variables.

Results:

Out of 984 study participants, a notable proportion showed poor knowledge (36.4%), exhibited poor attitudes (3.5%), and held poor beliefs (35.9%). Conversely, positive outcomes were observed across various domains, with 24.6% exhibiting good knowledge, 59.7% showing good attitudes, and 36.0% holding good beliefs. The study revealed that good knowledge often aligns with positive beliefs in 42.7% of cases. Negative attitudes correlate with poor beliefs in 4.8% of instances, while positive attitudes frequently coincide with good beliefs in 88.1% of Respondents.

Conclusion:

Our study underscores the necessity of incorporating LGBT-related topics into

college curricula and providing training for educators and staff. These steps are

crucial for fostering inclusivity and support for LGBT individuals within

educational institutions. Additionally, launching targeted educational campaigns

is essential for increasing understanding and acceptance of sexual orientation

and gender identity diversity.

Keywords: Sexual orientation, LGBT, Discrimination, Knowledge.

XIII

CONTENTS

| Sl. | Contents | Page |
|-----|--|------|
| No. | | No. |
| 1 | INTRODUCTION | 17 |
| 2 | OBJECTIVES OF THE STUDY | 24 |
| 3 | REVIEW OF LITERATURE | 25 |
| 4 | MATERIALS AND METHODS | 47 |
| 5 | RESULTS | 52 |
| 6 | DISCUSSION | 83 |
| 7 | SUMMARY | 90 |
| 8 | CONCLUSION | 94 |
| 9 | RECOMMENDATIONS | 95 |
| 10 | STRENGTHS AND LIMITATIONS OF THE STUDY | 97 |
| 11 | REFERENCES | 98 |
| 12 | ANNEXURE | |
| | I - PROFORMA | 105 |
| | II- ETHICAL CLEARANCE | 119 |
| | III- CONSENT FORM | 120 |
| | IV- PLAGIARISM REPORT | 125 |
| | V- GANTT CHART | 126 |
| | VI- PHOTOGRAPH | 127 |
| | | |
| | | |

LIST OF TABLES

| Sl. No. | Tables | Page no. |
|---------|--|-------------|
| 1 | Modified BG Prasad Classification 2021 – Score and classes | 50 |
| 2 | Distribution of Knowledge, Attitudes, and Beliefs (KAB) Scores Among Study Participants: | 64 |
| 3 | Association between Gender and Knowledge, Attitude, & Beliefs | 65 |
| 4 | Association between Religion and Knowledge, & Beliefs | 66 |
| 5 | Association between Religion and Attitude. | 67 |
| 6 | Association between the type of family and Knowledge, Attitude, & Beliefs | 68 |
| 7 | Association between Residence and knowledge, Attitude, & Beliefs | 69 |
| 8 | Association between Fathers' Literacy and Knowledge, Attitude, & Beliefs | 70 |
| 9 | Association between Fathers' occupation and Knowledge, Attitude, & Beliefs | 71 |
| 10 | Association between Mothers literacy and Knowledge, Attitude, & Beliefs | 72 |
| 11 | Association between Mothers occupation and Knowledge, Attitude, & Beliefs | 73 |
| 12 | Association between Professional background and Knowledge, Attitude, & Beliefs | 74 |
| 13 | Association between Socioeconomic Status and Knowledge, Attitude, and Beliefs | 75 |
| 14 | Association between Cultural Practices and Knowledge, Attitude, & Beliefs | 77 |
| 15 | Association between raised in a religious household with Knowledge, Attitude, & Beliefs | 78 |
| 16 | Association between Knowledge and Attitude | 79 |
| 17 | Association between Knowledge and Beliefs | 80 |
| 18 | Association between Attitude and Beliefs | 81 |
| 19 | Correlation of Knowledge, Attitudes, and Beliefs in Crosstabulation Analysis | 82 |

LIST OF FIGURES

| Sl. No. | Figures | Page no. |
|---------|--|----------|
| 1 | LGBTQ+ Identification Across Generations Globally: Ipsos Survey. | 20 |
| 2 | Age and Gender wise distribution of Participants | 52 |
| 3 | Religion | 52 |
| 4 | Type of family | 53 |
| 5 | Residence | 53 |
| 6 | Sociodemographic profile | 54 |
| 7 | Professional Background | 55 |
| 8 | Socio economic status | 56 |
| 9 | Cultural Practices of the study participants | 57 |
| 10 | I was raised in a very religious household | 58 |
| 11 | Knowledge regarding LGBT Community among study participants: | 59 |
| 12 | Attitude towards LGBT community among study participants: | 60 |
| 13 | Beliefs among study participants regarding the LGBT community: | 61 |
| 14 | Level of comfort in Interacting with LGBT Individuals | 62 |
| 15 | Family Support and Acceptance of LGBTI Individuals: | 63 |
| 16 | Awareness of Same-Sex Marriage Legality in India | 63 |

INTRODUCTION

"Race, gender, religion, sexuality, we are all people and that's it. We're all people.

We're all equal."

Gender is a fundamental component of social relationships that are founded on perceived distinctions between the sexes, male and female. It is the outcome of socially built notions about the behaviors, activities, and roles, that each sex plays. The two genders' stereotyping becomes so pervasive in society that there is no place for the third gender, which becomes the target of exclusion.¹

The Republic of India's Constitution mentioned, Our Constitution is the pride of the country's democracy affirms the right to equality, liberty, and fraternity to its subject by proclaiming, "We the People of India" in its context.² The Republic of India provides human rights to its citizens as part of our fundamental rights, but on the other side, there are still people who do not yet accept the LGBTQIA+ community.

The State shall not deny to any individual "equality before the law or the equal protection of the law," according to Article 14 of the Indian Constitution. Our Constitution's Preamble states that the right to equality it proclaimed, is not a formal right and that the State is required to make it effective. To equip the underprivileged group with the resources they need to catch up to the mainstream population, affirmative action is therefore required.

The term 'LGBTQIA+' is used to denote the following sets of people

Lesbian - women who are emotionally and sexually attracted to other women. 3

Gay - men who are emotionally and sexually attracted to other men.4

Bisexual

<u>Bisexual women</u> - Women who are emotionally and sexually attracted to both men and women

<u>Bisexual men</u> - Men who are emotionally and sexually attracted to both men and women.⁵

Transgender

-<u>Female-to-male transgender</u> (feeling born in the wrong body and should have been born male and actively changing his appearance to match his gender identity)

-<u>Male-to-female transgender</u> (feeling born in the wrong body and should have been born female and actively changing her appearance to match her gender identity).⁶

Intersexual people- a person born with both male and female genital characteristics.⁷

Asexual: A lack of sexual attraction towards others or a lack of interest in sexual activities.⁸

Queer: Umbrella term for whom sexual and gender identities that are neither heterosexual nor cisgender.

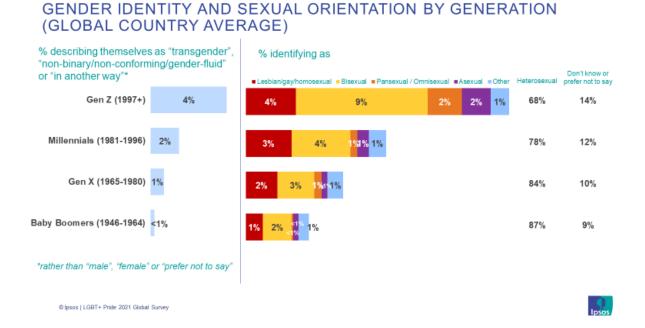
The inclusion of the '+' in 'LGBTQIA+' indicates that the listed identities are not comprehensive, encompassing additional categories such as pansexual, asexual, intersex, and more.^{9,10}

The third gender population in the nation has now been officially counted at 4.9 lakhs in India. Activists for transgender rights believe the figures to be six to seven times higher. Nearly 55,000 of the total number of transgender people identified by the census are in the 0–6 age group. Nearly 69% of the population overall lives in villages, and over 66% of those who are classified as third gender did as well.¹¹

Recently, LGBT+ Pride 2021 Global Survey (IPSOS survey) which included a 27-countries, revealed that approximately 80% identified themselves as heterosexual, while 3% identified as gay, lesbian, or homosexual, 4% as bisexual, 1% as pansexual or omnisexual, 1% as asexual, 1% as "other," and 11% either choose not to disclose or are unsure of their orientation.

The research reveals that on a global scale, men are inclined to identify more as gay or homosexual (4%) compared to women identifying as lesbian or homosexual (1%). This trend is also observed among different age groups, with Gen Z (4%) and Millennials (3%) having higher percentages than Gen X (2%) and Boomers (1%).

Figure 1: LGBTQ+ Identification Across Generations Globally: Ipsos Survey. 12



Furthermore, globally, members of Gen Z exhibit a significantly higher likelihood of identifying as bisexual (9%) in contrast to Millennials (4%), Gen Xers (3%), and Boomers (2%).

On a worldwide scale, the percentage of individuals reporting attraction to the same sex shows minimal variation across gender and education levels. However, significant differences are observed based on age and geographic location. More than 15 % in India

• Gen Z: Born 1997 and later

• Millennials: Born 1981-1996

• Gen X: Born 1965-1980

■ Baby Boomers: Born 1946-1964

In India, there were about 3% of homosexual, 9% Bisexual, 1% pansexual, 2% Asexual, 2% Others and heterosexual of 59%, and 24% did not reveal their gender identity.¹²

Even though we may claim ourselves to be a modern and advanced age, it is terrible to observe the injustices experienced by individuals within the LGBTQIA+ community. in many settings. Among those issues, they mostly encounter is

- LGBTQIA+ people face prejudice not just in schools and colleges but also when looking for jobs since employers are reluctant to hire individuals with diverse sexual orientations, because it is viewed negatively by other employees and does not fit with society. LGBTQIA+ employees reported encountering at least one instance of harassment or mistreatment at their workplace due to their gender identity, and a greater number had faced discrimination during hiring, promotion, or job retention. People become mired in a cycle of poverty as a result, and they are unable to find better-paying jobs. ^{13,14,15}
- Honor killings are done if a person is found to be LGBTQ. Several people have lately died as a result of such "honor killings". 16
- LGBTQ people's lack of acceptance is an issue in metropolitan homes as well as rural ones. Families routinely disobey these commitments and throw LGBTQ children away from their homes because their primary concern lies in preserving their social status rather than fulfilling their responsibilities to their children.¹⁷
- LGBTQ individuals typically experience exclusion from society, which contributes to their depression After telling their parents about their sexual

orientation and receiving rejection, many LGBTQ adolescents end up on the streets. These LGBTQ kids struggle with mental health conditions like sadness, anxiety, suicidal thoughts, and drug addiction. 18,19,20

LGBTQ youngsters face severe bullying and harassment in schools, universities, and other contexts. And also, these kids exhibit disparate academic performance. Nearly 70% of LGBTQ kids who experience face-to-face bullying in India experience anxiety, despair, and academic loss. Moreover, based on a survey encompassing over 17,000 children and young adults aged 13 to 24, 54% of LGBTQI individuals reported encountering bullying in educational institutions due to their sexual orientation, gender identity, gender expression, or variations in sex traits. The survey also revealed that 67% of students had been the recipient of negative remarks at least once (UNESCO,2021). This act of bullying and prejudice inflicted lifelong wounds in people's lives that generally take years to repair. 21,22,23,24

The Census Data also revealed that, In India only 46% of the third gender people are literate, on the other hand heterosexual literacy rate was 74%, The reason for this huge difference in literacy rate is, they are made to discontinue their education because of the harassment and the discrimination.²⁵

Research is essential in raising awareness and eradicating taboos and prejudice against the community.

The study's goal is to learn what heterosexual individuals perceive about homosexuality and how do they engage with them and also, to realize how culture approaches homosexuality. And to find the influencing factor of heterosexuality's perceptions and opinions towards the LGBT community in the 21st Century. By understanding this, the study can make interventions to make society to contribute a good friendly environment for LGBT people, it also aims to educate the public on homosexuality.

OBJECTIVES OF THE STUDY

- ♣ To study the knowledge, attitude, and beliefs of students toward the LGBT community.
- ♣ Compare and Correlate the Knowledge, attitudes, and beliefs of students with respect to social-demographic variables and their professional background.

REVIEW OF LITERATURE

History of the Term

Before the sexual revolution of the 1960s, non-heterosexuality lacked a common, Courteous label. The third gender was first coined in the 1860s, but it was not widely recognized. The first phrase that was used often to describe homosexuals had a negative view. In the 1950s, homophiles took their place, The term "gay" originated in the 13th century, originally signifying "happy" or "joyous." However, during the 1940s and '50s, "gay" emerged as a code word used within the community to describe sexuality and express same-sex desire. By the '70s, the word was embraced by the community as a mark of pride. ²⁶

The phrase "sexual minority" was first used in the late 1960s as a result of Lars Ullerstam's book The Erotic Minorities: A Swedish View, which advocated for tolerance and empathy for unusual sexual orientations.²⁷

Each community has tried to find its own identity, sometimes rejecting other subgroups while deciding whether and how to align with other gender and sexuality-based communities. These issues persist today

In the United States, campaigners started using the initials LGBT in 1988. The movement did not treat gay, lesbian, bisexual, and transgender persons equally until the

1990s²⁸. Some organizations, such as the GLBT Historical Society, changed their names in 1999 as a result of this.²⁹

The LGBTQ+ community has faced significant disagreement surrounding the universal acceptance of diverse member groups. The word LGBT has been a good symbol of inclusivity. According to GLAAD's Media Reference Guide from 2016, LGBTQ is the recommended initialism since it is more inclusive of younger community members who identify as queer.

LGBTQ Concept

Lesbian, gay, bisexual, and transgender is referred to by the acronym LGBT. It may refer to anyone who is non-heterosexual or non-cisgender, not only to people who are lesbian, gay, bisexual, or transgender. For people who identify as queer or are unsure of their sexual or gender identity, adds the letter Q to signify this inclusivity LGBTQ The initialism LGBT, along with some of its popular variations, has been in use since the 1990s and serves as an umbrella term for sexual orientation and gender identity.³⁰

Sexual Orientation

By the second part of the nineteenth century, the term homosexual was in common usage. The word "homosexuality" is now used to describe both same-sex sexual behaviour between men and women. In the late 19th and early 20th centuries, the homosexual identity evolved into a variety of gay, lesbian, queer, and other sexual orientation identities. Each of these identities is a step in the modernization process. The

correct way to refer to homo- and bisexual people is still up for dispute among lesbians, homosexual men, and bisexual people. The debates are lively, and no concept is accepted by everybody.

Lesbians, homosexuals, and bisexuals have in some cases actively taken terms that were once disparaging and revalued them, changing the negative phrases that were frequently used to condemn into positive self-definition words. These terms are now used positively by self-identified homosexual men and women. When used to describe a person who wishes to engage in sexual activity with another individual of the same sex, the term "homosexual" can also have a positive, neutral, or derogatory attitude. Sexual orientation is denoted by the terms homosexual, bisexual, heterosexual, lesbian, and gay.³¹

Gender identity

Gender shouldn't be viewed as just another word for women and/or men. Women and men are not the primary focus of contemporary gender studies; rather, it focuses on how femininities and masculinities are produced as opposing dichotomies, particularly in situations where the allocation of resources and power is crucial. As with everyone else, dominant gender conceptions have an impact on the lives of LGBT and intersex people. LGBT and intersex persons are usually ignored (or purposefully excluded from) in gender analysis and debates of gender legislation. Unfortunately, this portrayal of lesbian, gay, and bisexual people and relationships as invisible, misunderstood, and marginalized mirrors a heteronormative perspective. Additionally, it restricts the

development of gender analysis and settles for a limited perspective on the gender equality issue.³²

Statistics Of LGBT Community

By Census 2011, the third gender population in the nation has now been officially counted at 4.9 lakh. Activists for transgender rights believe the figures to be six to seven times higher. The distribution of the community around the states were given below ³³

| State | No of Third |
|----------------|----------------|
| | Genders(000's) |
| Uttar Pradesh | 137 |
| Andhra Pradesh | 44 |
| Maharashtra | 41 |
| Bihar | 41 |
| West Bengal | 30 |
| MP | 30 |
| Tamil Nadu | 22 |
| Odisha | 20 |
| Karnataka | 20 |
| Rajasthan | 17 |
| INDIA | 488 |

Ancient Indian sexuality

A book on statecraft from India from the second century BCE called the **Arthashastra** lists a wide range of sexual acts that, whether they were carried out with a man or a woman, were intended to be punished with the lowest possible fine. And doing a penance of "eating the five products of the cow and keeping a one-night fast" might seek forgiveness for gay relations between males, replacing the old idea that such behavior would result in caste loss.

This became increasingly prevalent throughout the Muslim era as even the sultans of the Delhi Sultanate engaged in romantic relationships with males in breach of Sharia law.^{34,35}

The Mughal Empire imposed a standard set of sanctions against homosexuality in the 17th century, which included death by stoning for Muslims and up to 100 lashes for free infidels as well as 50 lashes for slaves.³⁶

Hindu Scriptures:

Hinduism acknowledges a third gender; according to some views of the Mahabharata, some characters can change their gender. One such character is Shikhandi, who is often supposed to have been born as a girl but who later comes to identify as a man and marries a woman. The fertility goddess Bahuchara Mata is revered by hijras as their patroness.

Two significant Sanskrit books, the Nradasmti and the Sushruta Samhita, which are related to dharma and medicine, respectively, proclaim homosexuality to be immutable and prohibit gays from marrying a spouse of the opposite sex.

Further exploring the subject of homosexuality, the Sushruta Samhita and the Charaka Samhita claim that transgender individuals are born when the mother and father switch roles during an act and homosexuals are born when the father's sperm is sparse.^{37,38}

However, there are severe punishments for homosexuality in some circumstances, along with intimacy for heterosexual couples, in another Hindu literature called the Manusmriti.³⁹ An adult lady who had an affair with a young girl would be punished by having her head shaved, having two of her fingers amputated, and being forced to ride a donkey.

There are several images of gay behaviour in the Hindu Khajuraho temples, which are well-known for their sensual sculptures. For a long time, historians have maintained that pre-colonial Indian civilization neither criminalised nor demonised same-sex relationships. Although certain texts do include prohibitions against homosexuality, particularly among priests, Hinduism has long viewed homosexuality as natural and joyous.⁴⁰

Constitution of India and Gender Equality

Equality before the law and equal protection under the law are proclaimed in Article 14 of the Indian Constitution. The complete and equal enjoyment of all rights and freedoms is a component of equality. The fundamental characteristic of the Constitution is the right to equality, i.e. the laws apply uniformly to everyone, regardless of a person's status.⁴¹

Article 15 of the Indian Constitution prohibits the State from treating people differently on the basis of their religion, race, caste, sex, or place of birth, or any combination of these factors. Additionally, it provides that no citizen may be subject to limitations, disabilities, or liabilities because of their race, caste, gender, or place of birth.⁴²

In terms of public employment, Article 16 of the Indian Constitution ensures equality of opportunity, regardless of religion, colour, caste, sex, and other factors. Even if the term "sex" in this article does not explicitly exclude the third gender, it is nevertheless not included in its scope.⁴³

All citizens have the right to freedom of speech and expression, which includes the ability to express one's self-identified gender through attire, words, action, or behaviour, according to Article 19 (1) (a) of the Constitution. Subject to the limitations set out in Article 19(2) of the Constitution, no limits may be imposed on one's personal appearance or choice of clothing.⁴⁴

No one may be deprived of their life or personal liberty, unless in accordance with the legal process, according to Article 21 of the Indian Constitution. Therefore, everyone has the right to live, including LGBT persons.⁴⁵

Legal Rights

Section 377, enacted in 1862, was the first law in India during the British Raj to declare homosexuality, a crime.⁴⁶

Naz Foundation v. Govt. of NCT of Delhi(2009)

In the landmark case NAZ Foundation v. Government of N.C.T. Delhi, (hereafter referred to as the NAZ Foundation case), the Delhi High Court ruled in favor of LGBT people in 2009, declaring Section 377 of the Indian Penal Code, which criminalizes homosexuality in India, to be unconstitutional and in violation of Articles 14, 15, and 21. The section was then read down to permit consensual sexual activity between two homosexuals over the age of 18.⁴⁷

Suresh Kumar Koushal & Anr. v. NAZ Foundation & Ors. (2013)

When the LGBTQ+ community was about to breathe a sigh of relief after an eight-year battle, a number of individuals and faith-based organisations flatly rejected the idea of decriminalising homosexual relationships, as held by the Delhi High Court in Naz Foundation Govt. V. NCT Of Delhi, 2009, citing India's rich history steeped in ethics and tradition. To have Section 377's legality reviewed, they appealed to the Supreme Court of India.

On December 11, 2013, the division bench of Justices GS Singhvi and SJ Mukhopadhaya of the Honorable Supreme Court reversed the Delhi High Court's decision and reinstated the crime of homosexuality. The bench ruled that because LGBT+ people are a "minuscule minority," they are not entitled to constitutional protection. It further noted that Section 377 of the IPC is entirely lawful because it does not suffer from the vice of unconstitutionality Because LGBT people make up a tiny minority, the Supreme Court fiercely disregarded essential fundamental rights under Articles 14, 15, and 19 and 21. circumventing the Indian Constitution's core in the process.⁴⁸

National Legal Services Authority v. Union of India (2014)

In a landmark decision from 2014, National Legal Services Authority v. Union of India, the Supreme Court of India declared transgender people to be the "third gender," confirmed that the fundamental rights guaranteed by the Indian Constitution apply to them equally, and granted them the freedom to self-identify as male, female, or third gender.

This ruling has been hailed as a significant step in India's pursuit of gender equality. The court further ruled that transgender individuals will be given reservations to educational institutions and employment since they were regarded as members of economically and socially underprivileged strata.

And also claimed that, the Supreme Court's non-recognition of their identities was in violation of Article 14,15,16 and 21 of the Constitution of India. However, a major blow to this judgement came after the passing of Transgender Persons Bill, 2018. 49,50

Navtej Singh Johar v. Union of India, 2018

After the Delhi High Court's 2013 ruling was overturned by the Hon. Supreme Court in the Suresh Kumar Koushal Case, homosexuals were once again viewed as criminals for engaging in consenting sexual activity. Following this, India had seen an increase in the number of rallies for LGBT rights and filed a case with the Supreme Court questioning the constitutionality of Section 377 of the IPC.

The Supreme Court considered various petitions about the matter and decided to refer it to a larger bench. The government went on to say that it would not become involved in the case and would let the Supreme Court use its own judgment in making a decision. The petitioners claimed that section 377 infringed upon their constitutional rights to equality, freedom of speech, privacy, and protection against discrimination.

On September 6, 2018, the five-judge panel issued their decision, which was unanimously held to be:

1. As it violates the basic rights to intimacy, autonomy, and identity, Section 377(1) is unlawful as it relates to consenting adult sexual activity. As a result, Homosexual activity became legal.

- 2. The distinction between what is "natural" and what is "unnatural" under Section 377 is ill-defined and incomprehensible.
- 3. In addition, Section 377 restricts the right to freedom of speech guaranteed by Article 19 of the Indian Constitution, which includes the ability to declare one's sexual identity.
- 4. Disqualifying one's sexual orientation is equivalent to rejecting one's right to life since it is an essential component of one's self-identity.
- 5. Ignoring their basic rights just because they make up a tiny portion of the population is not a legal reason for doing so.
- 6. The Koushal judgement was harshly condemned by the court and was termed the judgment was clearly unlawful, illogical, and arbitrarily done.
- 7. It was also highlighted that discrimination against people based on their sexual orientation is against the law since, as evidenced by scientific and biological facts, sexual orientation is a natural phenomenon.
- 8. In addition, the Supreme Court ordered the government to raise awareness of LGBT rights and do away with prejudice towards LGBT individuals. The judges went into additional detail about the concerns of transgender people, privacy, right to self-determination, and mental health.^{51,52}

The Transgender Persons (Protection of Rights) Act, 2019

It was enacted with an objective to protect the rights of the Transgender Community by prohibiting discrimination against them with regards to employment, education. healthcare, access to government or private establishments.

Some lacunas with the Bill are:

- 1. The Transgender Persons (Protection of Rights) Act, 2019, does not adhere to this constitutional provision, which expressly forbids discrimination based on sex as stated in Article 15. Article 15 of the Indian Constitution is violated by the fundamental necessity of the identification certificate under Section 5 of the Act, 2019, for the legal recognition of the specific person as a transgender.⁵³
- 2. According to the Transgender Persons (Protection of Rights) Bill of 2019, the sentence for sexual assault against a transgender person is only two years in jail; however, if the same offence were committed against a woman, the IPC would impose a harsher sentence of up to seven years in prison.^{54,55}
- 3. The Transgender Persons (Protection of Rights) Act, 2019, failed to provide the preponderance of rights to community members besides transgender people. For instance, the Act of 2019 fails to protect a lesbian person who has been the victim of a serious sexual offence, and the person who has been victimized has no legal recourse.

The Section particularly defends trans men and trans women from being taken advantage of and disregards the rights of other members of the community.⁵⁶

Struggles Faced by the Community:

In a culture where heterosexuality is the only recognised orientation and homosexuality is stigmatised, the LGBT community faces a plethora of challenges. They deal with abuse on an almost regular basis as part of their everyday routine. Compared to those who identify as heterosexual, they are more likely to encounter intolerance, discrimination, harassment, and threats of violence because of their sexual orientation. The major cause is homophobia.

They encounter injustice and brutality everywhere they go. They endure suffering at the hands of others who make fun of them. The rights enjoyed by opposite-sex couples are frequently not extended to same-sex couples. All of the rights are denied to them.

They therefore experience prejudice and are excluded from social security programs like pensions and health care. LGBT individuals even conceal their gender and avoid disclosing it out of concern for their employment. The bullying and harassment that young LGBT people experience in schools, colleges, and universities frequently result in despair, school drop-outs, and homelessness.

They eventually grow to have poor self-confidence and self-esteem, and they distance themselves from friends and family. Unaware that their actions are isolating the LGBT children, the parents of typical children prevent them from playing with them out of pure concern and caring. Conflict in the family is frequently brought on by the parents' lack of communication with their LGBT child. Due to familial strife relating to their LGBT identity, many LGBT kids are placed in foster care, wind up in juvenile prison

centres, or end up on the streets. Due to the rejection, they experience from their parents and other primary carers, LGBT youth have a very high risk of developing physical and mental health issues as Adults.^{57,58}

Bar on Transgender Persons, Gays from Donating Blood

After hearing a Public Interest Litigation (PIL) challenging a Health Ministry directive prohibiting transgender and LGBT people from donating blood, the Hon. Supreme Court of India issued notifications to the Center and other parties on March 5, 2021. The constitutionality of Sections 12 and 51 of the Guidelines on Blood Donor Selection and Blood Donor Referral, 2017, published by the Ministry of Health and Family Welfare, was the subject of a petition filed by one T. Santa Singh, which was being heard by a three-judge panel led by Chief Justice of India (CJI) SA Bobde. Since members of the LGBT community and female sex workers were seen to be at a high risk of catching HIV/AIDS, the regulation completely prohibited them from giving blood.

As a result, the standards arbitrarily prohibit members of the LGBT Community from giving blood, rather than testing the blood sample of donors.

The aforementioned, demonstrate that the central and state governments' positions on the rights of the LGBT community are in flux, and it is still unclear whether they support the entire group or not.⁵⁹

Same sex marriage in India- A tussle

In October 2017, a group of citizens proposed a draft of a new Uniform Civil Code that would legalise same-sex marriage to the Law Commission of India. 60

It defines marriage as "the legal union as prescribed under this Act of a man with a woman, a man with another man, a woman with another woman a transgender with another transgender or a transgender with a man or a woman. All married couples in partnership entitled to adopt a child. Sexual orientation of the married couple or the partners not to be a bar to their right to adoption. Non-heterosexual couples will be equally entitled to adopt a child".⁶¹

In 2021 central Government had opposed same sex marriage in Delhi High Court stating that a marriage in India can be recognised only if it's between a biological man and biological woman capable of producing children. In its argument then Central govt had also said that considerations of "societal morality" are relevant in considering the validity of a law and it is for the Legislature to enforce such societal morality and public acceptance based upon Indian ethos.⁶²

On 12 June 2020, the Uttarakhand High Court acknowledged that while same-sex marriage may not be legal, cohabitation and "live-in relationships" are protected by the law.⁶³A ruling by the Supreme Court of India in 2022 widened the definition of families to live-in couples inclusive of LGBT, thereby providing LGBT couples rights and benefits equal to that of married couples.⁶⁴

On 25 November 2022, the Supreme Court of India agreed to hear the case that could legalize same-sex marriage as the nine petitions pending before the Kerala and Delhi High Courts are transferred to the Supreme Court for a uniform ruling.⁶⁵

On 19 December 2022, Sushil Modi, a prominent BJP lawmaker, told Parliament that "India is the country of 1.4 billion people and two judges cannot just sit in a room and decide on such a socially significant subject. Instead, there should be a debate in Parliament as well as the society at large" he added.⁶⁶

A lot of cases have been filed by couples who want their marriages recognised under Special Marriage Act, 1954; Hindu Marriage Act, 1955; Foreign Marriage Act (1969).⁶⁷

A study by Dr. Gurappa Puttanna Gururaj in 2019 conducted a cross sectional study to assess the attitude and belief of students towards LGBT community and to Compare, Correlate the attitude and beliefs of interns with respect to social demographic variables in Tamaka district of Kolar, 80 students were included in the study, who were doing house surgeons who are posted at RL Jalappa hospital. Data was collected using Riddles scale. Fisher and Chi-Square Exact tests have been used to determine the significance of research parameters on a categorical scale between two or more groups, and non-parametric settings for qualitative data analysis. In the study, About 7.5% of the interns had a negative attitude of "repulsion" towards LGBT community stating that Homosexuality is

seen as a crime against nature. 88.8% of interns had a negative attitude of "pity" towards LGBT who mainly represent heterosexuality [chauvinism]. 88.8% of interns had a "tolerant" attitude stating Homosexuality is viewed as a phase of adolescent development that many people go through and most people grow out of. Thus, lesbians/gays are less mature than straights and should be treated with the protectiveness and indulgence.⁶⁸

- A college based cross sectional study in Kolkata by A Kar *et al.*, in 2017 aimed to study the attitude of the Indian medical student towards the Homosexuality. Second and third year students were included in the study. Data was collected using self-administered Questionnaire among 290 students. About 55.6% had disagreed the statement of Homosexulaity being an illness, 81.8% agreed that homosexuality problems can be reduced if there was liberal society, On the other hand 15.9 % believed that Homosexuality is an illness, 24.8% agreed that homosexuals were neurotic and 8.2% believed they are a danger to children. The study indicates the need to work on the curriculum to change these negative attitudes.⁶⁹
- ♣ Ramya Madarapu *et al.*, Conducted cross sectional study in college of Khamman, Telengana. 200 college students were enrolled for the study. Self administered questionnaire was used for assessment. The reason behind their homosexuality ,50% answered as a hormonal imbalance, while 10 % as hormonal imbalance, and 16% for genetics, for which they obtained statistical significance 38 % of students have acceptance attitude towards the LGBT

- people, whereas 32% had supportive attitude towards the same, and 4 % had negative attitude of repulsion towards the LGBT people.⁷⁰
- A cross sectional, interventional study by Lubna Mohammedrafik Nerli *et al.*, was done in 51 undergraduate medical students. Data was collected using semi structured proforma for sociodemographic profile and CSUN questionnaire for attitude towards LGBT. Chi square test was used for qualitative data. Data was collected on first day followed by a lecture and a roleplay regarding the LGBT people discrimination and health issues faced by them, again the data was collected to see the change in their attitudes. 17.32% agreed to a statement that LGBT are unnatural, 9.80% agreed that they are mentally sick or immature, 19.60 agreed they are sexual perverts, 27.45 % agreed that homosexuality, bisexuality, and transgenderism are the result of too much freedom in the country.⁷¹
- A study to assess the gap analysis of the perception of college teachers and students conducted by Shally Dabra and Vineeta Prasad, they collected data using a Five-point Likert scale from 35 teachers and 85 students. The responses were recorded followed by analyzing qualitatively only the mean scores of the individual items and overall. The overall mean score of the teachers' attitude combined is 3.0, on the otherhand students is 2.5. and the significance is tested using the paired sample T test. Teachers had a positive attitude towards the LGBT Community than students, as they showed the neutral attitude, as the students were confused about the LGBT people.⁷²

- A cross-sectional study done by Duhaylungsod ST, with the aim to unleash the attitudes towards LGBT among the sample group. Senior grade students of tenth, eleventh and twelveth grade also senior high school teachers, of which 34 from grade 12, 33 from grade 11,19 from grade10, and 14 from teachers were taken into study, and Likert scale were used to collect the data from the participants. Of which 1.74 % had repulsive attitude, 3.32% of the respondents agree that LGBT people are born that way and, therefore, should be pitied.

 2.51% of the respondents support the LGBT people.⁷³
- A similar study was conducted through online by Siva Ilango T *et al.*, the participants were enrolled via snowball technique by sharing in the whatsapp group, and 643 participants were taken in the study with the inclusion criteria of age more than 18 years. The baseline demographic details were taken and SEKHQ Questionnaire was used for the knowledge and AHQ Questionnaire for the attitudes. On SEKHQ, responses to individual questions revealed substantial gender-based disparities in 12 questions. Females scored highly on eight of these questions, while males scored highly on four. The professional category's mean rank score was high on three questions, while the student category's score was high on six questions. The statements "Homosexuals are sick" (mean = 3.75 1.2), "Many gay men use their sexual orientation to obtain special privileges" (mean = 3.59 1.0), and "Homosexuals should not be allowed to work with children" (mean = 3.37 1.4) expressed the most negative attitudes in the AHQ.

The statement "the homosexuals should have an equal opportunity of employment" had the most favorable response in AHQ (mean = $1.88 \ 0.98$).

- ♣ A study by Sanchita Srivastava, Purnima Singh was done among 24

 heterosexuals in Delhi. It was a cross sectional study. Data were collected

 through Semi structured Questionnaire. The reactions of most of the participants

 represented the poor acceptance of homosexuality among Indian people.⁷⁵
- ♣ A cross-sectional web-based anonymous survey was sent to medical students enrolled at the University of California, by Kabir Matharu et al., The questionnaire contained 20-item, on seven-point likert scale survey incorporating items from previously validated instruments. Study participants were 251, of which 13 were LGBT and they were excluded from the study.16.4 % responded "disgusting" than the thought of a man and a woman engaging in the same acts; a significant minority of students found homosexuality to be an unnatural form of sexual expression.⁷⁶
- ♣ A study conducted by Andrew Parker & Dinesh Bhugra on First, second and third year medical students at the United Medical and Dental Schools of Guy's & St Thomas' Hospitals, London, Two groups of students in their first and third years were selected in 1993, and two more groups in their first and second years were selected in 1996, creating a total of four subgroups. Data was collected by the questionnaire, which comprised 20 statements on male homosexuality and analysed by SPSS version 8. While 66% of students agreed that dealing with HIV patients could put them at risk of infection, 34% of students disagreed that

the age of consent for male homosexuals and male heterosexuals should be the same. The fact that 75% of respondents said discussing male homosexuality did not make them feel embarrassed suggests a positive outcome.⁷⁷

- ♣ Sam Winter et al., conducted a cross sectional study among 18-25 year aged students from the University of Hong Kong. Sample size was 203 after all the inclusion and exclusion criteria. They used GTS questionnaire to collect the data. A t-test was conducted to compare these means, yielding a t-value of 4.28, which was statistically significant beyond the p < .05 level. The mean total score for the Hong Kong group was 107.89 (SD 23.15), while the corresponding mean for the Montreal group was 100.4 (SD 37.7). Hence, in comparison to the Montreal sample, the Hong Kong sample seemed to exhibit higher levels of transphobia.⁷⁸
- ♣ A study by Leah Kelley et al., among Second-Year Medical Students At the University of California at San Francisco (UCSF). Sample size is 75. From 1 (poor) to 5 (outstanding), students gave the LGBT small groups a rating of 3.77; the total course grade for the full Life Cycle course was 3.93. Four (16%) of the sixteen survey questions asked of the students responses showed a noticeable difference before and after the learning intervention.⁷⁹
- ♣ A Cross sectional study done by Xinli Chi and Skyler T. Hawk among university students from Eastern and Southwestern China. They selected randomly nine university out of 100 university. They collected data from 2644 students using preexisting Chinese sexual moral values scale. On a scale of 1 to 5, the students' average response to "having same-sex sexual impulses" was a negative 2.23. The

average student response was "homosexuality violates social norms," receiving a neutral 3.07. On the other hand, students' attitudes about same-sex relationships and marriage were negative, with average scores of 2.03 and 2.51, respectively. Students generally received a 2.51 average across all questions. Average test scores for male students were 2.35, while average test scores for female students were 2.68. Chinese university students so generally expressed negative opinions.⁸⁰

MATERIALS AND METHODS

Study population: Students studying in Colleges of Vijayapura.

Sampling method: All the students willing to consent and who were eligible as per

inclusion criteria were selected for the study.

Interview method: Face-to-face interviews were conducted using a semi-structured,

CSUN questionnaire and the Riddles scale.

Study design: Cross-sectional study.

Study duration: 1 year (Jan 2023 to Dec 2023)

Inclusion Criteria:

1. All students who are willing to participate from the selected colleges of

Vijayapura.

2. Above 18 Years.

Exclusion Criteria:

1. Absentees on the day of data collection.

Sample size: Given an expected knowledge proportion of 71% to 81% regarding

homosexuality in the population⁶⁹, the study necessitates a sample size of 984 subjects

with a 95% confidence level and 3% absolute precision.

Formula used $n = Z^2 p*q$

 D^2

47

Where Z is Z statistic at α level of significance

 D^2 = Absolute error

P= Proportion rate

q = 100-p

Study tool: A semi structured, pre tested questionnaire was developed (Annexure I).

The questionnaire includes questions pertaining to following categories;

A) Socio demographic profile of the study participants which includes,

I. 1)Name, age, gender, education, religion, residence.

II. 2)Information pertaining to family: Father's literacy, father's occupation,

mother's literacy, mother's occupation, Socio economic status, Type of

family.

B) Riddles Scale:

This scale serves as a psychometric instrument employed to evaluate the degree of

homophobia exhibited by individuals. Widely utilized in tolerance education concerning

discrimination based on sexual orientation, the Riddle scale comprises eight terms and

is a one-dimensional interval scale, resembling the Likert scale but without an explicit

zero. Individuals' placement on the scale is determined by the attributes they

demonstrate and the beliefs they endorse, with each phrase corresponding to a specific

set of attributes and beliefs.⁶⁸

48

C) Survey on California State University, Northridge (CSUN) questionnaire⁵²: This questionnaire was used in a pilot study at California State University, Northridge (CSUN), to gather as much information as they can about the attitudes of their CSUN community members toward lesbian, gay, bisexual, transgender or transsexual, and intersexual matters. It is 13 domains questionnaire about beliefs, attitudes, and practices. The domains have further sub-questions. The domains include questions about the religiosity of the participant; religiosity of household; belief in traditional gender roles; level of comfortableness while interacting in person with people belonging to LGBTIQ community; knowledge about LGBT people; about the origin of sexuality and gender; attitudes toward issues pertaining on LGBT people; changes our institute should do for LGBT people; acceptability of public display of affection by LGBT people; their religion and its view on LGBT community; their families' and friends' view on LGBT; frequency of usage of derogatory words; and the number of LGBT people among their family, friends, and workplace. Their responses were accepted in the form of a Likert scale ranging from strongly agree, agree, disagree, strongly disagree to I don't know. For convenience, the responses were then categorized into only agree, disagree, and I don't know. These scales have been adapted to the local cultures.

D) To assess the socio-economic status of the participants, Modified BG Prasad Classification socio-economic status scale 2021 was used as shown on table 1

Table 1- Modified BG Prasad's classification

| Social class | Original classification of per capita income (Rs/month) | Revised classification for 2021 (Rs/month) |
|-------------------------|---|--|
| I (Upper class) | 100 and above | 7770 and above |
| II (Upper middle class) | 50-99 | 33808-7769 |
| III (Middle class) | 30-49 | 2253 – 3808 |
| IV (Lower middle class) | 15-29 | 1166-2253 |
| V (Lower class) | <15 | <1166 |

Data Collection

The Ethical Committee of Shri B M Patil Medical College approved the study protocol. Simple random sampling by lottery method was used to select colleges from a comprehensive list. Colleges were stratified further based on academic disciplines such as architecture, engineering, and medical studies. Using this method, one college from each category: Medical (2 colleges), Engineering (6 colleges), Architecture (2 colleges), and Arts and Science (11 colleges) was randomly selected for inclusion in the study. The proportional representation of students from different academic categories was determined within each selected college based on the total student population available. From each stratum, students were then chosen randomly to ensure a diverse and representative sample. Permission to conduct the study was obtained from the head of the Colleges. Individuals who met the inclusion criteria were enrolled as participants in the study. Absentees at the time of data collection were not included in the study. They were briefed on the study's objectives, and each participant received an information sheet in their native language. Prior to data

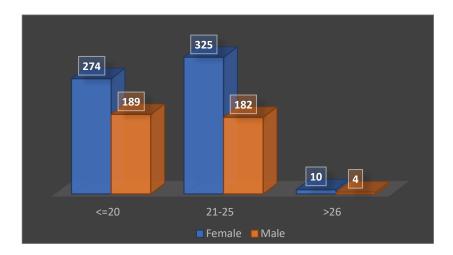
collection, informed consent was taken from the participants. The information was gathered by one-on-one interview method from the study participants considering the sensitivity of the topic. The interview was conducted in a separate area away from the class rooms where confidentiality was assured to the participants. A semi-structured questionnaire was used with details of their sociodemographic factors. The evaluation of knowledge, attitude, belief towards LGBTQIA+ people was done using Riddles scale, and CSUN questionnaire. For interpreting the results, we categorized each aspect based on the scores obtained: scores above 70% were considered good, scores between 50-70% were classified as moderate, and scores below 50% indicated poor knowledge, attitude, belief, or comfort levels. Each question was scored using a Likert scale, where correct answers received higher marks and incorrect answers received lower marks. This method effectively summarized the results, providing a clear categorization of knowledge, attitude, belief, and comfort levels.⁶⁸ After the data collection, Education session regarding the LGBTIQ+ Community was conducted to the students.

Statistical Analysis

The data obtained were entered in excel sheet. The results of the study were tabulated and appropriate statistical tests were applied using Statistical Package for Social Science (SPSS) Software version 26. Findings were displayed through counts, percentages, and diagrams. Associations were established using Crosstabulation. P value <0.05 was considered as statistically significant.

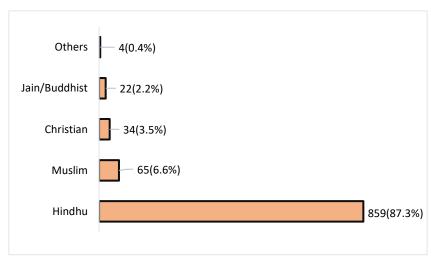
RESULTS

Figure 2: Age and gender distribution



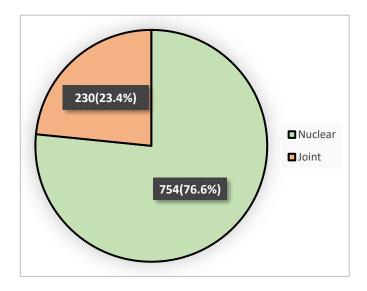
The distribution of respondents based on gender and age groups is presented in Figure 1. Among the 984 study participants, females comprised the majority, accounting for 61.8% (609) of the total. Notably, the largest proportion of participants belonged to the 21-25 age category

Figure 3: Religional Status



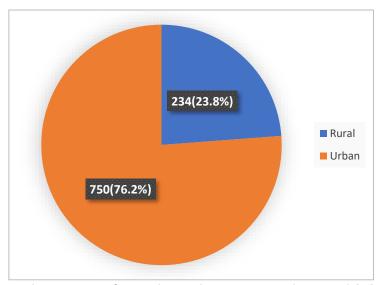
Hindus constitute the majority (87.30%) among the surveyed population, followed by Muslims (6.60%), Christians (3.50%), and Jain/Buddhist individuals (2.20%)

Figure 4: Type of Family



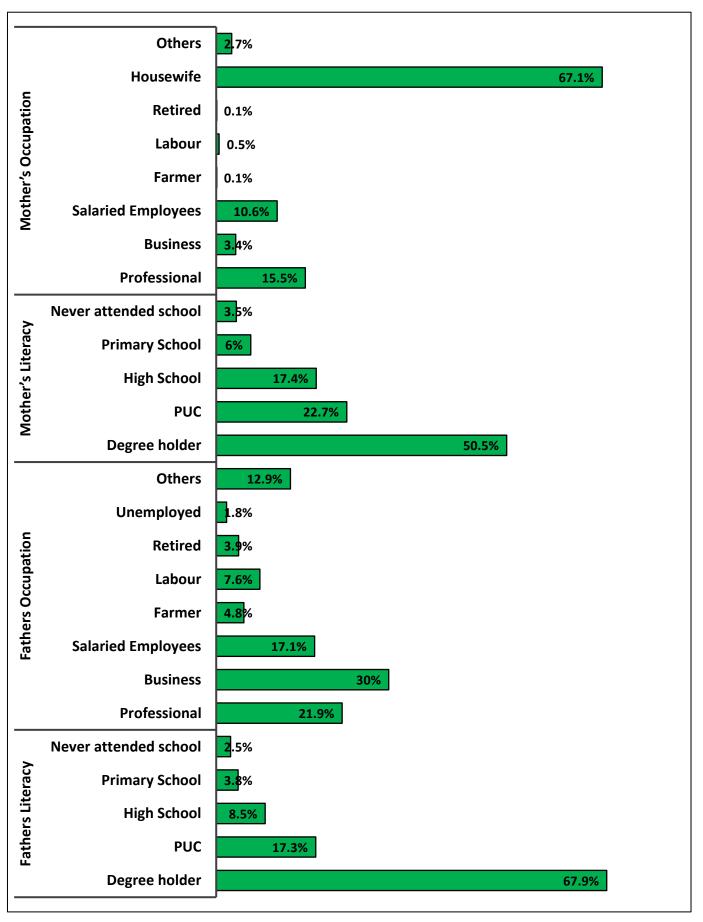
Majority of the participants were belonging to the nuclear family around 76.6%, and 23.4% were from joint family background.

Figure 5: Residence



76.2% of the respondents were from the Urban areas, whereas 23.8% from rural





The majority of fathers (67.9%) held a degree, with professionals (21.9%) and businessmen (30.0%) being the most prevalent occupations. Mothers, predominantly housewives (67.1%), had diverse educational backgrounds, with 50.5% being degree holders.

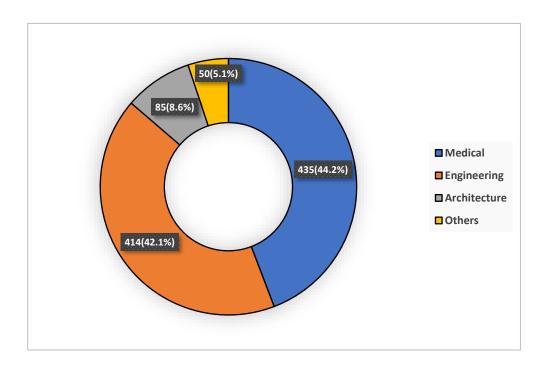
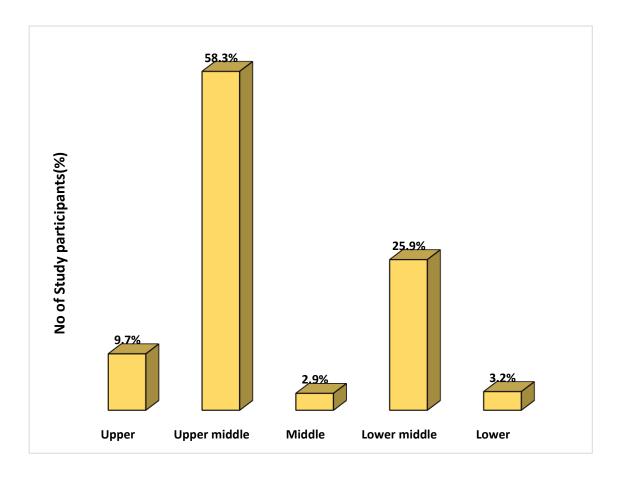


Figure 7: Professional Background

The majority of participants were from Medical (44.2%) or Engineering (42.1%) background.

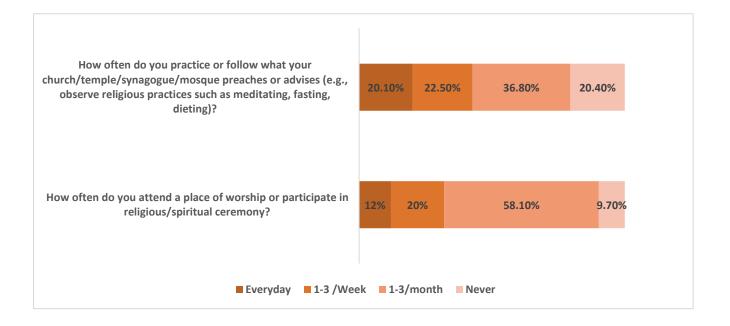
Figure 8: Socioeconomic Status
(Based on modified BG Prasad Classification)

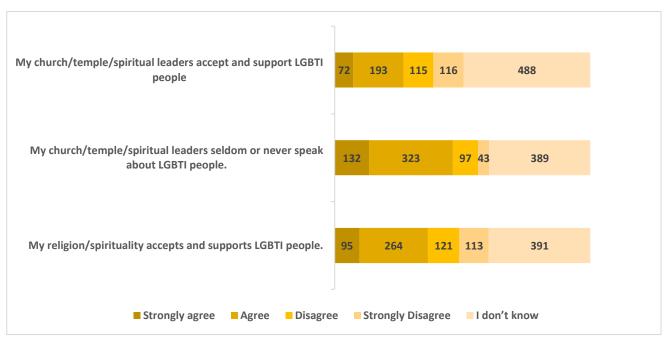


The socioeconomic status of the participants varied, with the highest representation in the upper middle class (58.3%), followed by the lower middle class (25.9%). A smaller proportion belonged to the upper class (9.7%), middle class (2.9%), and lower class (3.2%).

Figure 9: Cultural Practices of the study participants

Participants' religious engagement varied, with 96 indicating never attending religious ceremonies, while 572 practiced religious teachings 1-3 times a month. Additionally, 197 attended religious activities 1-3 times a week, while 201 reported doing so less frequently.





Among the surveyed participants, a significant portion, 201 individuals, indicated that they did not engage in any form of religious practices.

Among respondents, 264 agreed that their religion/spirituality supports LGBTI individuals, while 389 expressed uncertainties. Similarly, 193 believed their leaders accept and support LGBTI people, yet 389 indicated that their leaders seldom or never discuss the topic

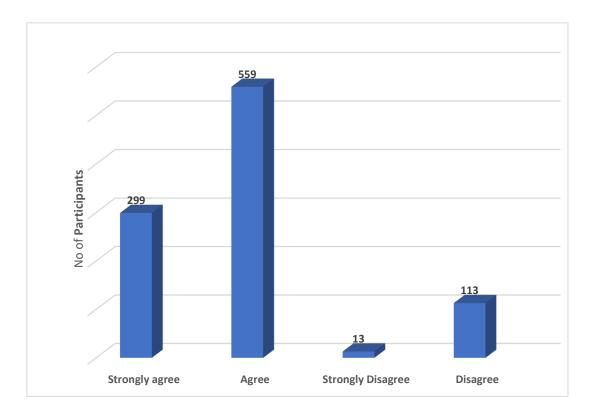


Figure 10: I was raised in religious household:

Merely 126 participants disagreed with the statement that they were raised in a religious home, out of the 559 who agreed, 299 strongly agreeing

Figure 11: Knowledge regarding LGBT Community among study participants:

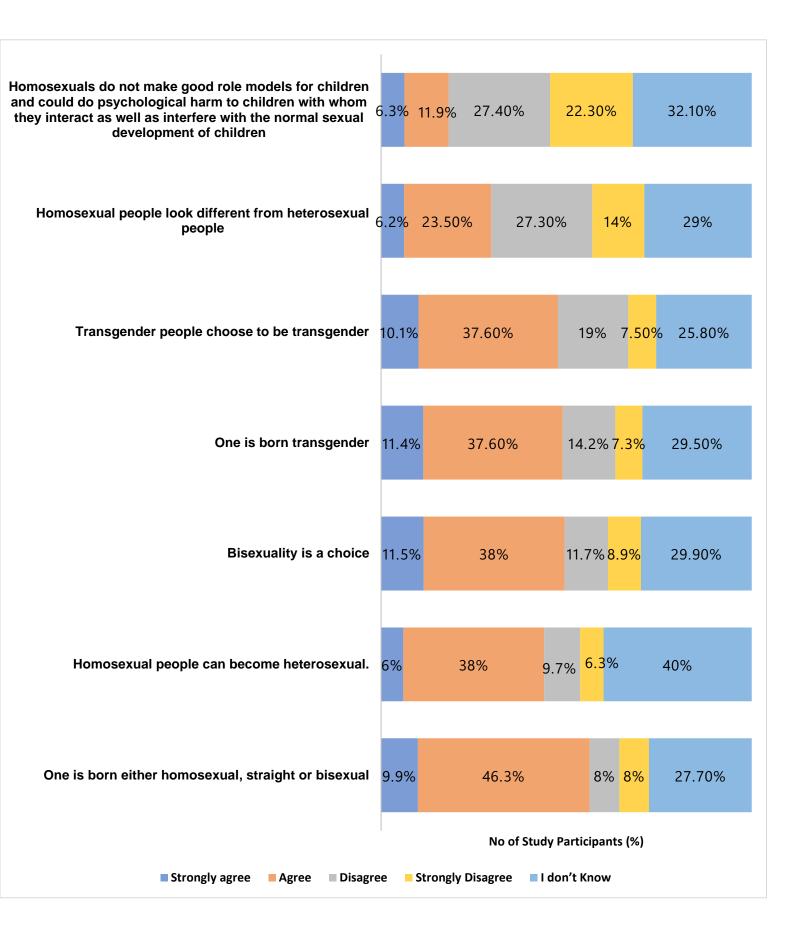


Figure 12: Attitude towards LGBT community among study participants:

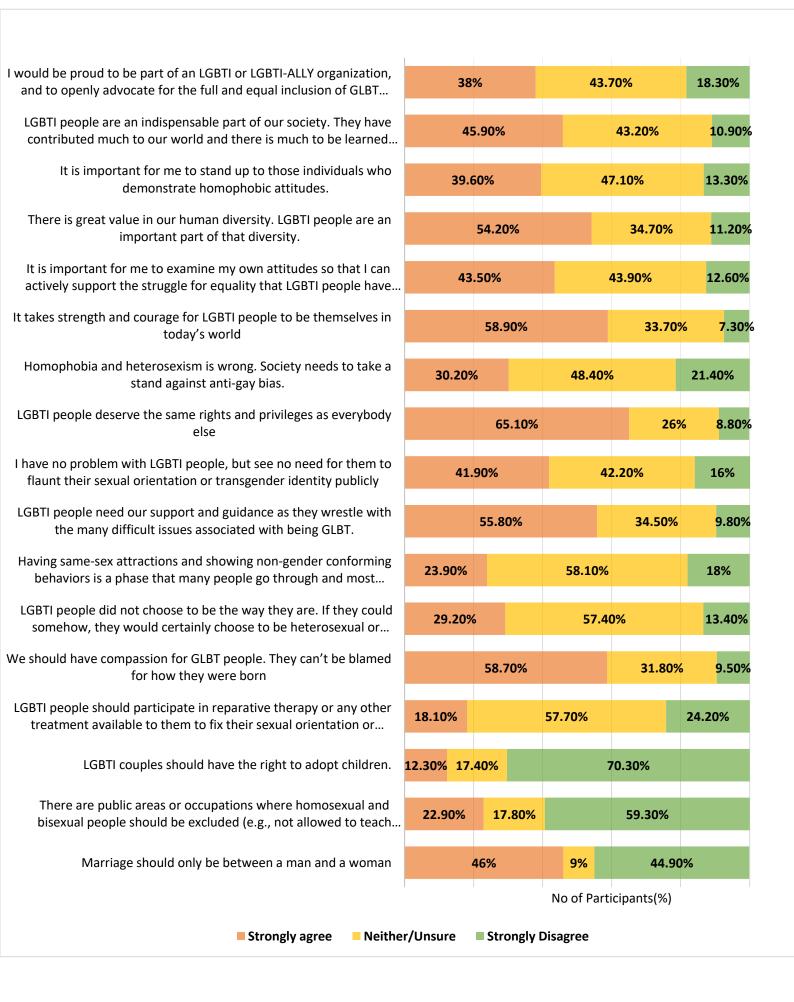


Figure 13: Beliefs among study participants regarding the LGBT community:

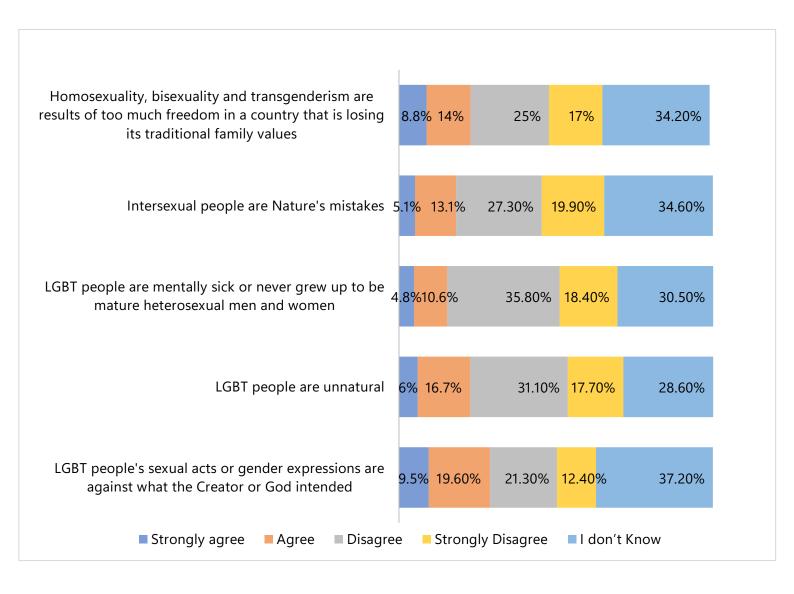
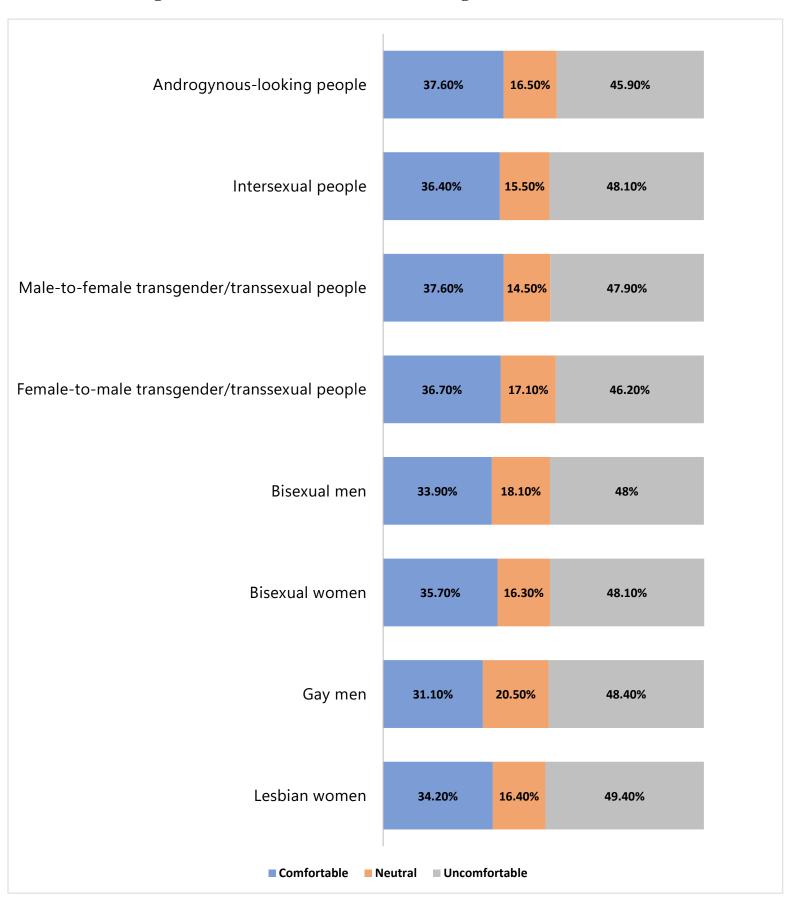


Figure 14: Level of comfort in Interacting with LGBT Individuals:



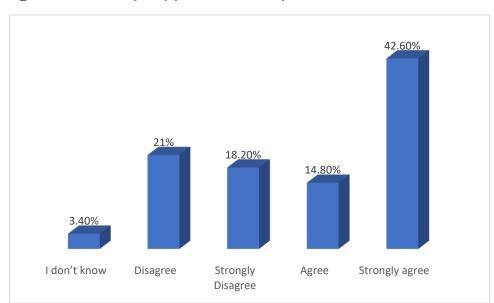


Figure 15: Family Support and Acceptance of LGBTI Individuals:

A significant portion of respondents expressed uncertainty or disagreement regarding their family's acceptance and support of LGBTI individuals. Specifically, 3.4% indicated uncertainty, while 21.0% disagreed, and 18.2% strongly disagreed with this statement.

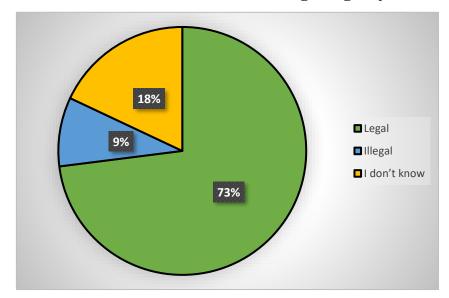


Figure 16: Awareness of Same-Sex Marriage Legality in India:

Figure 15, indicates that 73% of respondents know same-sex marriage is legal in India, 9% mistakenly believe it is illegal, and 18% are unsure

Table 2: Distribution of Knowledge, Attitudes, and Beliefs (KAB) Scores Among Study Participants:

| | Scoring | Frequency | Percentage |
|-----------|-------------------|-----------|------------|
| Knowledge | Poor (<50%) | 358 | 36.4% |
| | Moderate (50-70%) | 384 | 39.0% |
| | Good (>70%) | 242 | 24.6% |
| Attitude | Negative (<50%) | 34 | 3.5% |
| | Neutral (50-70%) | 363 | 36.9% |
| | Positive (>70%) | 587 | 59.7% |
| Beliefs | Negative (<50%) | 353 | 35.9% |
| | Neutral (50-70%) | 277 | 28.2% |
| | Positive (>70%) | 354 | 36% |

Scoring for knowledge, attitude, and beliefs was based on respondents' answers, with higher scores assigned to correct responses and zero to the least correct ones. Results indicate that 36.4% had poor knowledge, 39.0% had moderate knowledge, and 24.6% had good knowledge. Regarding attitude, 3.5% displayed poor attitudes, 36.9% had moderate attitudes, and 59.7% had good attitudes. Additionally, 35.9% had poor beliefs, 28.2% had moderate beliefs, and 36.0% had good beliefs.

Table 3: Association between Gender and Knowledge, Attitude & Beliefs

| | | Male | Female | Total | Chi-square | P value |
|-----------|-------------------|------------|------------|------------|------------|---------|
| | | | | | test | |
| Knowledge | Poor (<50%) | 132(35.2%) | 226(37.1%) | 358(36.4%) | 1.790 | 0.409 |
| | Moderate (50-70%) | 142 (37%) | 242(63.1%) | 384(40%) | | |
| | Good (>70%) | 101(26.9%) | 141(23.2%) | 242(24.6%) | | |
| Attitude | Negative (<50%) | 25(6.7%) | 9(1.5%) | 34(3.5%) | 114.727 | 0.001* |
| | Neutral (50-70%) | 205(54.7%) | 158(25.9%) | 363(36.9%) | | |
| | Positive (>70%) | 145(38.7%) | 442(72.6%) | 587(59.7%) | | |
| Beliefs | Negative (<50%) | 178(47.5%) | 175(28.7%) | 353(35.9%) | 39.673 | 0.001* |
| | Neutral (50-70%) | 99(26.4%) | 178(29.2%) | 277(28.2%) | | |
| | Positive (>70%) | 98(26.1%) | 256(42%) | 354(36%) | | |
| | Total | 375(100%) | 609(100%) | 984(100%) | | |
| | | | | | | |

*-Statistically significant

There was significant gender-based differences in attitude and beliefs, whereas knowledge levels were not statistically significant among the participants

- Males exhibit a higher prevalence of poor attitudes (6.1%) and beliefs (47.5%) compared to females (1.5% and 28.7%) respectively.
- 35.2% of males and 37.1% of females have poor knowledge.

Table 4: Association between Religion and Knowledge & Beliefs

| Religion | | Hindu | Muslim | Christian | Jain/Buddhist | Others | Total | Chi square test | P Value |
|-----------|----------|------------|-----------|-----------|---------------|---------|-----------|-----------------------|------------|
| Knowledge | Poor | 301(84.1%) | 38(10.6%) | 10(2.8%) | 9(2.5%) | 0(0%) | 358(100%) | 22.551 | 0.001* |
| | Moderate | 340(88.5%) | 19(4.9%) | 14(3.6%) | 7(1.8%) | 4(1%) | 384(100%) | | |
| | Good | 218(90.1%) | 8(3.3%) | 10(4.1%) | 6(2.5%) | 0(0%) | 242(100%) | | |
| Belief | Negative | 314 (89%) | 22(6.2%) | 13(3.7%) | 2(0.6%) | 2(0.6%) | 353(100%) | 60.566 | 0.001* |
| | Neutral | 229(82.7%) | 39(4.1%) | 6(2.2%) | 3(1.1%) | 0(0%) | 277(100%) | | |
| | Positive | 316(89.3%) | 4(1.1%) | 15(4.2%) | 17(4.8%) | 2(0.6%) | 354(100%) | | |
| Total | | 859(87.3%) | 65(6.6%) | 34(3.5%) | 22(2.2%) | 4(0.4%) | 984(100%) | | |

*-Statistically significant

The analysis reveals significant differences in knowledge and beliefs across religious groups ($\chi^2 = 22.551$, p < 0.001 for knowledge; $\chi^2 = 60.566$, p < 0.001 for beliefs).

- Hindus show the highest proportion of poor knowledge (84.1%) and negative beliefs (89%), while Muslims exhibit relatively lower percentages in these categories.
- Conversely, Hindus and Muslims have higher percentages of positive beliefs compared to Christians and Jain/Buddhist respondents.

Table 5: Association between Religion and Attitude

| Religion | | Hindu | Muslim | Others | Total | Pooled Chi- square | P Value |
|----------|----------|------------|-----------|----------|-----------|--------------------------|---------|
| Attitude | Negative | 27(79.4%) | 6(17.6%) | 1(2.9%) | 34(100%) | 15.407 | 0.001* |
| | Neutral | 302(83.2%) | 42(11.6%) | 19(5.2%) | 363(100%) | | |
| | Positive | 530(90.3%) | 17(2.9%) | 40(6.8%) | 587(100%) | | |
| Total | | 859(87.3%) | 65(6.6%) | 60(6.1%) | 984(100%) | | |

^{*-}Statistically significant

The analysis reveals significant associations between religion and attitude (pooled χ^2 = 15.407, p < 0.001).

- Hindus demonstrate the highest proportion of positive attitudes (90.3%), followed by others (6.8%) and Muslims (2.9%).
- Conversely, Hindus have the lowest percentage of negative attitudes (79.4%), with Muslims showing slightly higher rates (17.6%) and others at the lowest (2.9%).

Table 6: Association between the type of family and Knowledge, Attitude, & Beliefs

| Family | | Nuclear | Joint | Total | Chi square | |
|-----------|----------|------------|------------|-----------|------------|---------|
| | | | | | test | P Value |
| Knowledge | Poor | 246(68.7%) | 112(31.3%) | 358(100%) | 19.762 | 0.001* |
| | Moderate | 310(80.7%) | 74(19.3%) | 384(100%) | | |
| | Good | 198(81.8%) | 44(18.2%) | 242(100%) | | |
| Attitude | Negative | 21(61.8%) | 13(38.2%) | 34(100%) | 15.407 | 0.001* |
| | Neutral | 259(71.3%) | 104(28.7%) | 363(100%) | | |
| | Positive | 474(80.7%) | 113(19.3%) | 587(100%) | | |
| Belief | Negative | 248(70.3%) | 105(29.7%) | 353(100%) | 14.848 | 0.01* |
| | Neutral | 214(77.3%) | 63(22.7%) | 277(100%) | | |
| | Positive | 292(82.5%) | 62(17.5%) | 354(100%) | | |
| Total | | 754(76.6%) | 230(23.4%) | 984(100%) | | |

^{*-}Statistically significant

There were significant associations between family structure and knowledge, attitude, and beliefs. Participants in nuclear families exhibit higher percentages of good knowledge (81.8%), positive attitudes (80.7%), and positive beliefs (82.5%) compared to those in joint families (18.2%,19.3% and 17.5% respectively)

Table 7: Association between Residence and Knowledge, Attitude & Beliefs

| Residence | | Urban | Rural | Total | Chi-square | | |
|-----------|----------|------------|------------|-----------|------------|---------|--|
| | | | | | test | P Value | |
| Knowledge | Poor | 101(28.2%) | 257(71.8%) | 358(100%) | 16.113 | 0.0001* | |
| | Moderate | 98(25.5%) | 286(74.5%) | 384(100%) | | | |
| | Good | 35(14.5%) | 207(85.5%) | 242(100%) | | | |
| Attitude | Negative | 9(26.5%) | 25(73.5%) | 34(100%) | 3.131 | 0.209 | |
| | Neutral | 97(26.7%) | 266(73.3%) | 363(100%) | | | |
| | Positive | 128(21.8%) | 459(78.2%) | 587(100%) | | | |
| Belief | Negative | 109(30.9%) | 244(69.1%) | 353(100%) | 22.385 | 0.001* | |
| | Neutral | 69(24.9%) | 208(75.1%) | 277(100%) | | | |
| | Positive | 56(15.8%) | 298(84.2%) | 354(100%) | | | |
| Total | | 234(23.8%) | 750(76.2%) | 984(100%) | | | |

*-Statistically significant

This indicates significant associations between residence and knowledge and belief, but not attitude.

- Participants residing in urban areas demonstrate higher percentages of good knowledge (85.5%) and positive beliefs (84.2%) compared to those in rural areas.
- Conversely, rural residents exhibit higher percentages of poor knowledge (71.8%) and negative beliefs (69.1%)

Table 8: Association between Fathers Literacy family and Knowledge, Attitude & Beliefs

| | | Degree | PUC | High school | Primary school | Never attended school | Total | Chi- squar e test | P value |
|------------|----------|------------|------------|----------------|----------------|-----------------------------|------------|-------------------------|---------|
| Knowle dge | Poor | 227(34%) | 77(45.3% | 29(34.5%) | 13(35.1%) | 12(48%) | 358(36.4%) | 41.723 | 0.001* |
| | Moderate | 253(37.9%) | 50(29.4%) | 47(56%) | 21(56.8%) | 13(52%) | 384(39%) | | |
| | Good | 188(28.1%) | 43(25.3%) | 8(9.5%) | 3(8.1%) | 0(0%) | 242(24.6%) | | |
| Attitude | Negative | 22(3.3%) | 7(4.1%) | 2(2.4%) | 0(0%) | 3(12%) | 34(3.5%) | 11.427 | 0.179 |
| | Neutral | 247(37%) | 60(35.3%) | 27(32.1%) | 18(48.6%) | 11(44%) | 363(36.9%) | | |
| | Positive | 399(59.7%) | 103(60.6%) | 55(65.5%) | 19(51.4%) | 11(44%) | 587(59.7%) | | |
| Beliefs | Negative | 233(34.9%) | 61(35.9%) | 20(23.8%) | 25(67.6%) | 14(56.0%) | 353(35.9%) | 47.361 | 0.001* |
| | Neutral | 171(25.6%) | 48(28.2%) | 38(45.2%) | 11(29.7%) | 9(36%) | 277(28.2%) | | |
| | Positive | 264(39.5%) | 61(35.9%) | 26(31%) | 1(2.7%) | 2(8%) | 354(36%) | | |
| | Total | 668(100%) | 170(100%) | 84(100%) | 37(100%) | 25(100%) | 984(100%) | | |

^{*-}Statistically significant

The analysis demonstrates significant associations between fathers' literacy levels and knowledge and beliefs, but not attitude.

- Participants with higher paternal education levels exhibit lower percentages of poor knowledge (34%) and negative beliefs (34.9%).
- Conversely, those with lower paternal education levels demonstrate higher percentages of poor knowledge (48%) and negative beliefs (56%).

Table 9: Association between Fathers Occupation family and Knowledge, Attitude & Beliefs

| Fathers Occupation | | Unemployed | Labor | Self- employed | Salaried employees | Total | Chi square test | P value |
|-----------------------|----------|------------|-----------|-------------------|-----------------------|-----------|-----------------------|---------|
| Knowledge | Poor | 71(19.8%) | 46(12.8%) | 113(31.6%) | 128(35.8%) | 358(100%) | 32.864 | 0.001* |
| | Moderate | 71(18.5%) | 2(7%) | 137(35.7%) | 149(38.8%) | 384(100%) | | |
| | Good | 41(16.9%) | 2(0.8%) | 92(38%) | 107(44.2%) | 242(100%) | | |
| Attitude | Negative | 8(23.5%) | 0(0%) | 17(50%) | 9(26.5%) | 34(100%) | 24.979 | 0.01* |
| | Neutral | 61(16.8%) | 45(12.4%) | 113(31.1%) | 144(39.7%) | 363(100%) | | |
| | Positive | 114(19.4%) | 30(5.1%) | 212(36.1%) | 231(39.4%) | 587(100%) | | |
| Belief | Negative | 72(20.4%) | 44(12.5%) | 108(30.6%) | 129(36.5%) | 353(100%) | 24.108 | 0.01* |
| | Neutral | 49(17.7%) | 17(6.1%) | 110(39.7%) | 101(36.5%) | 277(100%) | | |
| | Positive | 62(17.5%) | 14(4%) | 124(35%) | 154(43.5%) | 354(100%) | | |
| Total | | 183(18.6%) | 75(7.6%) | 342(34.8%) | 384(39%) | 984(100%) | | |

*-Statistically significant

The analysis reveals significant associations between fathers' occupations and knowledge, attitude, and beliefs.

- Fathers employed as salaried employees demonstrate the highest percentages of good knowledge (44.2%), positive attitude (39.4%), and positive beliefs (43.5%).
- In contrast, those unemployed show the highest percentages of poor knowledge (31.6%), negative attitude (26.5%), and negative beliefs (36.5%)

Table 10: Association between Mother's Literacy family and Knowledge, Attitude & Beliefs

| | | Degree | PUC | High school | Primary school | Never attended school | Total | Chi- square test | P value |
|-----------|----------|------------|------------|----------------|----------------|-----------------------------|------------|------------------------|---------|
| Knowledge | Poor | 141(28.4%) | 94(42.2%) | 73(42.7%) | 33(55.9%) | 17(50%) | 358(36.4%) | 56.306 | 0.0001* |
| | Moderate | 201(40.4%) | 73(32.7%) | 69(40.4%) | 24(40.7%) | 17(50%) | 384(39%) | | |
| | Good | 155(31.2%) | 56(25.1%) | 29(17.0%) | 2(3.4%) | 0(0%) | 242(24.6%) | | |
| Attitude | Negative | 16(3.2%) | 9(4%) | 4(2.3%) | 2(3.4%) | 3(8.8%) | 34(3.5%) | 19.989 | 0.010* |
| | Neutral | 180(36.2%) | 71(31.8%) | 67(39.2%) | 35(59.3%) | 10(29.4%) | 363(36.9%) | | |
| | Positive | 301(60.6%) | 143(64.1%) | 100(58.5%) | 22(37.3%) | 21(61.8%) | 587(59.7%) | | |
| Beliefs | Negative | 173(34.8%) | 86(38.6%) | 50(29.2%) | 29(49.2%) | 15(44.1%) | 353(35.9%) | 19.774 | 0.011* |
| | Neutral | 126(25.4%) | 61(27.4%) | 62(36.3%) | 19(32.2%) | 9(26.5%) | 277(28.2%) | | |
| | Positive | 198(39.8%) | 76(34.1%) | 59(34.5%) | 11(18.6%) | 10(29.4%) | 354(36.0%) | | |
| | Total | 497(100%) | 223(100%) | 171(100%) | 59(100%) | 34(100%) | 984(100%) | | |

*-Statistically significant

The analysis demonstrates significant associations between mothers' literacy levels and participants knowledge, attitude, and beliefs. Participants mothers with higher education levels exhibit lower percentages of poor knowledge (28.4%), negative attitudes (3.2%), and negative beliefs (34.8%). On the other hand, with lower education levels demonstrate higher percentages of poor knowledge (50%), negative attitudes (8.8%), and negative beliefs (44.1%).

Table 11: Association between Mothers Occupation family and Knowledge, Attitude & Beliefs

| Mothers Occupation | | Unemployed | Labor | Self- employed | Salaried employees | Total | Chi square test | P value |
|-----------------------|----------|------------|---------|-------------------|-----------------------|-----------|--------------------|------------|
| Knowledge | Poor | 273(76.3%) | 1(0.3%) | 6(1.7%) | 78(21.8%) | 358(100%) | 24.108 | 0.001* |
| | Moderate | 258(67.2%) | 1(0.3%) | 23(6%) | 102(26.6%) | 384(100%) | | |
| | Good | 157(64.9%) | 3(1.2%) | 5(2.1%) | 77(31.8%) | 242(100%) | | |
| Attitude | Negative | 29(85.3%) | 0(0%) | 0(0%) | 5(14.7%) | 34(100%) | 9.613 | 0.142 |
| | Neutral | 249(68.6%) | 4(1.1%) | 10(2.8%) | 100(27.5%) | 363(100%) | | |
| | Positive | 410(69.8%) | 1(0.2%) | 24(4.1%) | 152(25.9%) | 587(100%) | | |
| Belief | Negative | 257(72.8%) | 4(1.1%) | 8(2.3%) | 84(23.8%) | 353(100%) | 25.062 | 0.001* |
| | Neutral | 204(73.6%) | 1(0.4%) | 3(1.1%) | 69(24.9%) | 277(100%) | | |
| | Positive | 227(64.1%) | 0(0%) | 23(6.5%) | 104(29.4%) | 354(100%) | | |
| Total | | 688(69.9%) | 5(0.5%) | 34(3.5%) | 257(26.1%) | 984(100%) | | |

The analysis reveals significant associations between mothers' occupations and respondents knowledge and beliefs ,but not attitude.

- Mothers who are unemployed show the highest proportions of poor knowledge (76.3%) and negative beliefs (72.8%).
- Conversely, salaried employees exhibit the highest percentages of good knowledge (31.8%) and positive beliefs (29.4%).

Table 12: Association between Professional Background and Knowledge, Attitude & Beliefs

| | | Medical | Engineering | Architecture | Others | Chi- Square Tests | P Value |
|-----------|----------|------------|-------------|--------------|-----------|-------------------------|------------|
| Knowledge | Poor | 108(24.8%) | 194(46.9%) | 29(34.1%) | 27(54.0%) | 77.808 | 0.001* |
| | Moderate | 172(39.5%) | 163(39.4%) | 37(43.5%) | 12(24.0%) | | |
| | Good | 155(35.6%) | 57(13.8%) | 19(22.4%) | 11(22.0%) | | |
| Attitude | Negative | 12(2.8%) | 22(5.3%) | 0(0%) | 0(0%) | 21.090 | 0.002* |
| | Neutral | 145(33.3%) | 170(41.1%) | 25(29.4%) | 23(46.0%) | | |
| | Positive | 278(63.9%) | 222(53.6%) | 60(70.6%) | 27(54.0%) | | |
| Beliefs | Negative | 129(29.7%) | 170(41.1%) | 32(37.6%) | 22(44.0%) | 39.838 | 0.001* |
| | Neutral | 109(25.1% | 134(32.4%) | 17(20.0%) | 17(34.0%) | | |
| | Positive | 197(45.3%) | 110(26.6%) | 36(42.4%) | 11(22.0%) | | |
| | Total | 435(100%) | 414(100%) | 85(100%) | 50(100%) | - | |

Table 12 shows that in terms of knowledge, students in medical and architecture fields demonstrate higher percentages of >70% (35.6% and 22.4% respectively). Conversely, students in the "Others" category exhibit high percentage of poor knowledge (54%). Similarly, a substantial majority of students in medical (63.9%), followed by architecture (70.6%), others (54%) and engineering (53.6%) fields express positive attitudes. Regarding beliefs, students in medical (45.3%) and engineering (41.1%) fields show the highest percentages of positive beliefs than others

Table 13: Association between the SES and Knowledge, Attitude & Beliefs

| | | Upper | Upper middle | Middle | Lower middle | Lower | Total | Chi- square test | P value |
|-----------|----------|-----------|-----------------|-----------|-----------------|-----------|----------------|------------------------|-------------|
| Knowledge | Poor | 30(31.6%) | 192(33.4% | 13(44.8%) | 107(42%) | 16(51.6%) | 358(36.4 %) | 24.463 | 0.002* |
| | Moderate | 45(47.4%) | 213(37.1%) | 13(44.8%) | 104(40.8% | 9(29%) | 384(39%) | | |
| | Good | 20(21.1%) | 169(29.4% | 3(10.3%) | 44(17.3%) | 6(19.4%) | 242(24.6 %) | | |
| Attitude | Negative | 4(4.2%) | 24(4.2%) | 0(0%) | 6(2.4%) | 0(0%) | 34(3.5%) | 6344 | 0. 0001* |
| | Neutral | 40(42.1%) | 173(30.1% | 5(17.2%) | 118(46.3% | 27(87.1%) | 363(36.9 %) | | |
| | Positive | 51(53.7%) | 377(65.7% | 24(82.8%) | 131(51.4% | 4(12.9%) | 587(59.7 %) | | |
| Beliefs | Negative | 32(33.7%) | 177(30.8% | 20(69%) | 107(42%) | 17(54.8%) | 353(35.9 %) | 45.843 | 0. 0001* |
| | Neutral | 29(30.5%) | 155(27%) | 5(17.2%) | 75(29.4%) | 13(41.9%) | 277(28.2 %) | | |
| | Positive | 34(35.8%) | 242(42.2% | 4(13.8%) | 73(28.6%) | 1(3.2%) | 354(36%) | | |
| | Total | 95(100%) | 574(100%) | 29(100%) | 255(100%) | 31(100%) | 984(100%) | | |

The analysis reveals a significant association between socioeconomic status and KAB (Knowledge, Attitude, and Beliefs) scores.

- In terms of knowledge, individuals' lower class in displayed the highest proportion of poor scores (51.6%), followed by the middle class (44.8%), and upper-middle class (33.4%), while the upper class showed the lowest (31.6%).
- Conversely, for attitude and beliefs, those in the upper-middle class exhibited the highest percentage of positive attitudes (65.7%) and positive beliefs (42.2%).
- Individuals in the middle class showed the highest proportion of negative beliefs (60%).

Table 14: Association between the Cultural Practices family and Knowledge, Attitude and Beliefs

| How often do y | you attend a pla | ace of worship (| or participate i | n religious/spi | ritual ceremony | y? | |
|----------------|---|--|--|--|--|---|---|
| | Everyday | 1-3/Week | 1-3/month | Never | Total | Chi- Square Tests | P Value |
| Poor | 46(38.7%) | 80(40.6%) | 182(31.8%) | 50(52.1%) | 358(36.4%) | 18.853 | 0.004* |
| Moderate | 43(36.1%) | 78(39.6%) | 235(41.1%) | 28(29.2%) | 384(39.0%) | | |
| Good | 30(25.2%) | 39(19.8%) | 155(27.1%) | 18(18.8%) | 242(24.6%) | | |
| Negative | 14 (11.8%) | 5(2.5%) | 8(1.4%) | 7(7.3%) | 34(3.5%) | 56.238 | 0.001* |
| Neutral | 55(46.2%) | 87(44.2%) | 185(32.3%) | 36(37.5%) | 363(36.9%) | | |
| Positive | 50(42.0%) | 105(53.3%) | 379(66.3%) | 53(55.2%) | 587(59.7%) | | |
| Negative | 42(35.3%) | 80(40.6%) | 194(33.9%) | 37(38.5%) | 353(35.9%) | 6.389 | 0.381 |
| Neutral | 30(25.2%) | 58(29.4%) | 167(29.2%) | 22(22.9%) | 277(28.2%) | | |
| Positive | 47(39.5%) | 59(29.9%) | 211(36.9%) | 37(38.5%) | 354(36.0%) | | |
| Uncomfortable | 33(27.7%) | 71(36.0%) | 153(26.7%) | 20(20.8%) | 277(28.2%) | 29.188 | 0.001* |
| Neutral | 33(27.7%) | 42(21.3%) | 99(17.3%) | 9(9.4%) | 183(18.6%) | | |
| Comfortable | 53(44.5%) | 84(42.6%) | 320(55.9%) | 67(69.8%) | 52(53.3%) | | |
| Total | 119(100.0%) | 197(100.0%) | 572(100%) | 96(100.0%) | 984(100.0%) | | |
| | Poor Moderate Good Negative Neutral Positive Negative Uncomfortable Neutral Comfortable | Everyday Poor 46(38.7%) Moderate 43(36.1%) Good 30(25.2%) Negative 14 (11.8%) Neutral 55(46.2%) Positive 50(42.0%) Negative 42(35.3%) Neutral 30(25.2%) Positive 47(39.5%) Uncomfortable 33(27.7%) Neutral 33(27.7%) Comfortable 53(44.5%) | Poor 46(38.7%) 80(40.6%) Moderate 43(36.1%) 78(39.6%) Good 30(25.2%) 39(19.8%) Negative 14 (11.8%) 5(2.5%) Neutral 55(46.2%) 87(44.2%) Positive 50(42.0%) 105(53.3%) Negative 42(35.3%) 80(40.6%) Neutral 30(25.2%) 58(29.4%) Positive 47(39.5%) 59(29.9%) Uncomfortable 33(27.7%) 71(36.0%) Neutral 33(27.7%) 42(21.3%) Comfortable 53(44.5%) 84(42.6%) | Everyday 1-3/Week 1-3/month Poor 46(38.7%) 80(40.6%) 182(31.8%) Moderate 43(36.1%) 78(39.6%) 235(41.1%) Good 30(25.2%) 39(19.8%) 155(27.1%) Negative 14 (11.8%) 5(2.5%) 8(1.4%) Neutral 55(46.2%) 87(44.2%) 185(32.3%) Positive 50(42.0%) 105(53.3%) 379(66.3%) Negative 42(35.3%) 80(40.6%) 194(33.9%) Neutral 30(25.2%) 58(29.4%) 167(29.2%) Positive 47(39.5%) 59(29.9%) 211(36.9%) Uncomfortable 33(27.7%) 71(36.0%) 153(26.7%) Neutral 33(27.7%) 42(21.3%) 99(17.3%) Comfortable 53(44.5%) 84(42.6%) 320(55.9%) | Poor 46(38.7%) 80(40.6%) 182(31.8%) 50(52.1%) Moderate 43(36.1%) 78(39.6%) 235(41.1%) 28(29.2%) Good 30(25.2%) 39(19.8%) 155(27.1%) 18(18.8%) Negative 14 (11.8%) 5(2.5%) 8(1.4%) 7(7.3%) Neutral 55(46.2%) 87(44.2%) 185(32.3%) 36(37.5%) Positive 50(42.0%) 105(53.3%) 379(66.3%) 53(55.2%) Negative 42(35.3%) 80(40.6%) 194(33.9%) 37(38.5%) Neutral 30(25.2%) 58(29.4%) 167(29.2%) 22(22.9%) Positive 47(39.5%) 59(29.9%) 211(36.9%) 37(38.5%) Uncomfortable 33(27.7%) 71(36.0%) 153(26.7%) 20(20.8%) Neutral 33(27.7%) 42(21.3%) 99(17.3%) 9(9.4%) Comfortable 53(44.5%) 84(42.6%) 320(55.9%) 67(69.8%) | Poor 46(38.7%) 80(40.6%) 182(31.8%) 50(52.1%) 358(36.4%) Moderate 43(36.1%) 78(39.6%) 235(41.1%) 28(29.2%) 384(39.0%) Good 30(25.2%) 39(19.8%) 155(27.1%) 18(18.8%) 242(24.6%) Negative 14 (11.8%) 5(2.5%) 8(1.4%) 7(7.3%) 34(3.5%) Neutral 55(46.2%) 87(44.2%) 185(32.3%) 36(37.5%) 363(36.9%) Positive 50(42.0%) 105(53.3%) 379(66.3%) 53(55.2%) 587(59.7%) Negative 42(35.3%) 80(40.6%) 194(33.9%) 37(38.5%) 353(35.9%) Neutral 30(25.2%) 58(29.4%) 167(29.2%) 22(22.9%) 277(28.2%) Positive 47(39.5%) 59(29.9%) 211(36.9%) 37(38.5%) 354(36.0%) Uncomfortable 33(27.7%) 71(36.0%) 153(26.7%) 20(20.8%) 277(28.2%) Neutral 33(27.7%) 42(21.3%) 99(17.3%) 9(9.4%) 183(18.6%) Comfortable 53(44.5% | Poor 46(38.7%) 80(40.6%) 182(31.8%) 50(52.1%) 358(36.4%) 18.853 Moderate 43(36.1%) 78(39.6%) 235(41.1%) 28(29.2%) 384(39.0%) Good 30(25.2%) 39(19.8%) 155(27.1%) 18(18.8%) 242(24.6%) Negative 14 (11.8%) 5(2.5%) 8(1.4%) 7(7.3%) 34(3.5%) 56.238 Neutral 55(46.2%) 87(44.2%) 185(32.3%) 36(37.5%) 363(36.9%) 6.389 Positive 50(42.0%) 105(53.3%) 379(66.3%) 53(55.2%) 587(59.7%) 6.389 Neutral 30(25.2%) 58(29.4%) 167(29.2%) 22(22.9%) 277(28.2%) Positive 47(39.5%) 59(29.9%) 211(36.9%) 37(38.5%) 354(36.0%) Uncomfortable 33(27.7%) 71(36.0%) 153(26.7%) 20(20.8%) 277(28.2%) 29.188 Neutral 33(27.7%) 42(21.3%) 99(17.3%) 9(9.4%) 183(18.6%) Comfortable 53(44.5%) 84(42.6%) 320(55.9%) |

The analysis indicates a significant association between frequency of attending religious/spiritual ceremonies and KAB (Knowledge, Attitude, Beliefs).

• Participants attending religious ceremonies every day exhibited higher proportions of poor knowledge (38.7%), negative attitude (11.8%), and discomfort (27.7%). Those attending 1-3 times a week showed a higher positive attitude (53.3%), and a majority (42.6%) reported a comfort level of >70%.

• Conversely, individuals attending 1-3 times per week or month showed higher percentages of positive attitudes (66.3%) and respondents who never attend show the highest percentage of beliefs (38.5%), and are more comfortable (69.8%) compared to others.

Table 15: Association between raised in a religious household family and Knowledge, Attitude and Beliefs

| | I was raised in a very religious household. | | | | | | |
|-------------|---|------------|-----------|------------|-------------------------|---------|--|
| | | Agree | Disagree | Total | Chi- Square Tests | P Value | |
| Knowledge | Poor | 332(38.7%) | 26(20.6%) | 358(36.4%) | | | |
| | Moderate | 338(39.4%) | 46(36.5%) | 384(39.0%) | 29.683 | 0.001* | |
| | Good | 188(21.9%) | 54(42.9%) | 242(24.6%) | | | |
| Attitude | Negative | 30(3.5%) | 4(3.2%) | 34(3.5%) | | | |
| | Neutral | 317(36.9%) | 46(36.5%) | 363(36.9%) | 0.049 | 0.976 | |
| | Positive | 511(59.6%) | 76(60.3%) | 587(59.7%) | | | |
| Beliefs | Negative | 319(37.2%) | 34(27.0%) | 353(35.9%) | 15.292 | 0.001* | |
| | Neutral | 250(29.1%) | 27(21.4%) | 277(28.2%) | | | |
| | Positive | 289(33.7%) | 65(51.6%) | 354(36.0%) | | | |
| Comfortable | Uncomfortable | 243(28.3%) | 34(27.0%) | 277(28.2%) | | | |
| | Neutral | 172(20.0%) | 11(8.7%) | 183(18.6%) | 10.939 | 0.004* | |
| | Comfortable | 443(51.6%) | 81(64.3%) | 524(53.3%) | | | |
| | Total | 858(100%) | 126(100%) | 984(100%) | | | |

*-Statistically significant

This reveals compelling associations between the respondents' experiences of being raised in a very religious household and their knowledge, attitudes, beliefs, and comfort levels.

- Notably, a substantial 42.9% of individuals with a 'Good' level of knowledge were not raised in religious households, whereas,38.7% had poor Knowledge in participants who were raised in religious homes, showcasing a significant association.
- Similarly, beliefs exhibit a strong correlation, with 51.6% of those with a 'Positive' belief level does not have a religious upbringing, on the other hand who were raised in the same, had around a higher percentage 37.2% having Negative beliefs,
- However, attitudes towards this upbringing did not show a significant association, with respondents distributed fairly evenly across the categories

Table 16: Association between Knowledge and Attitude

| Total score | То | Total score Attitude | | | Chi | P value |
|-------------|-----------|----------------------|------------|------------|--------|---------|
| Knowledge | Poor | Moderate | Good | | Square | |
| | | | | | Test | |
| Poor | 6(17.6%) | 199(54.8%) | 153(26.1%) | 358(36.4%) | 88.642 | 0.001* |
| Moderate | 14(41.2%) | 10(29.8%) | 262(44.6%) | 384(39.0%) | | |
| Good | 14(41.2%) | 56(15.4%) | 172(29.3%) | 242(24.6%) | | |
| Total | 34(100%) | 363(100%) | 587(100%) | 984(100%) | | |

^{*-}Statistically significant

Table 16, reveals a significant association between total scores of Knowledges and Attitude. Specifically, individuals with a poor Knowledge score tend to have predominantly moderate Attitude scores (54.8%), followed by good Attitude scores (26.1%). Conversely, those with moderate Knowledge scores show a diverse distribution in Attitude scores, with a relatively even spread across good (44.6%), poor (41.2%), and moderate (29.8%) categories.

Table 17: Association between Knowledge and Beliefs

| Total score | To | Total score Beliefs | | | Chi | P value |
|-------------|------------|---------------------|------------|------------|---------|---------|
| Knowledge | Poor | Moderate | Good | | Square | |
| | | | | | Test | |
| Poor | 183(51.8%) | 121(43.7%) | 54(15.3%) | 358(36.4%) | 149.016 | 0.001* |
| Moderate | 117(33.1%) | 118(42.6%) | 149(42.1%) | 384(39.0%) | | |
| Good | 53(15%) | 38(13.7%) | 151(42.7%) | 242(24.6%) | | |
| Total | 353(100%) | 277(100%) | 354(100%) | 984(100%) | | |

^{*-}Statistically significant

Table 17, shows a significant relationship between total scores of Knowledges and Beliefs.

- Notably, a substantial portion of participants with poor Knowledge scores also demonstrated poor Beliefs scores (51.8%).
- Conversely, those with moderate Knowledge scores displayed a more evenly distributed pattern across Beliefs categories, with a slightly higher percentage falling into the moderate Beliefs category (42.6%). Individuals with good

Knowledge scores showed diverse Beliefs scores, with a notable proportion (42.7%) falling into the good category.

Table 18: Association between Attitude and Beliefs

| Total score | To | Total score Beliefs | | | Chi Square | P value |
|-------------|------------|---------------------|------------|------------|------------|---------|
| Attitude | Poor | Moderate | Good | | Test | |
| Negative | 17(4.8%) | 7(2.5%) | 10(2.8%) | 34(3.5%) | 199.970 | 0.001* |
| Neutral | 198(56.1%) | 133(48%) | 32(9%) | 363(36.9%) | | |
| Positive | 138(39.1%) | 137(49.5%) | 312(88.1%) | 587(59.7%) | | |
| Total | 353(100%) | 277(100%) | 354(100%) | 984(100%) | | |

^{*-}Statistically significant

The analysis reveals a strong association between total scores of Attitudes and Beliefs.

- Participants with negative attitudes predominantly exhibited poor beliefs
 (4.8%). Conversely, individuals with positive attitudes demonstrated a notable
 prevalence of good beliefs (88.1%).
- Those with neutral attitudes displayed a varied distribution across beliefs categories, with a substantial proportion falling into the neutral beliefs category (48%).

Table 19: Association Between Knowledge, Attitudes, and Beliefs

| Total score | Total score | To | otal score belie | efs | | Chi- square | P-value |
|-------------|-------------|----------------|------------------|----------------|------------|----------------|---------|
| Knowledge | Attitude | Poor | Good | Moderate | Total | Test | |
| Poor | Poor | 4 (66.7%) | 2 (3.3%) | 0 (0%) | 6 (100%) | 57.978 | 0.001* |
| | Good | 60 (39.2%) | 47 (30.7%) | 46 (30.1%) | 153 (100%) | | |
| | Moderate | 119 (59.8%) | 5 (2.5%) | 75 (37.7%) | 199 (100%) | | |
| Good | Poor | 5 (35.7%) | 5 (35.7%) | 4 (28.6%) | 14 (100%) | 107.429 | 0.001* |
| | Good | 19 (11%) | 142 (82.6%) | 11 (6.4%) | 172 (100%) | | |
| | Moderate | 29 (51.8%) | 4 (7.1%) | 23 (41.1%) | 56 (100%) | | |
| Moderate | Poor | 8 (57.1%) | 3 (21.4%) | 3 (21.4%) | 14 (100%) | 32.177 | 0.001* |
| | Good | 59 (22.5%) | 123 (46.9%) | 80 (30.5%) | 262 (100%) | | |
| | Moderate | 50 (46.3%) | 23 (21.3%) | 35 (32.4%) | 108 (100%) | | |
| | Total | 353 (35.9%) | 354 (36%) | 277 (28.2%) | 984 (100%) | | |

Table 19, reveals significant correlations between knowledge, attitudes, and beliefs. Individuals with poor knowledge predominantly exhibit poor beliefs (66.7%), though a notable portion maintains good attitudes (39.2%). Conversely, those with good knowledge overwhelmingly possess good attitudes (82.6%) and good beliefs (46.9%), indicating a strong positive correlation between high knowledge and positive attitudes and beliefs. Individuals with moderate knowledge display a diverse range of attitudes and beliefs, with a significant portion having good attitudes (46.9%) and moderate beliefs (41.1%).

DISCUSSION

The stigma and taboo around the LGBT community lead to harmful outcomes like family violence and lack of acceptance. Societal pressure to conform to heteronormative standards, such as marriage expectations, heightens vulnerability to violence from peers and partners⁷⁵.

Recognizing the urgency of addressing these issues, this study focused on exploring the knowledge, attitudes, and beliefs (KAB) concerning the LGBT community among college-going students in the Vijayapura district. Gaining insights into the experiences of LGBT youth in Northern Karnataka, where resources and support systems are often limited, is essential for devising impactful interventions and support strategies.

Bringing attention to this sensitive subject represents a meaningful stride toward fostering equality, empathy, and acceptance within these communities. The ultimate goal is to create a supportive environment that empowers the LGBT community to thrive.

The study findings reveal a positive trend in attitudes towards the LGBT community, with a significant majority (59.7%) of respondents exhibiting good attitudes.

Conversely, the study highlights notable negative aspects. A substantial proportion of respondents exhibited poor knowledge (36.4%), while only 24.6%) demonstrated good knowledge. Furthermore, a significant portion (35.9%) held poor beliefs concerning the LGBT community.

Sociodemographic of the respondents:

Among the total study participants (n=984) interviewed in this study, a substantial majority (61.8%) were identified as female students. This finding resonates with similar research conducted by Kabir Matharu et al⁷⁶ (59.4%), Chi et al⁸⁰(50.3%), Leah Kelley et al⁷⁹ (66.7%), and Ramya Madarapu et al⁷⁰ (62%). These consistent trends in female representation underscore a notable demographic prevalence within the studied population across various research contexts.

Knowledge:

Our study reveals a higher level of knowledge among medical students (35.6%) regarding the LGBT community, particularly in their understanding of the sexuality of LGBT individuals. This finding aligns with results from previous studies, including one conducted among second-year medical students in Kolkata in 2018 by Kar et al.,⁶⁹ and another study among undergraduate medical students by Nerli et al⁷¹., This consistency underscores the crucial role of medical education in promoting understanding and embracing a variety of sexual orientations and identities. within healthcare settings.

In both Parker et al.'s study and our research, concerning attitudes towards the LGBT community, troubling trends emerge. Parker et al.,⁷⁷ found that 12%) of respondents agreed that "Male homosexuals are a danger to children." Similarly, in our study, a higher percentage (18.2%) concurred with the statement "Homosexuals do not make good role models for children and could do psychological harm to children with whom

they interact as well as interfere with the normal sexual development of children." These findings underscore the persistence of negative stereotypes and biases towards the LGBT community, reflecting a concerning societal attitude. Additionally, another study by Siva Ilango et al., revealed gender differences in these attitudes, with male respondents (mean rank was 303.81) generally expressing more favorable views towards homosexuals as role models for children, while female respondents exhibited more cautious attitudes, perceiving greater potential psychological harm.

Attitudes:

In the study conducted by Nerli et al⁷¹., a significant majority of respondents (54.9%) expressed disagreement with the idea that marriage should be limited to a union between a man and a woman, reflecting a more inclusive perspective.

Contrastingly, in our study, 46%) of respondents, the highest percentage, agreed with the statement, reflecting a more conservative stance on the issue. On other hand, a study by Shally Dabra et al.,⁷² the overall mean score of students' attitudes, derived from combining the scores of 22 items, is 2.5. This score suggests a neutral attitude on average among the students towards the subject matter related to the LGBT community. This disparity underscores the diversity of attitudes within different cultural and geographical contexts

In the study by Gurappa et al.,⁶⁸ it was found that a higher percentage of female participants (78.4%) of respondents exhibited favorable attitude scores, while for

males, the percentage was slightly lower at (69.8%). Nonetheless, no statistically significant difference was observed.

Similarly, in our study, female respondents (72.6%) demonstrated higher favorable attitudes compared to males (38.7%). Importantly, this disparity was found to be statistically significant.

Beliefs:

The findings of our study, alongside those reported by Nerli et al., reveal concerning trends regarding negative beliefs surrounding homosexuality, bisexuality, and transgenderism. In the study conducted by Nerli et al., 71(27.45%) of respondents agreed that these sexual orientations and gender identities are the result of too much freedom in the country.

Similarly, in our study, (22.8%) of respondents strongly agreed with this statement, indicating a significant proportion holding similar negative beliefs. This finding underscores the persistence of stigma and misconceptions surrounding sexual orientation and gender identity within our society.

In our study, (22.7%) of respondents agreed with the statement "GBT people's sexual orientation is unnatural," aligning with the moderate level of an agreement reflected by the mean score of 2.28 reported by a study conducted by Shally Dabra et al., ⁷²

The analysis reveals a notable contrast between the findings of the two studies regarding the statement that "LGBT people's sexual acts or gender expressions are against what the Creator or God intended."

In the study by Shally Dabra et al.,⁷² the mean score of 2.32 indicates a moderate level of agreement with the statement. However, in our study, the percentage of respondents agreeing with the statement is notably higher at 29.1%. This significant difference suggests a potential disparity in the intensity of agreement between the two study populations.

Comfortableness:

A study by Nerli et al., 71 revealed that the majority of students expressed discomfort in interacting with individuals from diverse sexual orientations and gender identities. Our study revealed significant levels of discomfort across various groups. For instance, 49.4% felt uncomfortable around lesbian women, while 48.4% felt uncomfortable around gay men. Similar discomfort levels were reported for bisexual women, bisexual men, female-to-male transgender/transsexual people, male-to-female transgender/transsexual people, and androgynous-looking people. Respondents who never attend show the highest percentage of comfortable (69.8%) compared to others. The data reveals a notable difference in comfort levels based on respondents' religious upbringing. Specifically, individuals from less religious households reported a higher likelihood of feeling comfortable (64.3%) compared to those from very religious backgrounds. These findings highlight a widespread

discomfort towards individuals across different sexual orientations and gender identities, emphasizing the importance of enhancing education and awareness to foster acceptance and inclusivity.

Culture:

Our study underscores the significance of religious upbringing in shaping knowledge, beliefs, and comfort levels ⁸⁰ regarding same-sex attraction, an aspect that has not been extensively evaluated in an Indian setting.

Our study found significant links between respondents' religious upbringing and their knowledge, attitudes, beliefs, and comfort levels. Those attending religious ceremonies daily showed higher rates of poor knowledge (38.7%) and negative attitudes (11.8%), while those attending less frequently reported more positive attitudes (66.3%) and greater comfort (69.8%). Interestingly, a substantial proportion (42.9%) with good knowledge had no religious upbringing, highlighting a significant association. Similarly, beliefs correlated strongly with religious background, with 51.6%) of those with positive beliefs having no religious upbringing. However, attitudes towards religious upbringing did not show a significant association.

Awareness of Same-Sex Marriage Legality in India:

In our study, a significant portion of respondents showed limited awareness regarding the legal status of same-sex marriage in India. Only 73% answered correctly, with 18% unaware and 9% incorrectly stating it as illegal. A parallel study by Ramya

Madarapu et al.,⁷⁰ demonstrated higher awareness levels, with 90%) of students accurately responding to questions about Section 377, which relates to same-sex relationships. These findings underscore the importance of enhancing public understanding and awareness of LGBTQ+ rights and legal frameworks.

The Crucial Role of Family Acceptance in LGBTQ+ Well-being

Family acceptance plays a vital role in the well-being of LGBTQ+ individuals. When family members and peers accept individuals as they are, without pressure to conform to societal norms, it bolsters their confidence in their sexual orientation. In the past, non-normative sexual preferences were often viewed as psychological disorders, leading to a perceived need for treatment. However, acceptance from immediate family and relatives helps dispel such notions, empowering individuals to embrace their identity openly.⁷²

While this aspect has been underexplored in many studies, our research addresses the importance of family support. Findings reveal that 39.2% of respondents lack supportive parents, highlighting the need for greater familial acceptance. Nonetheless, a significant majority (66.4%) enjoy supportive familial environments, which is encouraging for LGBTQ+ well-being.

SUMMARY

This is a cross-sectional study conducted among college students aged 18 years and above in Vijayapura from January 2023 to December 2023. A total of 984 students from the selected colleges were interviewed using a semi-structured questionnaire to assess socio-demographic characteristics, cultural practices, and the Riddles Scale, a psychometric tool measuring tolerance toward teaching about sexual orientation discrimination. Additionally, the Survey on California State University, Northridge (CSUN) questionnaire, comprising 13 domains on beliefs, attitudes, and practices, was administered.

Colleges were selected using simple random sampling by a lottery method from a comprehensive list and further stratified based on academic disciplines such as arts and science, architecture, engineering, and medical studies. Within each stratum, the proportional size of students in each category was selected to ensure a representative sample. Participants were included based on willingness to participate, employing a random sampling method. Students absent during data collection were not included in the study.

• The sociodemographic analysis of the 984 study participants revealed a majority of females (61.8%). Hindus constituted the majority religious group (87.30%), followed by Muslims (6.60%), Christians (3.50%), and Jain/Buddhist's (2.20%). Nuclear families were prevalent (76.6%), and the majority resided in

urban areas (76.2%). Fathers, mostly degree holders (67.9%), were commonly professionals (21.9%) or businessmen (30.0%), while mothers were predominantly housewives (67.1%), with 50.5%) degree holders. Participants were mainly from Medical (44.2%) or Engineering (42.1%) backgrounds, with Architecture at 8.6%). Socioeconomic status varied, with the upper-middle class being the largest (58.3%), followed by the lower-middle class (25.9%), and smaller proportions in the upper class (9.7%), middle class (2.9%), and lower class (3.2%) based on the modified BG Prasad Classification

- The study revealed varying levels of religious engagement among participants, regarding attitudes toward LGBTI individuals, 264 respondents believed their religion/spirituality supports them, while 389 expressed uncertainties. Similarly, 193 participants perceived acceptance and support for LGBTI individuals from their religious leaders, though 389 indicated that such discussions were rare. Interestingly, a mere 126 participants disagreed with being raised in a religious home, contrasting with the 559 who affirmed this upbringing, with 299 strongly agreeing.
- In the evaluation of knowledge, a notable proportion of respondents, comprising 358 (36.4%) individuals had poor knowledge, while only 242 (24.6%) individuals exhibited good knowledge. However, concerning attitudes, a substantial majority, totaling 587(59.7%) individuals, held positive attitudes. Conversely, only a small minority, consisting of 34 (3.5%) individuals,

- displayed negative attitudes. In addition, 35.9%) of participants had poor beliefs, 28.2%) held moderate beliefs, and 36.0%) had good beliefs.
- In our study, several variables displayed statistically significant associations with different aspects of respondents' attitudes, knowledge levels, and belief systems.
- a. Specifically, gender, religion, type of family, residence, fathers' and mothers' literacy, fathers' and mothers' occupation, professional background, socioeconomic status, and cultural practices (specifically, frequency of attending religious/spiritual ceremonies) were found to exhibit a statistically significant association with knowledge levels among respondents.
- b. Similarly, gender, religion, type of family, mother's literacy, father's occupation, professional background, socioeconomic status, and cultural practices (specifically, frequency of attending religious/spiritual ceremonies) were found to have a statistically significant association with attitude among respondents.
- c. Variables such as gender, religion, type of family, residence, fathers' and mothers' literacy, fathers' and mothers' occupation, professional background, and socioeconomic status, were found to exhibit a statistically significant association with beliefs levels among respondents.
- The study also revealed interesting associations between knowledge, attitudes, and beliefs among participants. Among those with good knowledge scores, a significant proportion (42.7%) also exhibited good beliefs. Conversely, participants with negative attitudes were more likely to have poor beliefs

(4.8%). Conversely, individuals with positive attitudes showed a strong prevalence of good beliefs (88.1%). These findings suggest a potential link between knowledge, attitudes, and beliefs, highlighting the importance of addressing all three aspects in interventions aimed at promoting understanding and acceptance.

In summary, the data indicates a clear trend where increased knowledge levels tend to coincide with positive attitudes and beliefs. Conversely, lower levels of knowledge frequently align with less positive beliefs, although they do not consistently correlate with negative attitudes.

Based on our study, we recommend integrating LGBT-related topics across various college curricula to foster a more inclusive learning environment and challenge heteronormative assumptions. Additionally, launching educational campaigns in schools will increase understanding and acceptance of sexual orientation and gender identity diversity, dispelling myths and misconceptions. Advocating for the enforcement of anti-discrimination laws is essential to safeguard LGBT rights in various sectors

Limitations include the potential for socially acceptable responses biasing data due to the sensitive nature of the topic and the cross-sectional design's limitation in establishing causal relationships between variables and knowledge, attitudes, and beliefs towards the LGBT community.

CONCLUSION

The LGBT community faces a myriad of challenges, including discrimination, stigma, and exclusion, simply because of their sexual orientation or gender identity. In this context, understanding college students' knowledge, attitudes, and beliefs is crucial for addressing these issues and fostering a more inclusive society.

The data revealed a pattern where higher levels of knowledge are associated with more positive attitudes and beliefs towards LGBT individuals. Conversely, lower levels of knowledge often correlated with less favorable beliefs, though not everyone exhibited negative attitudes.

A significant portion of respondents demonstrates an inadequate understanding of LGBT-related issues, emphasizing the urgent need for comprehensive education and awareness initiatives to bridge the knowledge gap and dispel misconceptions surrounding sexual orientation and gender identity.

However, addressing the lingering negative perceptions rooted in cultural and religious biases remains crucial to foster a truly tolerant and supportive society. The study also underscores the importance of creating inclusive and respectful environments for diverse LGBT identities, addressing attitudinal barriers to ensure everyone feels accepted and valued.

RECOMMENDATIONS

- The inclusion of LGBT-related topics in college curricula across various disciplines.
 It can help foster a more inclusive learning environment and challenge heteronormative assumptions.
- Launching educational campaigns in educational institutions to increase
 understanding and acceptance of sexual orientation and gender identity diversity and
 to dispel myths and misconceptions.
- 3. Advocate for the enforcement of anti-discrimination laws in various sectors to safeguard the rights of LGBT individuals.
- 4. Developing tailored mental health services to tackle the unique obstacles encountered by LGBTQ+ individuals. including discrimination and minority stress.
- Foster support networks and advocacy groups to empower LGBT individuals and promote social inclusion through collaboration between organizations and policymakers.
- 6. Support research initiatives to understand health disparities among LGBT populations and policy decisions.
- 7. Provide training and professional development opportunities for educators and staff to effectively support LGBT students and create inclusive spaces within educational institutions.

These efforts aim to create a more inclusive society where everyone, regardless of sexual orientation or gender identity, can access equitable healthcare and opportunities for well-being.

STRENGTHS OF THE STUDY

- 1. Employed validated questionnaires such as RIDDLES and CSUN, adapted to the local language, ensuring high sensitivity and specificity in assessing knowledge, attitudes, and beliefs related to the LGBT community.
- 2. Our study comprehensively explored various domains, including socio-demographic details, cultural practices, level of comfortableness, and parental support, providing a holistic understanding beyond the traditional assessment of knowledge, attitudes, and beliefs (KAB).

LIMITATIONS OF THE STUDY

- 1. Due to the sensitive nature of the topic, participants may have felt inclined to provide socially acceptable responses rather than expressing their true attitudes and beliefs, potentially biasing the data.
- 2. The cross-sectional nature of the study restricts our capacity to determine causality between independent variables and knowledge, attitudes, and beliefs (KAB) towards the LGBT community, as it does not provide the temporal sequence necessary to determine causal relationships.

REFERENCES

- 1. Das, S. (2021). LGBT Movement in India: The Journey towards an Inclusive Society. *Indian JL & Just*, 12.
- Times Of India. Reconnect with the Preamble [Internet]. Times Of India. 2020 [cited 2024 Jun 26]. Available from:
 https://timesofindia.indiatimes.com/india/reconnect-with-the-preamble/articleshow/73662094.cms
- 3. The Editors of Encyclopedia Britannica. (2024). lesbianism. In *Encyclopedia Britannica*.
- 4. Gay male sexuality [Internet]. Gov.au. [cited 2024 Jun 26]. Available from: https://www.betterhealth.vic.gov.au/health/healthyliving/gay-male-sexuality
- 5. Apa.org. [cited 2024 Jun 26]. Available from: https://www.apa.org/pi/lgbt/resources/bisexual
- 6. NCI dictionary of Cancer Terms [Internet]. Cancer.gov. 2011 [cited 2024 Jun 26]. Available from: https://www.cancer.gov/publications/dictionaries/cancer-terms/def/transgender
- 7. Leonard J. Intersex: Definition, terminology, and identities [Internet]. Medicalnewstoday.com. 2021 [cited 2024 Jun 26]. Available from: https://www.medicalnewstoday.com/articles/intersex
- 8. whatsup University, Mondal S. LGBTQIA+ and their situation in India [Internet]. Times of India Blog. 2022 [cited 2024 Jun 26]. Available from:

 https://timesofindia.indiatimes.com/readersblog/xpresblogs/lgbtqia-and-their-situation-in-india-44668/
- 9. Sharma, R. (2021). Rights of LGBTQ in India and the Struggle for Societal Acceptance. *JL Mgmt. & Human*, 4.
- 10. Samelius L, Wagberg E. Sexual orientation and gender identity issues in development: A study of policy and administration.
- 11.TransGender/Others Census 2011 India [Internet]. Census2011.co.in. [cited 2024 Jun 26]. Available from: https://www.census2011.co.in/transgender.php
- **12.**Ipsos.com. [cited 2024 Jun 26]. Available from: https://www.ipsos.com/sites/default/files/ct/news/documents/2021-06/lgbt-pride-2021-global-survey-ipsos.pdf

- **13.**Sears B, Mallory C. Documented evidence of employment discrimination & its effects on LGBT people.
- **14.**Pizer JC, Sears B, Mallory C, Hunter ND. Evidence of persistent and pervasive workplace discrimination against LGBT people: The need for federal legislation prohibiting discrimination and providing for equal employment benefits. Loy LAL Rev. 2011;45.
- **15.**Rosario M, Schrimshaw EW, Hunter J. Risk factors for homelessness among lesbian, gay, and bisexual youths: A developmental milestone approach. Children and youth services review. 2012 Jan 1;34(1):186-93.
- **16.**Umrao R. Gender Identity of LGBT and Their Position in India. Supremo Amicus. 2019;10:204.
- **17.**Sharma R. Rights of LGBTQ in India and the Struggle for Societal Acceptance. Issue 3 Int'l JL Mgmt. & Human.. 2021;4:18.
- **18.**Kaniuka A, Pugh KC, Jordan M, Brooks B, Dodd J, Mann AK, Williams SL, Hirsch JK. Stigma and suicide risk among the LGBTQ population: Are anxiety and depression to blame and can connectedness to the LGBTQ community help?. Journal of Gay & Lesbian Mental Health. 2019 Apr 3;23(2):205-20.
- **19.**Su D, Irwin JA, Fisher C, Ramos A, Kelley M, Mendoza DA, Coleman JD. Mental health disparities within the LGBT population: A comparison between transgender and nontransgender individuals. Transgender health. 2016 Jan 1;1(1):12-20.
- **20.**Gaur PS, Saha S, Goel A, Ovseiko P, Aggarwal S, Agarwal V, Haq AU, Danda D, Hartle A, Sandhu NK, Gupta L. Mental healthcare for young and adolescent LGBTQ+ individuals in the Indian subcontinent. Frontiers in psychology. 2023 Jan 20;14:52.
- **21.**Over half of LGBTQI students in Europe bullied in school, says UNESCO report [Internet]. www.unesco.org. 2021 [cited 2023 Jun 6 Available from: https://www.unesco.org/en/articles/over-half-lgbtqi-students-europe-bullied-school-says-unesco-report
- **22.**Goodboy AK, Martin MM. LGBT bullying in school: perspectives on prevention. Communication Education. 2018 Oct 2;67(4):513-20.
- **23.**Lee J. Too cruel for school: LGBT bullying, noncognitive skill development, and the educational rights of students. Harv. CR-CLL Rev.. 2014;49:261.
- **24.** Abraham S, Saju A. Cyber bullying in the LGBTQ and delineating indian government's role for LGBTQ in the cyberspace.
- 25.Glaad.org. [cited 2024 Jun 26]. Available from: https://www.glaad.org/blog/indias-census-counts-transgender-population-first-time

- 26. Wikipedia contributors. LGBT [Internet]. Wikipedia, The Free Encyclopedia. 2024. Available from:
 - https://en.wikipedia.org/w/index.php?title=LGBT&oldid=1230842320
- 27. Collegiatetimes.com. [cited 2024 Jun 26]. Available from: <a href="http://www.collegiatetimes.com/opinion/gsm-acronym-better-than-lgbt-alphabet-soup/article_f7a325a4-5acd-11e4-bf0d-001a4bcf6878.html#:~:text=Therefore%)2C%)20I%)20propose%)20everyone%) 20start
- 28. Alexander J, Yescavage K. Bisexuality and transgenderism: InterSEXions of the others. Journal of Bisexuality. 2004 Apr 12;3(3-4):1-23.
- 29.Our history [Internet]. GLBT Historical Society. [cited 2024 Jun 26]. Available from: https://www.glbthistory.org/timeline
- 30. Shankle M. The Handbook of Lesbian, Gay, Bisexual, and Transgender Public Health. Routledge; 2013.
- **31.**Washingtonpost.com. [cited 2024 Jun 26]. Available from: https://www.washingtonpost.com/news/arts-and-entertainment/wp/2014/05/23/civilities-what-does-the-acronym-lgbtq-stand-for/
- **32.**Samelius L, Wagberg E. Sexual orientation and gender identity issues in development: A study of policy and administration.
- **33.**Nagarajan R. First count of third gender in census: 4.9 lakh [Internet]. Times Of India. 2014 [cited 2024 Jun 26]. Available from: https://timesofindia.indiatimes.com/india/first-count-of-third-gender-in-census-4-9-lakh/articleshow/35741613.cms
- **34.**Eraly A. The Age of Wrath: A History of the Delhi Sultanate. Penguin UK; 2015 Apr 1.
- 35.Baillie NBE. A digest of Moohummudan law on the subjects to which it is usually applied by British courts of justice in India. London, England: Smith, Elder
- 36. Vanover T. Sex, sign, subversion: Symbolist art and male homosexuality in 19th-century Europe. Arts [Internet]. 2024;13(3):103. Available from: http://dx.doi.org/10.3390/arts13030103
- 37.Penrose W. Hidden in History: Female Homoeroticism and Women of a "Third Nature" in the South Asian Past. Journal of the History of Sexuality. 2001;10(1):3–39.
- 38.Dutta PK, India Today Web Desk. Homosexuality in ancient India: 10 instances [Internet]. India Today. 2018 [cited 2024 Jun 26]. Available from: https://www.indiatoday.in/india/story/10-instances-of-homosexuality-among-lgbts-in-ancient-india-1281446-2018-07-10

- 39. Ankit Srivastava, Dr. Vivek Kumar. SECTION 377 AND LGBT ACTIVISM IN INDIA. International Journal of Research and Analytical Reviews. 2019;6(2):30–4.
- 40. Narayan S. Historical, Cultural and Socio-Legal Analysis of LGBTs in India.
- 41. Justice Palok Basu. Law relating to protection of human rights: under the indian constitution and allied laws. Allahabad: Modern Law Publications; 2002.
- 42. Jangir SK. Reservation policy and Indian constitution in India. American International Journal of Research in Humanities, Arts and Social Sciences. 2013;3(1):126-8.
- 43. Rai D. Right to equality: Article 16, 17 and 18 of the Indian constitution [Internet]. iPleaders. 2024 [cited 2024 Jun 26]. Available from: https://blog.ipleaders.in/right-to-equality-article-16-17-18/
- 44.Subhan J. Emerging Rights Under Article 19 (1)(a) of the Constitution of India. Available at SSRN 2145117. 2010 Mar 29.

 Jani N. Article 21 of constitution of India and right to livelihood. Voice of Research. 2013;2:61–6.
- 45.Jani N. Article 21 of the constitution of India and right to livelihood. Voice of Research. 2013;2:61–6.
- 46.Suresh Kumar Kaushal vs. Naz Foundation: A critical analysis [Internet]. Academike. Laxmikant Bhumkar; 2014 [cited 2024 Jun 26]. Available from: https://www.lawctopus.com/academike/suresh-kumar-koushal-vs-naz-foundation-critical-analysis/
- 47. Mahapatra D. Supreme Court makes homosexuality a crime again [Internet]. Times Of India. 2013 [cited 2024 Jun 26]. Available from: https://timesofindia.indiatimes.com/india/supreme-court-makes-homosexuality-a-crime-again/articleshow/27230690.cms
- 48.Guide on the Rights of Transgender Persons in India [Internet]. Nyaaya. 2022 [cited 2024 Jun 26]. Available from: https://nyaaya.org/resource/guide-on-the-rights-of-transgender-persons-in-india/
- 49.Mondal S. India's stand on LGBTQ [Internet]. Times of India Blog. 2021 [cited 2024 Jun 26]. Available from: https://timesofindia.indiatimes.com/readersblog/shivangi-pandey/indias-stand-on-lgbtq-34626/
- 50.BBC News. India court legalises gay sex in landmark ruling. BBC [Internet]. 2018 Sep 6 [cited 2024 Jun 26]; Available from: https://www.bbc.com/news/world-asia-india-45429664

- 51.Gettleman J, Schultz K, Raj S. India gay sex ban is struck down. 'indefensible,' court says. The New York times [Internet]. 2018 Sep 6 [cited 2024 Jun 26]; Available from: https://www.nytimes.com/2018/09/06/world/asia/india-gay-sex-377.html
- 52.Rautray S. Section 377 verdict: Section 377: SC rewrites history, homosexual behaviour no longer a crime [Internet]. The Economic Times. [cited 2024 Jun 26]. Available from: https://economictimes.indiatimes.com/news/politics-and-nation/sc-delivers-historic-verdict-section-377-gone-being-gay-no-more-a-crime-in-india/articleshow/65696771.cms
- 53.Rai D. Transgender protection and article 15 of the Constitution of India [Internet]. iPleaders. 2021 [cited 2024 Jun 26]. Available from: https://blog.ipleaders.in/transgender-protection-article-15-constitution-india/
- 54. Transgender rights Bill: A stunted understanding of gender and equality [Internet]. The Wire. [cited 2024 Jun 26]. Available from: https://thewire.in/lgbtqia/transgender-rights-bill-a-stunted-understanding-of-gender-and-equality
- 55. Transgenders and rape law: is there a need for reformation [Internet]. Vaidhalegal.com. [cited 2024 Jun 26]. Available from: https://www.vaidhalegal.com/post/transgenders-and-rape-law-is-there-a-need-for-reformation
- 56.Banerjee MS, Bhatnagar VD. The Transgender Persons (Protection of Rights) Act, 2019: Beneficial or Detrimental to the LGBTQ Community.
- 57.Dagras M. Victimization of LGBT Community in India. Available at SSRN 3866184. 2021 Jun 13.
- 58. Sankhyan A, Hussain SS. Rights Of LGBTQ In India and The Struggle for Societal Acceptance. Journal of Positive School Psychology. 2022 May 1;6(3):9903-15.
- 59.Legal Correspondent. Plea against ban on blood donation by gay, transgender persons [Internet]. The Hindu. 2021 [cited 2024 Jun 26]. Available from: https://www.thehindu.com/news/national/plea-against-ban-on-blood-donation-by-gay-transgender-persons/article33997411.ece
- 60.Chishti S. Drafting change: What the new 'progressive' intervention in Uniform Civil Code debate entails. The Indian Express [Internet]. 2017 Oct 18 [cited 2024 Jun 26]; Available from: https://indianexpress.com/article/explained/drafting-change-what-the-new-progressive-intervention-in-uniform-civil-code-debate-entails/

- 61.A new UCC for a new India? Progressive draft UCC allows for same sex marriages [Internet]. Catchnews.com. [cited 2024 Jun 26]. Available from: https://www.catchnews.com/amp/india-news/a-new-ucc-for-a-new-india-progressive-draft-ucc-allows-for-same-sex-marriages-85386.html
 - 62. Sansad TV: Perspective- Legalising Same-Sex Marriage [Internet]. INSIGHTS IAS Simplifying UPSC IAS Exam Preparation. 2022 [cited 2024 Jun 26]. Available from: https://www.insightsonindia.com/2022/12/16/sansad-tv-perspective-legalising-same-sex-marriage/
 - 63. Mandhani A. Can't marry, but same sex couples have right to live together: Uttarakhand High Court [Internet]. theprint. 2020 [cited 2024 Jun 26]. Available from: https://theprint.in/judiciary/cant-marry-but-same-sex-couples-have-right-to-live-together-uttarakhand-high-court/444706/
- 64.Schmall E, Kumar H. India's supreme court widens definition of 'family.' The New York times [Internet]. 2022 Aug 30 [cited 2024 Jun 26]; Available from: https://www.nytimes.com/2022/08/30/world/asia/india-supreme-court-same-sex.html
- 65. Wikipedia contributors. Recognition of same-sex unions in India [Internet]. Wikipedia, The Free Encyclopedia. 2024. Available from: https://en.wikipedia.org/w/index.php?title=Recognition_of_same-sex_unions_in_India&oldid=1229908730.
- 66.How same-sex marriage could become legal in India. Time [Internet]. [cited 2024 Jun 26]; Available from: https://time.com/6247937/india-same-sex-marriage-supreme-court/
- 67.TNN. Two judges can't rule on same-sex marriage: Sushil Modi [Internet]. Times Of India. 2022 [cited 2024 Jun 26]. Available from: https://timesofindia.indiatimes.com/india/two-judges-cant-rule-on-same-sex-marriage-sushil-modi/articleshow/96353745.cms
- 68.Gururaj GP, Chandrasekhar RS. Attitudes and Beliefs of Indian doctors training in rural medical tertiary college in Kolar, South India towards the LGBT community
- 69.Kar A, Mukherjee S, Ventriglio A, Bhugra D. Attitude of Indian medical students towards homosexuality. East Asian Archives of Psychiatry. 2018 Jun;28(2):59-63.
- 70.Madarapu R, Pratap KV, Padma TM, Kalyan VS, Srikanth P. Attitudes of students towards lesbian, gay, bisexual and transgender community (LGBT) in Khammam. Age. 2019;200(21):26.

- 71.Nerli LM, Shah VR, Tiwari DS, Patel VK, Vasavada DA, Sangma RD. Evaluation of Knowledge and Attitude toward LGBT Community, and the Effect of Education on Knowledge and Attitude in Medical Undergraduates. Indian Journal of Private Psychiatry. 2021 Jul 31;14(2):51-6.
- 72.Dabra, S., and Prasad, P. (2021). A Gap Analysis of the Perception of College Teachers and Students towards The LGBT community. International Transaction Journal of Engineering, Management, & Applied Sciences & Technologies, 12(4), 12A4N, 1-10. http://TUENGR.COM/V12/12A4N.pdf DOI: 10.14456/ITJEMAST.2021.77
- 73. Duhaylungsod ST, Madrid CG, Lapiz ML, Pongasi CS, Tan LM. Attitudes Toward the LGBT: A Research Paper Presented to the Faculty of the Senior High School Department Iligan City National High School. Arts Social Sci J. 2018;9(3):356.
- 74. Siva Ilango T, Karthikeyan S, Sumithra Devi S, Arumuganathan S, Usaid S, Sethumadhavan V. An online survey of education, knowledge and attitude toward homosexuality in adults. Indian J Soc Psychiatry 2020;36:344-50
- 75. Srivastava S, Singh P. Psychosocial roots of stigma of homosexuality and its impact on the lives of sexual minorities in India. Open Journal of Social Sciences. 2015;3(08):128.
- 76.Matharu K, Kravitz RL, McMahon GT, Wilson MD, Fitzgerald FT. Medical students' attitudes toward gay men. BMC Medical Education. 2012 Dec;12(1):1-7.
- 77. Andrew Parker & Dinesh Bhugra (2000) Attitudes of British medical students towards male homosexuality, Sexual and Relationship Therapy, 15:2, 141-149, DOI: 10.1080/14681990050010736
- 78. Winter S, Webster B, Cheung PK. Measuring Hong Kong undergraduate students' attitudes towards transpeople. Sex Roles. 2008 Nov;59:670-83.
- 79.Leah Kelley, Calvin L. Chou, Suzanne L. Dibble & Patricia A. Robertson (2008) A Critical Intervention in Lesbian, Gay, Bisexual, and Transgender Health: Knowledge and Attitude Outcomes Among Second-Year Medical Students, Teaching and Learning in Medicine: An International Journal, 20:3, 248-253, DOI: 10.1080/10401330802199567
- 80.Chi X, Hawk ST. Attitudes toward same-sex attraction and behavior among Chinese university students: Tendencies, correlates, and gender differences. Frontiers in psychology. 2016 Oct 13;7:1592.

Sociodemographic questionnaire:

ANNEXURE -1

QUESTIONNAIRE

To Assess the Knowledge, Attitude, And Beliefs Towards the LGBT Community Among Students of Various Professional Backgrounds in Vijayapura

(The LGBTI community is the lesbian, Gay, Bisexual, transgender, and Intersexual population.

Lesbian women: women who are emotionally and sexually attracted to other women

Gay men: men who are emotionally and sexually attracted to other men

Bisexual: Bisexual women: women who are emotionally and sexually attracted to both men and women

Bisexual men: men who are emotionally and sexually attracted to both men and women

Transgender: <u>Female to male transgender</u> (feeling born in the wrong body and should have been born male and actively changing his appearance to match his gender identity)

<u>Male-to-female transgender</u> (feeling born in the wrong body and should have been born female and actively changing her appearance to match her gender identity

Intersexual people: a person born with both male and female genital characteristics)

| bociodemographic questionnane. | |
|--------------------------------|----------------------------|
| Date: | Proforma No: |
| 1.Age: | Years |
| 2.Gender | Male Female Third Gender |
| 3.Education: | Undergraduate Postgraduate |

| 4.Socio economic class: | Upper class Upper Middle Class Middle Class Lower Middle Class Lower Class |
|-------------------------|--|
| 5.Religion: | Hindu Muslim Christian Jain/Buddhist Others |
| 6.Father's literacy: | Never attended School Primary School High school PUC/Diploma Degree and above |
| 7.Father's occupation: | Cultivation Agri Labour Non Agri labour Craft men/ Independent work Business Salaried employees Professional Retired Unemployed Others |

| 8.Mother's Literacy | Never attended School Primary School High school PUC/Diploma Degree and above |
|-----------------------|---|
| 9.Mother's Occupation | Cultivation Agri Labour Non Agri labour Craft men/ Independent work Business Salaried employees Professional Retired Housewife Others |
| 10.Type of family: | Nuclear Joint |

Questionnaire To Assess the Religiosity Among Participants:

(Please answer honestly and to the best of your knowledge. Please note that this is about your personal opinion, and there is no correct or wrong answer.)

| 11. How often do you attend a place of worship or participate in religious/spiritual ceremony? | Never 1-3 times/ month 1-3 times/week Everyday |
|--|--|
| 12. How often do you practice or follow what your church/temple/synagogue/mosque preaches or advises (e.g., observe religious practices such as meditating, fasting, dieting)? | Never 1-3 times/ month 1-3 times/week Everyday |
| 13. I was raised in a very religious household. | Strongly Agree Agree Disagree Strongly Disagree |
| 14. My religion/spirituality accepts and supports LGBT people. | Strongly Agree Agree Disagree Strongly Disagree I don't know N/A |

| 15. My church/temple/spiritual leaders seldom or never speak about LGBTI people. | Strongly Agree Agree Disagree Strongly Disagree I don't know N/A |
|--|--|
| 16. My church/temple/spiritual leaders accept and support LGBTI people. | Strongly Agree Agree Disagree Strongly Disagree I don't know N/A |

Questionnaire To Assess the Knowledge About the Origins of Sexuality and Gender among Participants:

| 17. One is born either homosexual, straight or bisexual. | Strongly Agree Agree Disagree Strongly Disagree I don't know |
|--|--|
| 18. Homosexual people can become heterosexual. | Strongly Agree Agree Disagree Strongly Disagree I don't know |

| 19. Bisexuality is a choice | Strongly Agree Agree Disagree Strongly Disagree I don't know |
|---|--|
| 20. One is born transgender. | Strongly Agree Agree Disagree Strongly Disagree I don't know |
| 21. Transgender people choose to be transgender. | Strongly Agree Agree Disagree Strongly Disagree I don't know |
| 22. Homosexual people look different from heterosexual people | Strongly Agree Agree Disagree Strongly Disagree I don't know |
| 23. Homosexuals do not make good role models for children and could do psychological harm to children with whom they interact as well as interfere with the normal sexual development of children | Strongly Agree Agree Disagree Strongly Disagree I don't know |

Questionnaire To Assess the Attitude Towards LGBTI Community among Participants:

| 24. Marriage should only be between a man and a woman. | Strongly Agree Agree Disagree Strongly Disagree |
|---|--|
| | I don't know |
| 25. There are public areas or occupations where homosexual, transgender and bisexual people should be excluded (e.g., not allowed to teach young children in public schools, to serve in the military). | Strongly Agree Agree Disagree Strongly Disagree I don't know |
| 26. LGBTI couples should have the right to adopt children. | Strongly Agree Agree Disagree Strongly Disagree I don't know |
| 27. LGBTI people should participate in reparative therapy or any other treatment available to them to fix their sexual orientation or gender identity disorder. | Strongly Disagree Neither/Unsure Strongly Agree |

| 28. We should have compassion for LGBT people. They can't be blamed for how they were born | Strongly Disagree Neither/Unsure Strongly Agree |
|--|---|
| 29. LGBTI people did not choose to be the way they are. If they could somehow, they would certainly choose to be heterosexual or identify as a traditional male or female. | Strongly Disagree Neither/Unsure Strongly Agree |
| 30. Having same sex attractions and showing nongender conforming behaviors is a phase that many people go through and most people outgrow | Strongly Disagree Neither/Unsure Strongly Agree |
| 31. LGBTI people need our support and guidance as they wrestle with the many difficult issues associated with being GLBT. | Strongly Disagree Neither/Unsure Strongly Agree |
| 32. I have no problem with LGBTI people, but see no need for them to flaunt their sexual orientation or transgender identity publicly. | Strongly Disagree Neither/Unsure Strongly Agree |

| 33. LGBTI people deserve the same rights and privileges as everybody else. | Strongly Disagree Neither/Unsure Strongly Agree |
|---|---|
| 34. Homophobia and heterosexism is wrong. Society needs to take a stand against antigay bias. | Strongly Disagree Neither/Unsure Strongly Agree |
| 35. It takes strength and courage for LGBTI people to be themselves in today's world. | Strongly Disagree Neither/Unsure Strongly Agree |
| 36. It is important for me to examine my own attitudes so that I can actively support the struggle for equality that LGBTI people have undertaken | Strongly Disagree Neither/Unsure Strongly Agree |
| 37. There is great value in our human diversity. LGBTI people are an important part of that diversity. | Strongly Disagree Neither/Unsure Strongly Agree |

| 38. It is important for me to stand up to those individuals who demonstrate homophobic attitudes. | Strongly Disagree Neither/Unsure Strongly Agree |
|---|---|
| 39. LGBTI people are an indispensable part of our society. They have contributed much to our world and there is much to be learned from their experiences. | Strongly Disagree Neither/Unsure Strongly Agree |
| 40. I would be proud to be part of an LGBTI or LGBTIALLY organization, and to openly advocate for the full and equal inclusion of GLBT people at all levels of our society. | Strongly Disagree Neither/Unsure Strongly Agree |

Questionnaire To Assess the Beliefs Towards LGBTI Community among Participants:

| 41. LGBT people's sexual acts or gender expressions are against what the | Strongly Agree Agree |
|--|---|
| Creator or God intended | Disagree Strongly Disagree I don't know |
| | |

| 42. LGBT people are unnatural. | Strongly Agree |
|--|-----------------------------|
| | Agree |
| | Disagree |
| | Strongly Disagree |
| | I don't know |
| | |
| 43. LGBT people are mentally sick or | Strongly Agree |
| never grew up to be mature | Agree |
| heterosexual men and women | Disagree |
| | Strongly Disagree |
| | I don't know |
| | |
| 44 Interceptual needle one Neture's | Strongly Agree |
| 44. Intersexual people are Nature's mistakes | Strongly Agree |
| mistakes | Agree |
| | Disagree Strong du Disagree |
| | Strongly Disagree |
| | I don't know |
| | |
| 45. Homosexuality, bisexuality and | Strongly Agree |
| transgenderism are results of too much freedom in a country that is losing its | Agree |
| | Disagree |
| traditional family values. | Strongly Disagree |
| | I don't know |
| | |
| | |

Questionnaire To Assess the Level of Comfortableness to Interact with the LGBTI People Among Participants:

(Please choose the level of comfortableness. Please answer honestly to the best of your knowledge. We are interested in your personal view and there are no correct or wrong answers to these questions.)

| 46. Lesbian women (women who are emotionally and sexually attracted to other women) | Highly Comfortable Somewhat Comfortable Neutral Somewhat Uncomfortable Very Uncomfortable N/A |
|---|---|
| 47. Gay men (men who are emotionally and sexually attracted to other men) | Highly Comfortable Somewhat Comfortable Neutral Somewhat Uncomfortable Very Uncomfortable N/A |
| 48. Bisexual women (women who are emotionally and sexually attracted to both men and women) | Highly Comfortable Somewhat Comfortable Neutral Somewhat Uncomfortable Very Uncomfortable N/A |
| 49. Bisexual men (men who are emotionally and sexually attracted to both men and women) | Highly Comfortable Somewhat Comfortable Neutral Somewhat Uncomfortable Very Uncomfortable N/A |

| 50. Female to male transgender/transsexual people (feeling born in the wrong body and should have been born male and actively changing his appearance to match his gender identity) | Highly Comfortable Somewhat Comfortable Neutral Somewhat Uncomfortable Very Uncomfortable N/A |
|---|---|
| 51. Male-to-female transgender/transsexual people (feeling born in the wrong body and should have been born female and actively changing her appearance to match her gender identity) | Highly Comfortable Somewhat Comfortable Neutral Somewhat Uncomfortable Very Uncomfortable N/A |
| 52. Intersexual people (a person born with both male and female genital characteristics, ambiguous genitalia, or sex chromosomal makeup of XXX, XYY, XXY, YY, or X) | Highly Comfortable Somewhat Comfortable Neutral Somewhat Uncomfortable Very Uncomfortable N/A |
| 53. Androgynous looking people (a person whose gender is ambiguous to you; you can't tell if the person is a he or a she) | Highly Comfortable Somewhat Comfortable Neutral Somewhat Uncomfortable Very Uncomfortable N/A |

| 54. Is same sex legal marriage in India | Agree |
|---|----------|
| | Disagree |
| | |
| | |
| | |
| | |

Questionnaire To Assess the Participants' Family and Friend's Attitude:

| 55.My family doesn't speak about LGBTI people. | Strongly Agree Agree Disagree Strongly Disagree I don't know |
|--|--|
| 56.My friends don't speak about LGBTI people. | Strongly Agree Agree Disagree Strongly Disagree I don't know |
| 57. My family accepts and supports LGBTI people. | Strongly Agree Agree Disagree Strongly Disagree I don't know |
| 58.My friends accept and support LGBTI people. | Strongly Agree Agree Disagree Strongly Disagree I don't know |

ANNEXURE -II

ETHICAL CLEARANCE CERTIFICATE





BLDE

(DEEMED TO BE UNIVERSITY)

Declared as Deemed to be University u/s 3 of UGC Act, 1956
Accredited with 'A' Grade by NAAC (Cycle-2)

The Constituent College

SHRI B. M. PATIL MEDICAL COLLEGE, HOSPITAL & RESEARCH CENTRE, VIJAYAPURA BLDE (DU)/IEC/ 696/2022-23 30/8/2022

INSTITUTIONAL ETHICAL CLEARANCE CERTIFICATE

The Ethical Committee of this University met on Friday, 26th August, 2022 at 3.30 p.m. in the Department of Pharmacology scrutinizes the Synopsis of Post Graduate Student of BLDE (DU)'s Shri B.M.Patil Medical College Hospital & Research Centre from ethical clearance point of view. After scrutiny, the following original/ corrected and revised version synopsis of the thesis/ research projects has been accorded ethical clearance.

TITLE: "TO ASSESS KNOWLEDGE ATTITUDE AND BELIEFS TOWARDS LGBT COMMUNITY AMONG STUDENTS OF VARIOUS PROFESSIONAL BACKGROUNDS IN VIJAYAPURA".

NAME OF THE STUDENT/PRINCIPAL INVESTIGATOR: DR KAVIMALAR T

NAME OF THE GUIDE: Dr. M. R. Gudadinni, Professor, Dept. of Community Medicine

Dr. Santoshkumar Jeevangi Chairperson IEC, BLDE (DU), VIJAYAPURA Chairman, Institutional Ethical Committee, BLDE (Deemed to be University)

Member Secretary
IEC, BLDE (DU),
VIJA YAPURA
MEMBER SECRETARY
Institutional Ethics Committee

Dr.Akram A

DE (Deemed to be University)

BLDE (Deemed to be University)

Following documents were placed before Ethical Committee for Scrutinization pura-586103. Karnataka

· Copy of Synopsis/Research Projects

Copy of inform consent form

Any other relevant document

Smt. Bangaramma Sajjan Campus, B. M. Patil Road (Sholapur Road), Vijayapura - 586103, Karnataka, India.

BLDE (DU): Phone: +918352-262770, Fax: +918352-26303, Website: www.bldedu.ac.in, E-mail:office@bldedu.ac.in

College: Phone: +918352-262770, Fax: +918352-263019, E-mail: bmpmc.principal@bldedu.ac.in

ANNEXURE – III

INFORMED CONSENT FORM FROM THE COLLEGE AUTHORITY

Title: To Assess the Knowledge, Attitude, And Beliefs Towards the LGBT

Community Among Students of Various Professional Backgrounds in Vijayapura

District

Purpose of Research:

I have been informed that this study will help to assess the Knowledge, Attitude, And Beliefs towards the LGBT Community Among Students in Vijayapura. The study will also explore risk factors

Procedure: I understand that this is a College-based study. In this procedure, the students will be asked a series of questions by the researcher regarding the topic.

Benefits: I understand that my student's participation in the study will help the researcher to assess the Knowledge, Attitude, And Beliefs Towards the LGBT Community Among Students in the Vijayapura district

Confidentiality: I've been told that my student's name, contact information, and answers to the questions are kept secret and will never be identified to anyone outside of the study.

Request For More Information: I understand that I can ask more questions about the study at any time to Dr. Kavimalar.T, PG at the department of Community medicine to answer my questions or concerns. I will be informed of any significant new findings

discovered during the course of the study, which might influence your continued

participation

Refusal or Withdrawal of Participation: I understand that my student's participation

is voluntary and that he/she may refuse to participate or may withdraw consent and

discontinue participation in the study at any time without prejudice. I also understand

that Dr. Kavimalar.T may terminate his/her participation in the study at any time after

she has explained the reasons for doing so.

Consent Statement: I confirm that Dr.Kavimalar.T has explained the research's

purpose, the study procedure that my Students will undergo & benefits that he/she

may experience. I have been explained all the above in detail in my language and

understand the same.

Therefore, I agree to give consent for my student's participation as a subject in this

research project.

(Signature of the Head of the Institute)

Date:

INFORMED CONSENT FORM

Title of the Topic: To Assess the Knowledge, Attitude, And Beliefs Towards the LGBT Community Among Students of Various Professional Backgrounds in Vijayapura

- **1. Purpose of Research:** I have been informed that this study will help to assess the knowledge, attitude, and beliefs towards the LGBT community among students of various professional backgrounds in Vijayapura.
- 2. Procedure: It is a Cross-sectional study. The study group will be comprised of College Students in the age group above 18 years. After your written consent and resolving any queries that you have regarding the study, the participants will be interviewed using a questionnaire. We would like to collect information regarding your socio-demographic details and personal opinion on certain Community People. You are invited to participate in the study voluntarily. We are doing this study on all the students like you, who will be enrolled.
- **3. Risk and Discomforts**: As this is a questionnaire-based interview no physical or psychological harm is involved in the study.
- **4. Benefits**: I understand that my participation in the study may not have a direct benefit to me but will be useful in assessing the knowledge, attitude, and beliefs

towards the LGBT community among students of various professional backgrounds in Vijayapura

- **5. Confidentiality:** I understand that my name, contact information, and answers to the questions are kept secret and will never be identified to anyone outside of the study.
- **6. Request for more Information:** I understand that I may ask more questions about the study at any time. The concerned researcher is available to answer my questions or concerns. I understand that I will be informed of any significant new findings discovered during the course of this study that might influence my continued participation. A copy of this consent form will be given to me to keep for careful reading.
- **7. Refusal or Withdrawal of Participation:** I understand that my participation is voluntary and that I may refuse to participate or may withdraw my consent and discontinue participation in the study at any time without prejudice. I also understand that the researcher may terminate my participation in this study at any time after she has explained the reasons for doing so.

I confirm that Dr. Kavimalar.T has explained the research's purpose, the study procedure that I will undergo & the possible discomfort and benefits that I may

experience in my own language. I have been explained all the above in detail in my language and understand the same.

Therefore, I agree to give consent to be a part of this research.

Name of the Participant:

PLAGIARISM REPORT



Similarity Report ID: oid:3618:61862298

PAPER NAME

AUTHOR

To Assess the Knowledge, Attitude, And Beliefs Towards the Lesbian, Gay, Bisexu al, and Transgender (KAVIMALAR T

WORD COUNT

CHARACTER COUNT

14918 Words

91310 Characters

PAGE COUNT

FILE SIZE

99 Pages

325.8KB

SUBMISSION DATE

REPORT DATE

Jun 22, 2024 2:02 PM GMT+5:30

Jun 22, 2024 2:04 PM GMT+5:30

5% Overall Similarity

The combined total of all matches, including overlapping sources, for each database.

• 5% Internet database

· 4% Publications database

· Crossref database

· Crossref Posted Content database

Excluded from Similarity Report

- · Submitted Works database
- · Bibliographic material

· Quoted material

- · Cited material
- · Small Matches (Less then 14 words)

Summary

ANNEXURE V: Gantt chart

| In Years | 2022 | | | | | | 2023 | | | | | | | | | | | | 2024 | | | | | | | | | |
|---|------|------|-----|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Activity | Jun | July | Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Topic selection | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Synopsis preparation and submission | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Review of literature | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Preparation of Proforma | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Data collection | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Data analysis | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Dissertation writing | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Dissertation submission | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

ANNEXURE V

PHOTOGRAPHS

