

UNDERSTANDING OF SEX AND SEXUALITY AMONG COLLEGE STUDENTS IN  
MIZORAM

BY

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Submitted

In partial fulfillment of the requirement of the Degree of Doctor of Philosophy in Social  
Work of Mizoram University, Aizawl

## ***SUPERVISOR'S CERTIFICATE***

This is to certify that the thesis 'Understanding of Sex and Sexuality among College Students in Mizoram' submitted by Zothankimi Ralte for the award of Doctor of Philosophy in Social Work is carried out under my guidance and incorporates the students' bonafide *research* and that these have not been submitted for award of any degree in this or any other University or Institute of learning.

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I, Zothankimi Ralte, hereby declare that the subject matter of this thesis is the record of work done by me, that the contents of this thesis did not form basis of the award of any previous degree to me or to the best of my knowledge to anybody else, and that the thesis has not been submitted by me for any research degree in any other Universities/Institute.

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## TABLE OF CONTENTS

Chapter		Page No.
	<i>Supervisor's Certificate</i>	i
	<b>Candidate's Declaration</b>	ii
	<b>Acknowledgement</b>	iii
	<b>Table of Contents</b>	iv-v
	<b>List of figures/ abbreviations/ tables</b>	vi-ix
<b>I</b>	<b>INTRODUCTION</b>	<b>1-18</b>
	1.1 Definition and Concept	
	1.2 Historical Perspective on Sex and Sexuality	
	1.3 National Perspective on Sex and Sexuality	
	1.4 Regional Perspective on Sex and Sexuality	
	1.5 Present Scenario	
	1.6 Statement of the Problem	
	1.7 Objectives of the Study	
	1.8 Chapter Scheme	
<b>II</b>	<b>REVIEW OF LITERATURE</b>	<b>19-59</b>
	2.1 Knowledge and Awareness on Sex and Sexuality	
	2.2 Sexual Behavior	
	2.3 Attitudes related to Sex and Sexuality	
	2.4 Parent Child Communication and Sex and Sexuality	
	2.5 Peer Group Relationship and Sex and Sexuality	
	2.6 Mass Media Exposure and Sex and Sexuality	
	2.7 Religiosity and Sex and Sexuality	
	2.8 Substance Use and Sex and Sexuality	
	2.9 Analysis of Review of Literature	
	2.10 Research Gaps	

<b>III</b>	<b>METHODOLOGY</b>	<b>60-64</b>
	3.1 Research Design	
	3.2 Sources of Data Collection	
	3.3 Sampling Procedure	
	3.4 Tools of Data Collection	
	3.5 Data Analysis	
	3.6 Ethical Consideration	
<b>IV</b>	<b>RESULTS AND DISCUSSIONS</b>	<b>65-120</b>
	4.1 Socio Demographic Profile	
	4.2 Respondents and parents, peers, mass media, religion and substance use	
	4.3 Sex and Sexuality	
	4.4 Relationship among various dimensions	
	4.5 Consequences of sexual behavior	
	4.6 Case Vignettes	
	4.6.1 Analysis of the cases	
	4.7 Focus Group Discussion	
	4.7.1 Analysis of discussions	
	4.8 Key Informant Interview with health care professionals	
	4.8.1 Analysis of the interviews	
<b>V</b>	<b>CONCLUSION</b>	<b>121-130</b>
	5.1 Major Findings	
	5.2 Suggestions	
	<b>Appendices</b>	<b>x-xiv</b>
	<b>Bibliography</b>	<b>xv-xxvi</b>
	<b>Brief Bio Data of the Candidate</b>	<b>xxvii-xxix</b>
	<i>Particulars of the Candidate</i>	<b>xxx</b>

## **List of Figures**

Figure 1      Map of Mizoram

## **List of Abbreviations**

AIDS	Acquired Immunodeficiency Syndrome
CSE	Comprehensive Sex Education
FGD	Focus Group Discussion
HIV	Human Immunodeficiency Virus
IUD	Intrauterine Device
LGBT	Lesbian, Gay, Bisexual and Transgender
MBSE	Mizoram Board of School education
MHIP	Mizo Hmeichhe Insuihkhawm Pawl
MIRSAC	Mizoram Remote Sensing Application Centre
NGOs	Non Government Organizations
PPTCTC	Prevention of Parent to Child Transmission Centre
PrEP	Pre-Exposure Prophylaxis
SEM	Sexually Explicit Material
STD	Sexually Transmitted Disease
STI	Sexually Transmitted Infection
URL	Uniform Resource Locator
WHO	World Health Organization
YMA	Young Mizo Association

## **List of Tables**

Table 1	Reliability of Scales Constructed
Table 2	Gender
Table 3	Age
Table 4	Marital Status

Table 5	Information about children
Table 6	Religion
Table 7	Denomination
Table 8	Course
Table 9	Type of Family
Table 10	Form of Family
Table 11	Primary Occupation of Family
Table 12	Secondary Source of Income
Table 13	Monthly Income of Family
Table 14	Socio-Economic Category
Table 15	Parent Child Communication
Table 16	Peer Group Relationship
Table 17	Mass Media Exposure
Table 18	Religiosity
Table 19	Substance Use
Table 20	Gender Differences (t-test)
Table 21	Sexual Orientation
Table 22	Attitude towards LGBT Community
Table 23	Levels of attitude towards LGBT Community
Table 24	Knowledge and Awareness
Table 25	Levels of Knowledge and Awareness
Table 26	Sexual Behavior of Respondents
Table 27	Mean Frequency of Sexual Behavior
Table 28	Levels of Sexual Behavior
Table 29	Attitude towards Sexual Behavior
Table 30	Levels of Attitude towards Sexual Behavior
Table 31	Gender Differences across Dimension of Sex and Sexuality
Table 32	Correlation of various dimensions of sex and sexuality
Table 33	Correlation between dependent and independent variables
Table 34	Consequences of Sexual Behavior
Table 35	Suggestions

Over half of the world's population is under 25 years old and for building a more just and unbiased world, we need to invest in these young people by involving and engaging them as partners in the process of development. It is a reality that the taboo on youth sexuality is one of the key forces driving the AIDS epidemic as well as a contributor to high rates of teenage pregnancy and maternal mortality (IPPF, 2009). Further, many people in the world are stigmatized and discriminated against because of their actual or perceived sexual orientation or gender identity. Among other inequalities, lesbian, gay and transgender people are significantly more likely than the general population to be targeted for violence and harassment, to contract HIV, and to be at risk for mental health concerns such as depression and suicide (WHO, 2015). Today's adolescents and youth, which accounts for 1.8 billion strong of the world's total population, consisting a quarter of the global population are growing up in a world with political, social, economic and environmental transformation. They have high concerns and expectations for themselves as well as the societies that they live in, challenging the governments and the global community to meet their needs. In the midst of all these pressures which transcend all borders, young people today are shaping social, political and economic development, challenging norms which are biased, discriminatory and prejudiced, while laying and building a foundation for a better future (United Nations Fund of Population Activities, 2019).

World Health Organization (2015) states that "sexual health today is widely understood as a state of physical, emotional, mental and social wellbeing in relation to sexuality. It encompasses not only certain aspects of reproduction but also, the possibility of having pleasurable and safe sexual experiences, free of coercion, discrimination and violence." Indeed, it has become clear that human sexuality includes many different forms of behaviour and expression, and that the recognition of the diversity of sexual behaviour and expression contributes to people's overall sense of well-being and health. Within this context, it is important to understand sexual health as multi-dimensional which not only accommodates physical wellbeing of an individual but can significantly contribute or reduce the overall development of a person especially among the youth.

Although we have seen various interventions undertaken by both Government and Non-Governmental Organizations (NGOs) to cater to the need of improving adolescents' and young adults' sexual health, we still see the need for encouragement, awareness and promotion of their sexual health, even just from a physical perspective, as youth are still among the most vulnerable group who are contracting and transmitting Sexually Transmitted Infections (STIs), Sexually Transmitted Diseases (STDs) including Human Immunodeficiency Virus (HIV), becoming pregnant, going through abortion and engaging in sexual risk behaviors. It is important that we have intervention plans in place which will be well received by the youth population so that it can address these issues effectively. The United Nations have in fact taken into account that every young person will one day have to make life-changing decisions about their sexual health but yet researches have shown that majority of them lack essential knowledge to make responsible decisions which leaves them vulnerable to various sexually transmitted infections, unplanned pregnancy and also to coercion, and hence, they have developed a model for Comprehensive Sex Education (CSE) to educate young people in these aspects. This CSE are based on human rights principles, gender equality and empowerment of young people which will enable them to protect their health, well-being and dignity (United Nations Population Fund, 2014).

According to WHO (2011), there is evidence about the importance of sexuality education in terms of preventing unintended pregnancy and pregnancy at an early age. The Organization assembled an international consultation on this topic that concluded that Comprehensive Sex Education should be expanded in order to provide accurate information and education about safe sex to adolescents. Sexuality education offers protection against unintended pregnancy and prevents Sexually Transmitted Infections (STIs), including HIV and AIDS and can also help young people to develop communication skills, as well as enhancing their self-esteem and capacities in making decisions in maintaining positive and reasonable relationships.

According to Joshi (2004), human behavior is very complex and when it pertains to sex and sexuality, its complexity increases manifold. But sexual development is an essential part of human growth and development and all humans have been curious and

inquisitive about it. The ignorance or false and inaccurate information about sex and sexuality has been adversely affecting not only individuals but also the entire process of social development. Also sexual behavior encompasses a vast range of actions, some of which are fairly common and shared by a great many people, while others are less universally accepted and enjoyed. The research on sexual behavior is very much limited by the understanding of what sexual behaviors people actually carry out and the extent of truth that can be drawn from very personal questions (Myers & Milner, 2007).

Human sex and sexuality plays a major role in everyone's life regardless of whether we are young or old, man or woman because it is an integral part of what we do and who we are. Throughout time, it has always been a vital part of the human existence for all civilizations and societies. Sex and sexuality has always been a sensitive subject throughout the ages. We can see tremendous changes in the perception and attitudes towards sex and sexuality through the decades because what was once considered obscene and abnormal is now accepted by the general population worldwide. People have become more expressive in terms of their sexual activities and other related behaviors with public display of affection found everywhere with the turn of a head. It is also a known fact that same-sex relationship is gaining acceptance as compared to years ago where they would be forced to go through intensive psycho-therapy like electric shock etc., torture and even put into prison. In fact, many countries have legalized same-sex marriage with Netherlands being the first in 2001.

### **1.1 Definition and Concept**

The term 'Sex' can refer to two things. Firstly, it refers to the biological characteristics distinguishing male and female in terms of their differences in chromosomes, anatomy, hormones, reproductive systems, and other physiological components (Lindsey, 2011). Human beings have 46 chromosomes out of which twenty-two pairs are called autosomes and they determine the development of most of our body structures and characteristics. The remaining twenty third pair consists of the sex chromosomes which decide the individual's sex and other sex-linked characteristics (Mangal, 2001). In females this sex chromosomes consist of two similar chromosomes X and X, hence female sex chromosome is represented as XX, while in male it consists of

two different chromosomes X and Y, hence it is represented as XY. Therefore, if the male X-type sperm infuses with the female ovum, then the baby will have XX sex chromosome making it a female; if Y-type sperm infuses with the female ovum, then the baby will have XY sex chromosome making it a male (MBSE, 2016) .

Secondly, the term also refers to lovemaking or genital contact between two people, as in “having sex”. For centuries, societies all over the world agree to the understanding that sex means just one thing: sexual intercourse within the context of marriage for the purpose of procreation. Pursuing any other form of genital pleasure was not only viewed as sinful, but it could get you thrown in jail or, in some cases, puts you to death. In contrast to this view, the concept of sex in modern times has been significantly expanded, and sexual activity has become quite complex. For instance, “sex” now refers to a wide range of behaviors and sexual activity today is no longer legally or morally restricted to traditional heterosexual marriage either; sex occurs between unmarried romantic partners, “friends with benefits,” and people of varying sexual orientations. Furthermore, sexual acts can serve a wide range of purposes, with procreation being just one possibility. People now see sex as a form of recreation, a way to express love or get closer to a partner, a way to celebrate special occasions, and (for some) a way to make money (Lehmiller, 2014).

Sexual motivation is social because it involves other people and provides, according to many, the basis for social groupings in higher animals like human beings etc. and sexual behavior is highly regulated by social pressures and religious beliefs. Sex is also psychological in the sense that it is an important part of our emotional lives; it can provide intense pleasure, but it can also give us agony and involve us in many difficult decisions (Morgan & King, 1993).

Sexuality most importantly involves the subjective desire to experience sexual arousal and possibly to engage in overt expression of that desire. In many instances the sexual desire involves the motivation to engage in sexual contact with another human being (Hill, 2008). According to King (1999) Sexuality is defined as, “all the sexual attitudes, feelings, and behaviors associated with being human. The term does not refer specifically for erotic response or to sexual acts, but rather to a dimension of one’s

personality.” WHO (2015) also defined sexuality as, “Sexuality is a central aspect of being human throughout life; it encompasses sex, gender identities and roles, sexual orientation, eroticism, pleasure, intimacy and reproduction. Sexuality is experienced and expressed in thoughts, fantasies, desires, beliefs, attitudes, values, behaviors, practices, roles and relationships. While sexuality can include all of these dimensions, not all of them are always experienced or expressed. Sexuality is influenced by the interaction of biological, psychological, social, economic, political, cultural, legal, historical, religious and spiritual factors.” Sexuality, therefore, provides a broader and more complete understanding of human nature, and to fully comprehend the meaning of human sexuality, we must look closely at all human conditions and dissolve disciplinary boundaries (Kelly, 1996). We can also say that human sexuality is how people experience and express themselves as sexual beings and the choices they made for expressing their sexual preferences may be termed as sexual orientation. This orientation can be categorized into different types; (i) heterosexuality, which is the sexual attraction to another person of the opposite sex (ii) homosexuality, is the sexual attraction to the same sex (iii) bisexuality, sexual attraction to both sexes, (iv) transsexuality, which is the desire to live and be accepted as a member of the sex that they are not born with, (v) pansexuality, which is romantic or emotional attraction towards people regardless of their sex or gender identity, and (vi) asexuality, which is attraction to no sexes in a sexual way.

There have been arguments by researchers where some stated that sexual orientation is determined by genetics whereas others imply that it is influence by environment hence it is socially constructed, leading to the nature-nurture debate; ‘nature’ as those behavioral traits that belong to a person which are inherently attributed and/or innate characteristics such as instincts and drives; and ‘nurture’ as the conditioning environmental factors, influences, and external stimuli that influence behavior, emotions and thinking.

According to Potki et al. (2017) there are three major factors that affect human sexuality which are as follows; firstly, human sexuality is affected by biological factors which includes feelings, beliefs, and perception that an individual possess by which they shape and adjust their behavior. The understanding of an individual as a sexual being is

shaped before reaching adolescent period and years before engaging in sexual behavior which becomes apparent once an individual reaches adolescence. Secondly, there is the physiological factor which is mainly concern with body image and includes the understanding, attitude and perception to one's own appearance. There is also a strong relationship between body image and subjective well-being especially in the Western culture. While positive perception and attitude towards body image promotes sexual confidence and behavior, dissatisfaction of one's own body results in anxiety and worry which hinders sexual behaviors of individuals and interferes with their quality of sexual experiences. Lastly, sexuality is also influence by social factors which includes parents, peers and media. Families being the first social institution, parents are usually the first people to teach young children about sexual identity and inculcate love, kindness and humility. Peers also shape an individual's sexuality because once children reached an age where they start having interactions outside of their homes, their values, principles and behaviors are significantly influenced by their peers. Media is also a social factor that affects human sexuality because when an individual faces repeated messages through media which maybe verbal or non-verbal, it has great impact in shaping his or her values and attitudes about love, dating, sexual relationships, and the like which may result in stereotyping.

There is a common understanding that once individuals hit puberty they become more aware about their sexuality although Psychologist like Sigmund Freud has argued that sexuality and sexual behavior develop during the early years prior to puberty. Teenagers, in particular, have a lot of questions about sex and sexuality which they are embarrassed about. These raising issues need to be dealt with by their parents, teachers, other significant adults or healthcare providers so that accurate information is handed to them. Sexual development is an important part of health, similar to other measures of physical growth, such as height and weight. Sexual behavior, which is related to sexual development, has important health implications for everyone, and especially for teens. Therefore, it is particularly important that teens be well informed about all aspects of sex and sexual health.

## **1.2 Historical Perspective on Sex and Sexuality**

In Plato's Symposium, Aristophanes, who was a comic playwright of ancient Athens, talked about the origins of humans as sexual beings. He said that humans descend from creatures with two faces, four legs and four arms, with two identical genitals. These creatures were divided into three genders where the first group had two men genitals, the second group had two women genitals, and the third group had one of each which he named hermaphrodites. The creatures after time became egoistical, arrogant and disrespectful, and to punish them Zeus split them into two separate beings. They started to die from hunger and loneliness because these creatures like to cling to one another. Zeus then took pity on them and made their genitals in such a way that they could have sexual relations and remain together though being physically separated (Mottier, 2008). This was one of the first explanations as to why people are being attracted to the opposite sex or to the same sex because hermaphrodites have sexual attachment to their opposite sex, while the others have attachment to their own sex. Aristophanes' speech became a famous myth for the origin of human sexuality, and ancient Greeks came to believe that some individuals desire only other human being of their own sex. However, many classicists disagree with this, pointing out that it is most outrageous and absurd (Mottier, 2008). Overtime, Aristophanes' ideology on human sex and sexuality was disregarded and its conceptualization was shifted giving it a cultural meaning which was yet still very different from the understanding of sex and sexuality today.

The Greek society was based on the political and social rule set by small elite of adult male citizens, women and children, therefore, occupy a very subordinate position where they have no political or social rights. In fact, Athenian women were treated as minors where they were always under the supervision and guardianship of a male relative and sexual culture at the time was solely focused and organized only for the pleasure of men. The understanding of sex was exclusively penetrative and other expressions of sexual activities were not considered as part of the domain of sexual behaviour. Greek men were encouraged to practice penetrative sex as a show for female domination and control (Mottier, 2008). In latter part of the Greek era, there was a sexual paradigm shift where physical pleasure took the backseat and a strong spiritual development was

introduced. The basis for this huge shift was *dualism* which was the belief that body and soul are two separate beings. This gave rise to the philosophy that wisdom came from virtue which could be achieved only by avoiding strong passion. Plato, for instance, believed that by avoiding all sexual desires, a person could achieve immortality and strive for spiritual and intellectual love, hence, the term '*platonic*' is still used today to refer to sexless love. In time, dualism also had its influence on early Christian leaders (King, 1999).

The decline of Roman empire and the rise of Christianity coincided which was marked with sexual excess and dissolution which was based on dualism. Early Christians, therefore, had the purview of separating physical love from spiritual love. Christian writers reflect sexual desires as temptations and one of the most influential writers was St. Paul who an eminent persecutor of the Christians before converting himself to Christianity due to a vision he had after which he view the human body as evil and struggle to control his sexual desires. He blamed Eve for the expulsion of human beings from the Garden of Eden, and therefore considered all women as temptresses. He preached a celibacy lifestyle and believed that it was the way to heaven and view marriage as a behavior for the weak-willed people (King, 1999). In fact, in his letter to the Corinthians he wrote, "It is good for a man not to have sexual relations with a woman" (The Holy Bible, 2011). Thus, St. Paul considered marriage as a compromise to deal with the sexual problems of the flesh which greatly influence the belief of many early Roman Catholic leaders. St. Augustine was another believer of this ideology who converted into Christianity after reading the teachings of St. Paul. He went on to become one of the most influential educators in inculcating chastity into Christians view on sex and sexuality. He promotes sexual abstinence and suggested that sex was produced by 'sinful desire' (Mottier, 2008). During the 16<sup>th</sup> century Martin Luther and John Calvin organized a revolt against the Roman church which greatly revolutionized Christian views on sex. In fact, Luther believed that priests and nuns should be allowed to marry to cater to human needs for sexual relations which will solve the problem of lust. In order to preserve the family as a unit, they do consider masturbation, adultery and homosexuality as sinful and severely condemned its practice, but sex with love within the institution of marriage was greatly emphasized. Thus, the puritans have a very positive view on sex

and love within the relationship of marriage as compared to the early Roman Catholics and proved that a person does not enter the Kingdom of Heaven by virtue of denying sexual pleasure but rather by living careful and productive lives. This belief was greatly accepted by many people which transcended to New England (King, 1999).

The 19<sup>th</sup> century also called the Victorian era was the era of anti-sexuality. All sexual pleasures were denied and women who were viewed as temptresses were now considered to be asexual and men were seen as the gender responsible lust. During this time, women's place was in the home, they covered their bodies from head to toe and wives engaged in sexual intercourse only as a duty to their husbands (King, 1999). There was no linkage between sex and love, but although sex occupied a very conflicted place, prostitution and pornography flourished during this time. This anti-sexual principles were deeply rooted on the 18<sup>th</sup> century belief that lose of semen can reduce a man's strength and virility, and frequent orgasms would result in various physical, mental and moral corruption. This was the major cause of anti-sexualism during this era which resulted in negative attitudes towards female sexuality. In fact, men were advised to avoid women, because sexual attraction to them would cause semen wastage (Kelly, 1996). During this time, people went to the extent of making and patenting anti-masturbation devices like the four pointed urethral ring, a spermatorrhea, a penis ring, etc. to prevent, especially children and adolescents, from masturbating (King, 1999 & Mottier, 2008). The subject of sex was silenced, and not only did it 'fail to exist, but it had no right to exist'. The topic of sex was under the admission that there was nothing to say about it, nothing to see and nothing to know. However, forced concessions were made where if it was truly necessary to have sexual desires satisfied, if not within the institution of marriage, then to a place where they could be reintegrated at least in those of profit. This made prostitution thrived during this era (Foucault, 1976).

The Industrial Revolution started to slowly change this concept. The development of technologies and machines shortened workload and working hours and people started to enjoy leisure time both at home and outside. The invention of automobiles also increased people's mobility and young adults were able to move about without supervision of parents and other significant adults. Further, with the discovery of

penicillin, people became less worried about sexually transmitted diseases like syphilis and gonorrhea, and with the introduction of birth control pills and IUD in 1960s, people began to engaged more in sexual activities as unwanted pregnancies could be avoided (King, 1999). As values changed, legal restrictions concerning sexual activities between consenting adults began to reduce, and sex and love began to increasingly intertwine. The understanding of sexual intercourse from an expression of love began to shift to a more permissive attitude, away from involvement of emotions like romance and commitment. As a result of all these changes in perceptions and attitudes towards sex and sexuality, we entered what was called the 'sexual revolution' which was the period where people became more sexually permissive in regards to pre-marital sex, extra marital affairs, homosexuality and a variety of other sexual experiments came into existence (Kelly, 1996).

### **1.3 Theoretical Perspective of Sex and Sexuality**

According to Baumeister, Maner and DeWall (2006), there were two main dominant theoretical orientation related to sex and sexuality. One was constructionist feminism and the other was evolution. These two approaches were found to be very restrictive in their understanding of human sexuality leaving no scope for new ideas that were needed. However, new theoretical approaches of understanding sex and sexuality emerged with the development of knowledge where taboos related to sex found little ground.

Baumeister, Maner and DeWall (2006), has laid out several theoretical perspective related to sex and sexuality. They are as under:

- i. **Social Constructionist Theory:** this theory argues that sexual desire and behavior are a product upbringing, socialization, religion, political influence, media and other agents in society. Theorists under this school emphasis on historical, cultural variations. Though, they give credit to biology as one important foundation in understanding sex and sexuality, they believe that social circumstances, meaningful interpretations, cultural influence, and subjective experience are the focal point in understanding sex and sexuality.

- ii. **Feminist Sexology:** This theory emerged as a criticism to social constructionist theory and is grounded on the theme that sexual attitudes and practices are rooted in gender roles that are particular to cultures and history. This theory also argues that gender relations and women's problem are related to oppressive and exploitative social structures defined by men at the expense of their female counterparts. Therefore, power which is accepted by social structures defines roles that subjugate women in various roles and activities including sexual orientations and activities.
- iii. **Evolutionary Theory:** This theory seeks to understand the desires and behaviors of individuals as a product of ancestors who produce more and better offspring. Theorists under this school argue that human sex and sexuality relating to attraction, romance, maintaining relationship, sexual intercourse, sexual orientations and emotions in relationships have been shaped, somehow, in parts by the evolutionary process.
- iv. **Psychoanalytic Theory:** The theory related to human sex and sexuality was greatly influence by the psychoanalytic theory brought about by Sigmund Freud. It emphasis on the concept of sex drive which includes desire for love, affiliation and belongingness. Such drives manifest itself in the form of art and philanthropy or other activities not necessarily related to the actual behavior. This theory also emphasis that bisexuality is natural but orientations of sexuality are only a product of socialization where one is attributed certain gender roles. Another important aspect this theory is how timely repressions of attachment towards parents can reduce overt sexual behavior or incestuous relationships.
- v. **Social Exchange Theory:** This theory examines what sex may bring to the potential lovers, including rewards such as pleasure, love, attention and prestige as well as costs such as heartbreak and disgrace. This approach emphasizes that sex itself is a resource that can be traded between a man and a woman. Eg: the man offers love and security and the woman offers her chastity. This theory also emphasizes on certain standards that exists on how

much one is expected to commit or spent for the other to reply in certain ways or forms.

#### **1.4 National Perspective on Sex and Sexuality**

Ancient India has been very open about sex and sexuality as evident in their paintings and sculptures. India has a rich cultural history on sexuality, marriage and fertility which can be seen in their erotic carvings found in temples and caves. History also supported that although common people were force to maintain a monogamous marriage Indian rulers were allowed to practice polygamy. Traditionally, as Indian marriages were mostly arranged by elders, premarital sex was not an accepted practice hence, marriage was controlled (Chakraborty and Thakurata, 2013). During the Vedic Period women were given equal significance as men, and were treated with respectability and thoughtfulness (Das and Rao, 2019). Indians have also been credited with writing a famous text somewhere between the 1<sup>st</sup> and 6<sup>th</sup> centuries known as ‘Kama Sutra’ where the main context consists of expression of Indian attitude toward sex as a vital and natural element of their psyche and life. Other books that were written at the time which had poetic and colorful description of ways to become pleasing lovers and how to promote satisfying love making include Apsaras, which is writings about a female supernatural being, a divine nymph, who ruled the sky and dance for entertainment and often seduce mortal men; also a book called “The Perfumed Garden” which is a classical Islamic sex manual. Hence, India is considered to be the pioneer of sex education through their art and literature (Chakraborty and Thakurata, 2013). India also practiced the devadasi system which was first confirmed during the Keshari Dynasty in the 6th century A.D. in South India. The practice started when one of the queens during this dynasty decided that in order to show respect and honor the gods, women who were trained in classical dancing should be married to the deities. These women were given great respect and it was considered an auspicious role because they were married to immortal supernatural beings. The devadasis would take care of the temples and perform at temple rituals, and were supported by many patrons and rulers (Shingal 2015).

During the provincial era (15<sup>th</sup> to 17<sup>th</sup> centuries), India was invaded and she saw a power play between the French and the British, with the British emerging as dominant in

the country in early 19<sup>th</sup> century. This dominance brought with it the Victorian values on sex and sexuality, stigmatizing Indian sexual liberalism and imposed a strict attitude towards sex confining it to matrimony. The pre-Independence Era saw many changes especially towards women with purdah system isolating women, Sati practices wherein widows were burned alive at their husband's pyre and the concept of dowry and child marriages took over the society. Eventually, gender roles were strictly imposed where the role of a husband and wife was differentiated by the distribution of chores which was solely based on the binary sex of male and female (Das and Rao, 2019). During the British rule in the Penal Code of India imposed in 1890 by Lord Macaulay criminalized 'gay sex' Misra (2009) and the devadasis lost not only their patronage and support, but also their status in the society, leading to the beginnings of their exploitation (Shingal 2015).

After India attained independence, sex was still considered a taboo and the matter was not discussed especially in the family. Men remained the dominant sex and women were married off at a young age and lack independence and authority to control their sexuality. These young women lack of adequate knowledge on matters of sexual behaviour and protection resulted in early pregnancies and other health issues (Avasthiet.al. 2008). Despite sex and sexuality being a taboo, legislations were formed to counter gender discrimination like Madras Devadasis (Prevention of Dedication) Act, 1947; Sati (Prevention) Act, 1987; The Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013 and the like, besides various constitutional safeguards like Article 14 which is equality before law and read "The State shall not deny to any person equality before the law or the equal protection of the laws within the territory of India", and Article 15 which is concern with "Prohibition of Discrimination on grounds of Religion, Race, Caste, Sex or place of birth" (Bharadwaj, 2015).

Indians today, have also become more expressive in terms of their affection and are now more accepting towards certain sexual behaviors that were once considered illegal, where in, on 2nd July 2009 it revoked IPC section 377 and ruled that "consensual sex amongst adults is legal" which includes gay sex and finally decriminalizes sex

between two consenting adult gays (Misra 2009). Though modern India has witnessed many changes regarding its concept on sex and sexuality according to Abraham and Kumar (1999) many Indian parents strongly oppose to sex and sexuality education in schools and they suggested that these parents need to be sensitized that Indian family and educational institutions are losing their traditional level of control over students, especially male, in terms of their sexual behavior.

### **1.5 Local Perspective on Sex and Sexuality**

The origin of the Mizos, like those of many other tribes in the North Eastern India is cloaked in mystery. It is the general acceptance that they were a part of a great Mongoloid wave of migration from China who moved to India to their present habitat. The first recorded history of Mizo people calling themselves 'Mizo' is found in folk song composed by Lallula (1703-1807) when he killed a fox with a bamboo spear and wrote a song about it (Lalramliana, 2004). The Mizo practiced a strict patriarchal system and especially before Christianity was witnessed in the society they were headhunters and headhunting was an expression of power and masculinity (Zou, 2005).

Traditional Mizos lived in villages and its administration was run by the village Chiefs. Women occupy a very subordinate position where their main roles include carrying of household chores and rearing of children. Although they were considered inferior to men history supported various female Chiefs who were fearless and rule their villages with courage. The Mizos also practiced the system of Zawlbuk where the men would reside at night and since women were not allowed in the Zawlbuk it was used as an institution to teach young boys about discipline and prepare them for wars. Many married young men, therefore, very often would stay away from their wives during the night and they would entice unmarried girls which was permissible within the code of Zawlbuk discipline. During this period although virginity before marriage was treated with great respect, premarital sex was very common where a young man would stealthy slid into his lover's bed at night for sexual activities and any couple who decide to consummate their relationship during their courtship would eventually marry (Chatterji, 1975). It was also considered an achievement on part of a young man who can have sexual intercourse with a maiden and he would normally boast about his success among

his friends. To add to this, if a young man is able to consummate two young sisters it was considered a great accomplishment and they would lay a sign on his dead body called '*archangthiang*' to signify his achievement (Dokhuma, 1992).

When the Christian missionaries came to Mizoram in 1894, the customs and traditions of the Mizo society went through a huge transition because these missionaries brought with them the Victorian and Christian culture from the West. In order to gain the support of the patriarchal mindset of the Mizo people, the church introduced Victorian values and principles, which became the guiding scripture for judging the lives of the Mizos. In a way, the language of the mission became sexualized and gendered combining the already existing patriarchal society with that of the patriarchal biases in the Judeo-Christian traditions. The introduction of Christianity and its teachings like that of the Old Testament where the fall of the Garden of Eden as a result of Eve's sin further justified the oppression of women. Therefore, controlling women's sexuality as well as their spatial domain thus became the holy goal of the Mizo Christian society and the religion was used as a weapon to oppress women (Chakraborty, 2011). Although the matter of sex and sexuality continue to remain a taboo, practices like pre-marital sex, homosexuality, post marital affairs and the like of sexual activities that were not allowed by the Christian religion, were considered grievous sins. In fact, during the British colonization in 1909 an order was issued where it criminalizes homosexuality and cross-dressing. The order further stated that all gay men should wear men's clothes, behave like men, pay revenue and do porter works, and instructed the village Chiefs to report the cases of any homosexual practices.

In Mizoram, Christian values and practices are inculcated in children at a very young age which greatly influence their thinking and actions in later stages of life in a very conservative and traditional manner. But with the impact of globalization and westernization, young Mizos today have started to represent behaviors beyond Christian's values and teachings, which include a more liberal perception and attitudes towards sex and sexuality. So there is an imbalance between the youth and the elderly which can cause a lot of stress and tension across generations. This difference is also evident from the findings of Ralte (2010) which states that regarding the acceptance level

of gay people in Mizoram, younger generations were more acceptable towards them while the elders have a more negative attitude. Further, traditional and conventional sexual behaviors are slowly being replaced by a more open and non-orthodox behavior resulting in different issues related to sex and sexuality like abortion, pre-marital sex, extra marital affair, etc. Also, as Ralte (2018) pointed out that conventional Mizo woman do not normally consider divorce even when subjected to various hardships. Especially those that were married to a village Chief, because they were allowed to practice polygamy, and take on other wives called '*hmei*', women remained faithful to their husbands. But today, as one of the attributes to women's education and as part of the society evolving, the society is witnessing many marriages ending in divorce. The State also ranks the highest in people living with HIV/AIDS with 9 cases of new detection every day (MSACS, 2019) and that even young adolescents have adopted the practice of cyber sex, phone sex, sexual intercourse and paid sex (Chhakchhuak, 2010).

### **1.6 Present Scenario**

Human sex and sexuality plays a key role in everyone's life and it is the basic part of what we do and who we are which has remain a vital element for the survival of humanity. But as important and significant as it may be, the topic has remained sensitive and taboo throughout the ages which has caused pain, suffering and anguish to a lot of people. Sexuality today can no longer be overlooked or ignored especially in work on health and human rights because the growing diversity of rights-based advocacy and documentation, and new initiatives in public health, health policy, and service delivery, have inevitably engaged questions of sexuality (Miller and Vance, 2004). McAnulty and Burnette (2006) wrote that premarital sexual intercourse became increasingly common over the last century, the number of lifetime sexual partners has increased for both men and women, and there is a rise in cohabitation where unmarried people are living together. Prostitution is also rising with one factor that women use it as a mechanism to control men (Levin and Peled, 2011), young people have become more permissible to various sexual activities (Askun and Ataca, 2007), and negative attitude towards homosexuality has decreased (Janmaat and Keating, 2017), with various countries and States legalizing same-sex marriage with Netherlands being the first in 2001.

## **1.7 Statement of the Problem**

The study of sex and sexuality especially among youth is an integral part in social work practice. The significance of the study of youth in social work research is such that, it can bring about essential understanding about the highest populated group in India and provide an understanding on how interventions can be made to sustain society and enhance human functioning.

With the various developments taking place in society, youth in Mizoram have been submerged with cultures other than their own, making way for a 'state of anomie' a sense of normlessness among the youth. There exists a cultural lag among the youth as a result of this transition brought about by various agents of change taking place in the society. This has loosened traditions and norms that curtailed to sustain the erstwhile youth in Mizoram. Today, the generation gap is increasing and the understanding of sex and sexuality among the Mizo youth have become distorted in such a way that it has given rise to other social problems. Pre-marital sex is on the rise, suicide among youth is increasing and metro-sexuality has become the trend in understanding themselves as social beings. There is also a rise in homosexuals and bisexuals who have revealed their sexual orientation openly to the public. Further these practices have increased vulnerability in terms of other health issues such as tuberculosis, HIV/AIDS and other venereal diseases.

According to a study conducted by Synod (2010), premarital sex is very common among young adults in Mizoram, and similarly other sexual related practices were also found to be highly common according to Ralte (2010) who found that gay men in Mizoram were married to the opposite sex and had sex with both men and women which confirms the existence of extra-marital affairs and bisexuality in Mizoram. Chhakchhuak (2010) in her study among students of higher secondary schools in Mizoram also found that children had parents who had extra-marital affairs/Marital discord. Further, she also found students watched pornography, read sex related magazines, masturbated, watched adults having sex, have had Cyber-sex and phone sex, have had sexual intercourse and were involved in paid sex. It is not known as to why such sexual practices and behavior takes place.

According to Lalkima (1997), the rise in alcoholism following the seventies resulted in the increase of divorce rates and in such cases of separation both spouse remarries other persons. He further states that the increase in the number of children in need of care and protection was because of misuse of sex and loose customary laws of marriage in the Mizo society.

Lalrinawma (2005) wrote that there is little communication within a Mizo family and the best time for it was during mealtime. Many families do not communicate much with their children nor do they give them adequate importance and children therefore grow up without proper care and concern. Children spent little time with their family and peer group was the main agent of socialization for them. It is not known as to whether these findings have an implication to the understanding of sex and sexuality among youth in Mizoram. However, it is indicative of the fact that Mizos' understanding of sex and sexuality is a product of primary and secondary institutions and other social problems faced by youth in Mizoram.

In the light of the above, this study will try to find what influences youth in their understanding of sex and sexuality and will give a comparative analysis of this understanding across gender. It will also delve upon the knowledge and awareness of college students on sex and sexuality, their sexual behavior, their attitudes towards all forms of sexual behaviour and their attitude towards LGBT communities. It will also attempt to suggest measures for social work intervention and policy making.

### **1.8 Objectives of the Study**

- 1) To explore the nature and the relationship of and among parent-child communication, peer group relationship, mass media exposure, religiosity and substance use and abuse among college students in Mizoram across gender.
- 2) To find out the knowledge and awareness on sex and sexuality among college students in Mizoram across gender.
- 3) To understand all forms of sexual behavior among college students in Mizoram across gender.

- 4) To find out the attitude towards all forms of sexual behavior among college students in Mizoram across gender.
- 5) To find out the sexual orientations and attitude towards LGBT communities among college students in Mizoram across gender.
- 6) To determine the relationship between knowledge and awareness on sex and sexuality, sexual behavior, attitude towards sexual behavior and LGBT communities among college students in Mizoram across gender.
- 7) To determine the relationship between parent-child communication, peer group relationship, mass media exposure, religiosity and substance use and abuse and knowledge and awareness on sex and sexuality, sexual behavior, attitude towards sexual behavior and LGBT community among college students in Mizoram across gender.

### **1.9 Chapter Scheme**

Chapter 1 : Introduction

Chapter 2 : Review of Literature

Chapter 3 : Methodology

Chapter 4 : Findings and Discussions

Chapter 5 : Conclusion

This chapter will highlight different literature in understanding sex and sexuality among youth and will also help in identifying various research gaps.

## **2.1 Knowledge and Awareness**

Karamouzian et al. (2017) studied the awareness and knowledge about Sexually Transmitted Infections (STIs) among nonmedical students in Iran. The study has a total of 742 male and female undergraduate and graduate students from five nonmedical public and private universities using convenience sampling. Results indicated that half of the respondents have never heard of STIs, a little over half could identify STIs other than HIV which include Hepatitis B, genital herpes, gonorrhoea and genital warts. There was gender difference in knowledge about STIs where women scored higher than men and were more likely to identify several STIs correctly. Further, almost half of the respondents were able to correctly identify symptoms of STIs such as painful urination, painful abdomen, genital ulcers, vaginal discharge, painful testicles, and blood in urine. Findings also reveal that only one-third of the respondents knew most STIs can be cured, but three-quarters of them knew that treatment is necessary for such infection and most respondents say that they would visit a physician if infected with STIs. Further, the internet and peers were identified as the principal source of information for STIs and men were more likely to use the internet as their source while women gain knowledge from their family members. Majority of the respondents also pointed out the necessity of delivering sexual health education in schools.

Arowojolu et al. (2002) conducted a study to understand the sexuality, contraceptive choice and AIDS awareness among 2388 Nigerian undergraduates using self-administered structured questionnaire. Results show that majority of the respondents were sexually experienced out of which less than a fourth have had secretly gone through abortions. All the respondents knew at least one method of contraception; out of which condom use is the highest followed by withdrawal method. Among non users reasons for not using any form of contraception include religion, side effects, parents opposing, infrequent sexual intercourse, etc. All respondents in the study were aware about HIV/AIDS and can identify its different modes of transmission. Although result indicated that students were more knowledgeable about this, it was further found that there were

many respondents who believed HIV could be transmitted through French kissing. The study concluded that Nigerian undergraduate students have low awareness and knowledge about sexual health and its issues.

Burns conducted a study in 2002 to understand the whether the education in sex sexuality provided to students of girls' school in Uganda is sufficient or not. The research used a qualitative method which was administered through focus group discussions and case studies with students. Focus group discussion (FGD) with teachers and administrator was also conducted to assess the quality and quantity of sex education provided to the students. FGD with teachers and administrators revealed that for the girls to maintain abstinence they were kept isolated in the boarding school and were not allowed to leave mid-term, they were also taught to abstain from sexual behaviors or have a single life-long partner, and girls who have trouble in abstinence were privately encouraged to use condoms and students were taught not to think or involve in romantic love and sex by being selective on what they read and watch, playing sports, keeping busy, and being careful with whom they spend time with. It was found that these strategies were inadequate for the girls as FGD revealed that they have little information about what sex actually is, how to use a condom, why it protects them, and results indicated that the school is not providing them with what they need in order to have a better sexual health. Besides lack of information, their desires, ideas and misconceptions about sex are not being addressed by the existing curriculum.

Olajide et al. (2014) conducted a study among 215 physically challenged adolescents in special schools to assess their awareness and use of modern contraceptives. They found that most respondents have not heard of modern contraceptives which include male and female condoms, injectables, spermacides, oral contraceptive pills, and intrauterine device like copper T and the most common source of information was through television and radio. It was also found that there was gender difference on knowledge about this issue where males score much higher than female students do. Further, surprisingly out of all the respondents who have had sexual intercourse, more than half of them are not aware and have no knowledge about modern contraceptions.

Phillips conducted a study in 2006 to understand if high school students in the Caribbean have correct information about the widespread of HIV and to find out whether their information have any influence on their sexual behavior. To identify the level of their knowledge and attitude, questionnaire was administered which reveal that students were aware about HIV not being transmissible through social contact, and females were know knowledgeable on the modes of HIV transmission as compared to males. Then students were interviewed through 6 focus group discussions to understand if knowledge influence behavior and findings revealed that students give more importance to the pleasures of sex than on the dangers of risky sex, even in the situation of acquiring an HIV/STI infection. They prefer not to use condoms because they feel that it decreases the pleasure of sex and some also stated their non condom use as a result of feeling embarrassed to buy condoms. It was also found that though girls were more aware about HIV than boys, sex trade among girls is widely practiced, where they would receive material gifts in exchange for sex which will differ according to various degrees of sexual intimacy.

Yusuf (2014) conducted a study among Ghanaian youth to examine their knowledge on contraception and sexual awareness. Interview was carried out among 200 young married couples and findings reveal that majority of the respondents were aware about modern contraceptions like condom and birth control pills but they do not necessarily use these because it is not socially accepted as there is an expectancy of child birth during the first two years of marriage and many new couples are worry of not conceiving. Further, this custom affects different developmental aspects of the youth and misplaces the purpose of multiple childbirth and marriage which is to increase the Muslim population without losing the core objective of marriage. Although contraceptions are well known among Ghanaians youth, it has not received a priority as it is seen as a practice which is not welcomed in the Muslim community and it was identified that more than half of the young couples do not visit health care professionals and would rather have child birth in herbal centres rather than in hospitals. This failure to visit is health care providers lead to many couples being ignorant about important issues related to healthy pregnancy and child birth.

Maria (2007) conducted a study among 4878 single youth in Ethiopia to examine their sexual awareness. Although the awareness of HIV/AIDS is relatively high, respondents are not aware about other STIs. The majority of the respondents stated that they were aware of AIDS and they know how to avoid the disease. Respondents also mentioned that being faithful to a single partner, using condom and abstinence are ways of avoiding HIV infection and knowledge of other ways of avoiding HIV infection like PrEP was generally low. There are also various beliefs where respondents stated that avoiding injections will prevent them from contracting AIDS, avoiding a partner who has many sexual partners was a way of prevention from AIDS, and avoiding sex with commercial sex workers will also protect them from HIV infection. It was further stated that a healthy looking person can have HIV infection and a person may not necessarily have physical manifestations of the disease. Awareness of STIs other than AIDS was very minimal for both genders and girls were more aware about symptoms of various STIs as compared to boys.

Ogunlayi (2005) examined the awareness and knowledge of sexual and reproductive rights among adolescents in Western Nigeria. A total of 600 adolescents were interviewed using quantitative and qualitative interview to collect information through multi stage sampling technique. Results revealed that majority of the respondents understand the word 'rights' as 'entitlements', more than half of them stated that they are aware about various sexual and reproductive rights, and it was found that boys were more aware about these rights as compared to girls. It was further identified that students from private schools were more aware about sexual and reproductive rights than students in Governmental schools and the reason for this was that private schools work better with other organizations in awareness programmes for students while Government schools see it as a co curricular activity and do not support such programmes. Results revealed that among students who were aware about these rights, they do not necessarily have knowledge on the contents of the rights. In their understanding about reproductive health, it was found that students believed it refers to health of reproductive organs and being able to bear more children. Hence the study concluded that respondents have poor knowledge and awareness on sexual and reproductive rights.

Joshi (2010) administered a questionnaire to 182 adolescents from Mumbai between the age group of 17–21 years. The questionnaire was to examine their knowledge about important aspects of sexuality and how to gain access to the information. Results showed that respondents scored low on sexual knowledge which includes items like conceptions and symptoms of pregnancy and scored higher on knowledge about masturbation, orgasms and contraceptions. Further, there was no gender difference found in these items. Participants also reported that the source of most of their sex information was peers and books while parents and siblings do not play a significant role in providing knowledge and awareness about sex related information to the respondents. The study concluded that Indian youth lack sex education and suggested that since many Indian adolescents are sexually active and it is necessary that they are given the opportunity to access accurate information in order to maintain their sexual health and have adequate knowledge on sexuality.

Agarwal (2015) stated that 87 per cent new HIV infections in India is because of unsafe sex which placed young people in the centre of the epidemic. For his study, structured interview method was used to gather qualitative and quantitative data among 250 unmarried girls in Jaipur pursuing undergraduate and post graduate education. Results showed that respondents are aware about the prevalence of HIV/AIDS and cited television as the main source of information about it. Most of the respondents were aware about the most common mode of transmission which is through sex, but were not highly aware about other sources such as sharing of syringes, blood transfusion and mother to child. Also, they lack correct information about ‘safe sex’ and believe that HIV can be spread through excessive sex, insect bites, living with HIV/AIDS patients and sharing utensils with them, using a urinal which is used by a sero-positive person and some even stated that HIV can be spread by environmental pollution. Besides this, majority of them stated that HIV testing can be done only in hospitals and further commented that “AIDS can’t happen to me” which clearly showed their lack of awareness and put them at risk.

Sharon (2017) conducted a study to understand sexuality among women college students in Chennai. A total of 325 female undergraduate students participated in the study and data was collected using questionnaires. Study reveal that majority of the

respondents do not know whether condoms can be used to prevent Sexually Transmitted Infections (STIs) and Sexually Transmitted Diseases (STDs) and although they are aware of its use to prevent pregnancy, many of them are unsure when to use it, for instance, some stated that it should be used only before actual sexual intercourse and some thought that it should be used after sex. Results also revealed that almost half of the respondents do not see masturbation as a normal sexual behaviour and majority of them are not aware about the concept of homosexuality.

## **2.2 Sexual Behavior**

Townsend and Wasserman (2011) conducted a study to college hookups and the emotional investment attach to it. A total of 335 male and 365 female students from northeastern university in the U.S. participated in the study. All respondents were unmarried and their age group range from 18 to 23 years. Results indicated that males reported more one-night stands as compared to females, and they also engaged more frequently in intentional sex without emotional involvement. It was also found that the total number of partners is closely associated with casual sexual behavior where the more number of sexual partners that respondents have they are more likely to engaged in casual sex. There was gender difference found in this association where male respondents scored relatively higher than females. This can be attributed to the finding that males were found to be more permissive in their sexual behaviour as compared to females which includes behaviors like need for emotional involvement before sex, need for emotional attachment after sex, sex without love and the like. The study concluded that though both gender engaged in casual sex there is gender difference in the amount of emotional involvement attached to it.

Kanwetuu, Mokulogo and Azumah (2018) conducted a study among 340 students to highlight their sexual behavior. Results implicated that students were sexually active where majority of them have had sexual intercourse with friends or peers and some admitted to having sex with teachers and family members. The reasons for their initiation of sexual behavior varied which include wanting to show love to a partner, forced to have sex by a partner, peer influence, curiosity and personal sex drive. Although students used contraceptions like condoms and oral contraceptive pills, their usage was low and

majority of them do not take these precautions which can prevent STDs and unwanted pregnancies. There were also reports of using the withdrawal method to prevent pregnancy. There was gender difference on number of sexual partners within the last 12 months where males were more likely to have more partners as compared to females, and some even reported keeping multiple sex partners at a time.

Patrick and Lee (2010) tested sexual motivations and engagement in sexual behavior among college students. They gathered data from 637 first year college students enrolled in a northwestern university of United States. It was found that most students who reported having engaged in sexual intercourse stated 'sexual enhancement'- having sex for the thrills or purely for pleasure, as their reason for initiating sex meaning that they started to engaged in sexual behavior casually. Other reasons for sexual initiations were expression of love, and loneliness. For those that reported to have never engaged in sexual behavior reported their reasons for abstinence because of lack of intimacy, lower need for sexual enhancement, against morals, not age appropriate and health concerns like contracting STIs and STDs.

Tang, Lai and Chung (1997) examined Chinese students to understand their sexual behavior. Findings revealed that male students became interested in sexual activities at an early age as compared to female students where the mean age for sexual interest for male was 13.94 years for females it was 16 years. Besides this, there was no significant gender difference for 'age at first sexual engagement' as it was found the mean age of sexual initiation for male was 17.14 years and 18.13 for females. Results also showed that many students engaged in kissing and petting with their partners, and majority of male students reported having sexual fantasies every week while it was relatively low for females where only half of them reported fantasizing the same once in every month. There was also report of having engaged in sexual intercourse once weekly for males and once or twice for females. Students reported experience in various sexual activities like oral sex, anal sex, and male dominant position sexual intercourse, which were similar across gender, except for masturbation, where the number of males who reported indulging in masturbation was twice as many as those with females.

Schulz et al. (1977) conducted a longitudinal study was carried out to understand pre marital sexual intercourse among college students. A number of 1964 students were made to answer questionnaires prior to their arrival at the college and again during their sophomore and senior year of college. Finding revealed that majority of the respondents have engaged in pre marital sex by the time they are in their senior year and there was no significant gender difference found. It was seen that religiosity played an important role in this behavior where students who reported having strong religious affiliation were more likely to maintain their abstinence. As for students who reported engaging in pre marital sex, there is no association with interpersonal commitment and respondents do not place emotional attachment as a motivation to engaged in sexual behavior.

Eisenberg (1977) identify differences in the sexual behaviors of college students who engaged in same sex sexual experiences and those with only opposite-sexual partners. A total of 14,521 students across colleges in the United States participated for the study where a self administered questionnaire was used for data collection. Majority of the students reported having sexual experiences with only the opposite sex while minority of them engaged in same-sex behavior as well as with both sexes. It was found that students who engaged in same sex behavior were older than heterosexual students, which is same in both male and female students. Data also reveal that more than half of the students who were sexually active do not use condoms and consistent condom users were more likely to be in-campus students. Majority of the respondents reported having one sexual partner during the past 30 days and there was significant difference in condom use between heterosexual and gay students where students who have engage in heterosexual sex reported frequent use of condoms as compared to those engaged in same sex behaviour. There was also a difference found in the number of partners in past 30 days where students with same sex partner reported having higher number of sexual partners. The study concluded that homosexuals and bisexuals are more active in sexual behavior and less likely to indulge in condom use hence making them more vulnerable to various STDs.

Santhya, Acharya and Jejeebhoy (2011) conducted a study among youth from six Indian States to examine their condom use before marriage. Results showed that men

were more likely to use condoms as compared to women but there was an association found among men between condom use and age of sexual initiation. It was found that the older the male respondents were, they were more likely to engage in condom use and those that had some formal education were also more likely to use condom at the time of their first sexual initiation. Condom use among males was also associated with peer influence where it was reported that friends advise and give condoms to each other for protection against unplanned pregnancies. Youth who reported not having used condoms while engaging in sexual intercourse stated that they were embarrassed to approach service providers and get a condom, which is more likely to happen among females than in males. The study concluded that youth in India are sexually active and there is the need to make suitable method for condom collection for them so they can make a transition to a safe sexual life before marriage.

### **2.3 Attitudes related to sex and sexuality**

Levin and Peled (2011) conducted a study on attitudes towards prostitutes and prostitution among students at Tel-Aviv University where the study was conducted in two study phases. In the first phase 229 students participated and in the second stage there were 163 students. Findings reveal that attitudes towards prostitutes and prostitutions among participants include it being a forced and undesirable sexual behaviour which harms the institution of marriage and contributes towards the increase in HIV/AIDS. It was also pointed out that women become prostitutes because they are not properly educated although there were many students who feel that people become prostitutes because it is convenient as well as profitable. Further, findings reveal that participants comprise of conflicting attitudes where some respondents feel that prostitution is a form of violence against women where others say that women get into the trade because they want to control men.

In a study conducted by Janmaat and Keating (2017) it was found that young people of Britain were more tolerant towards homosexuality as compared to older generations. Through trend analysis using British Social Attitudes survey (BSA) and the World Values Survey (WVS) it was revealed that intolerance towards homosexuals started to decline considerably during the 1980s as a result of rising levels of education

including a broader shift in cultural attitudes. It was found that the increase in acceptance of homosexuality primarily represents a cohort effect, which was brought about by increase in levels of education as well as by a broader cultural shift in attitudes.

According to Dane and MacDonald (2009) heterosexual acceptance of homosexuals can enhance their well being. A study was carried out among 127 same sex attracted University students between the age group of 18 to 25. A self-report questionnaire was developed and administered to gain access to information pertaining to disclosure of sexual orientation, extent of disclosure, perceived level of acceptance and, support received from sexual minority friends. Also, Rosenberg Self-Esteem Scale (RSE) was administered to understand their level of self esteem and Satisfaction with Life Scale (SLWS) was included to measure their life satisfaction. Results indicated that participants disclose their sexual orientation mostly to their friends, then to their mothers and the least disclosure was made to their fathers. It was also found that a large number of the respondents reported that at least one heterosexual contact from the wider community knew of their sexual orientation. Further RSE and SLWS showed there is strong correlation between perceived acceptance and their well being and indicated that mother's acceptance has the highest contribution to their psychological well being.

Stone (2009) conducted a study to understand inclusion of transgender by gay and lesbian activists where 32 activists who were involved in LGBT movement between the years 1992 to 2002 were interviewed. Interviews include a series of questions regarding highlighting activists' history of interactions with transgendered individuals, understandings of intersections between LGBT issues, and political experiences with transgender inclusion. Stone found from the interview that participants feel a vague common discrimination with transgender population but gay men were less accepting towards transgender inclusion as compared to lesbian women. Although lesbians do not struggle as much as gay men, they feel an 'invasion of women's space' with transsexual people. Stone also wrote that during interviews with lesbian women it was mentioned that while it took them courage to come out and become spokesperson for their movement 'someone who is in the middle of a big transition might not be a great spokesperson for anything'. One elder gay lesbian also declared that she felt frustrated to advocate for

transgendered people and suggested that they should advocate for their own rights and inclusion. Gay interviewees were far more vocal and persistent with their complaints and one skeptical gay man even described it as an invasion of their movement by unwelcome groups.

Luster et al. (2013) conducted a study on how shyness affects attitude and sexual behavior of adolescents. They studied 717 students from four colleges across the United States and found that shyness has a positive correlation with sexual attitudes with men where they show a more liberal view towards sexual behaviors whereas it was negatively correlated with women where they show a conservative view. The study revealed that shyness was also positively associated with solitary sexual behaviors. Further, in terms of sexual partners involving in coital and non-coital behaviors, it was found that shyness was also negatively associated with coital and non-coital sexual behaviors and number of lifetime partners for women.

Arnold et al (2014) found that among Australian students, although overall attitudes towards homosexuality was non-prejudice, students of medicine and veterinary medicine held a more negative attitude towards homosexuality as compared to students of politics. This comparative study was conducted among 122 students of medicine, 145 students of politics and 153 students of veterinary medicine who completed a questionnaire to measure their anti-homosexual attitudes and assess their knowledge on homosexual issues. The study further found that males were more prejudiced than females towards homosexual behaviors and women scored higher in their knowledge about homosexuality. It also showed that among the respondents, students of medicine and veterinary medicine reveal a more homophobic behavior as compared to students of politics.

Askun and Ataca (2007) studied a total of 563 students from three Turkish Universities who completed a questionnaire that assessed their virginity status, first intercourse, sexual permissiveness, pornography usage, endorsement of traditional sexual double standards, and the perception of parental attitudes about sexuality. Results indicated that female students were more traditional in their attitude towards sex and sexuality and also exhibit a more conservative sexual behaviors as compared to male

students. Results indicated that female were less permissive than men in their sexual behaviors which includes various variables like sexual behavior on first date, sexual intercourse with casual partners and sexual intercourse with committed partners. Though this may be the case, women were found to become more permissive in their sexual behaviors when their relationships advance to pre-engaged or engaged. . The study was conclusive in terms of men being more permissive at the time of first sexual encounter as compared to their female counterparts and students who engage in sexual behavior have a more positive attitude to sexual activities.

Ghule, Balaiah and Joshi (2007) studied premarital sex attitude among rural college youth in Maharashtra. Respondents consist of 1500 rural college students within the age group of 15-24 who answered questionnaires to determine the attitudes towards sex before marriage. Findings showed that majority of the students were conservative towards sexual behaviors where they did not only disregard the behavior but view it as an immoral sexual activity. These attitudes include pre-marital sex, masturbation, pornography, extra marital affairs, birth control and the like. Besides this, there was gender bias in sexual behavior where it was found that male respondents were more permissive to pre marital sex as compared to females. There was also gender difference in attitude towards sex and sexuality where males were found to be more liberal than females, and that the older students were, they were found to be less conservative as well. Further, a positive association was also found between attitudes and peer interaction, exposure to pornography, substance abuse and knowledge about reproductive health.

In a study conducted by Kakavoulis and Forrest (1999) they compared university students in Greece and Scotland to assess their attitudes to sexual development and sex education. Two set of questionnaires were constructed both in Greek and English and was completed by 436university students in Greece and an equivalent number in Scotland. The majority of both groups of students felt that they have more than adequate knowledge on their gender identity and are both confident in how they deal with the opposite sex. In terms of source of information about sex and sexuality it was found that friends are rated as highest source, while media and family was placed second, and church and school occupied the least rank. Further, half of the Scottish respondents and

more than half of the Greek students feel that based on their own experience, they do not think their family is in a position to provide them adequate sex education. Both groups of students favor inculcating sex education in their curriculum but differ on how it should be implemented. The Scottish students feel that sex education should be integrated into a curriculum as a whole while the Greek students feel that it should be taught as a separate course in the school curriculum, and almost three-fourth of all respondents from both colleges believed that sex education should begin not in college but at primary school stage.

According to Oswalt, Cameron and Koob (2005) college students regretted their decision to engage in sexual intercourse. They conducted a study by administering questionnaire to 348 college students prior to attending an educational program on sexual health issues. Analysis on respondents who were sexually active ( $n=270$ ) indicated that majority of them regretted their decision to engaged in sexual intercourse. When probe into the matter, it was found that the reason for their regret include different factors like the decision was conflicting with their morals, alcohol played an intervening cause, they eventually found out that their partners wanted different things, failure to practice safe sex an use condom, and their desire to remain a virgin till marriage has been compromised should not be reversed. There was also a significant gender difference where more women than men reported feeling pressured to have sex by a partner and sexual regret also remained consistently higher among respondents with increased number of partners.

Kennedy and Gorzalka (2002) compared Asian and non-Asian university students to explore their differences in their attitudes towards coercive and non-coercive sexual behavior. A total of 205 Asian and 195 non-Asian undergraduate students from British Columbia University, Canada were assessed on their attitudes towards sexual behavior, sexual harassment and rape. Asian students were found to score higher in rape myths which consist of statements such as women report false rape for attention, any healthy woman can resist rape, women who dress improperly calls for trouble, majority of rape victims are promiscuous females, women who thinks highly of herself and refuse to talk to men should be taught a lesson, etc. It was also found that men were more likely to

agree with these rape myths than women and the length of residency in Canada on Asian women was not a factor for their attitude towards sex myths, and among Asian men those that were born in Canada showed a decrease in tolerance for these rape myths as compared to those that have migrated from Asian countries.

Lim (2002) found that youth in Singapore still show rather negative attitudes toward homosexuals. For this study, samples consist of 365 students with an average age group of 20 years from three randomly selected educational institutions in Singapore. Findings reveal that people were generally more tolerant toward homosexuals if their interaction with the target person is at a less intimate level, for example, being a neighbor as opposed to a son; this holds true in studies conducted in the West as well. Findings also showed that respondents were more tolerant towards female homosexual than to male homosexuals. Turning to the results on gender differences, findings reveal that women, in general, were comfortable being in the midst of male homosexuals while the reverse holds true for male respondents.

Joshi (2010) studied Indian adolescent sexuality where a questionnaire was administered to 182 adolescents from the city of Mumbai in the age group of 17–21 years in order to examine their attitudes to sex education, premarital sex and homosexuality. Results indicated that students feel sexual intercourse is essential when you are in love with the person, but also believed that casual sex without marriage as well as abortion is morally wrong. Females are found to be more tolerant towards homosexuals, where majority of them believed that homosexuality is normal and that homosexuals make good friends. Further, it was found that majority of the respondents from both gender feel that parents are not able to give them appropriate information on sexual issues and almost all respondents favor the implementation of sex education in schools as part of the curriculum.

## **2.4 Parent-Child Communication and Sex and Sexuality**

Nappi.et. al. (2008) conducted a study among adolescents in psychiatric care fitting into two criteria which includes those that were at the time receiving or were scheduled to receive services in a mental health treatment facility and also those

adolescents who had a parent or adult caregiver who was willing to participate in the study along with them. The study was longitudinal with a sample of 718 adult caregivers along with their adolescents. The aim of the study was to find a correlation between safe sex practices of adolescence and family communication. A different set of questionnaire was administered to the caregivers and adolescents which comprises of different ethnic groups. For caregivers Parent–Adolescent Sexual Communication Scale and Parenting Style Questionnaire (PSQ) were administered while for adolescents Adolescent Risk Behavior Assessment (ARBA) was used. Findings reveal that among African American parents who reported that they are capable of open discussions about sex related issues and are able to monitor their children had adolescents who are reported decreased sexual behaviour but on the contrary, findings are not similar among Caucasian and Hispanic families where there is no correlation between parent communication about safe sex with adolescent safe sex practices.

According to Klein, Becker and Stulhofer (2018), when parents do well in different dimensions of parenting like communication, offering emotional support, and encouragement of autonomy, it plays a crucial role in contributing to healthy sexual behavior of their children. The study conducted was longitudinal online study and had female students participating from 69 high schools. Data were collected within a span of two years at regular intervals to monitor if there were any changes and relationship between parenting and participants development of the ability to make decisions and assertions related to one's own sexuality otherwise called sexual agency. It was found that with higher the rate of parent's involvement in their daughter's lives, adolescents were able to have stronger and reliable sexual agency. The study also pointed out that the findings indicate how important it is for parents to frequently engage themselves in communicating, offering emotional support and encouraging their children in terms of sexual expressions which would in turn help them make wise decisions related to their sexuality and other sexual activities.

In a study conducted by Whitaker et al. (1999), interviews were conducted with sexually active black and Hispanic youth between the ages of 14-17 from Alabama, New York and Puerto Rico to examine if there is a relationship between parent-teenager

discussions about sexuality and about sexual risk, and if parental communication skills foster teenagers' discussions about sexual risk with a partner as well as condom use. A total of 372 teenagers and their mothers participated in the study where face to face interviews were conducted separately for both the child and the mother. During the interview, series of questions were asked regarding discussions about sexuality and sexual risk behavior, parental openness, communication with partners about sexuality and safe sex as well as condom use. It was found that there is significant correlation between parent-teenager communication about sexuality as well as sexual risk related topics and teenager communicating the same with their partners, but this relationship is relevant only when parents were skilled and open about the topic at hand. Similarly, when parents are skilled, comfortable and open in their discussions about sexuality and sexual risk behavior their children are more likely to engage in condom use.

Epstein and Ward conducted a study in 2008 where they study adolescent boys to understand if sexual information received through parental communication, peer communication and media has an influence on their sexual behavior. The researchers used a measure adopted from Fisher (1993), where participants were asked to indicate the extent of contribution that parents, peers and media had to their understanding of sex related topics. Topics include questions related to sexual intercourse, pregnancy, fertilization/conception, menstruation, sexually transmitted diseases, abortion, homosexuality, birth control, necking and petting, and dating norms and expectations and responses were indicated on a four-point scale that ranged from "nothing" to "a lot". Firstly, results indicated that adolescent boys received more information about sex related topics from their peers and media rather than their parents. However, it was found that sexual communication from peers and media were more liberal and parents were found to be the major source of messages regarding abstaining from sex until marriage. Results also show that the minimal sexual communication exchanged between adolescent boys and their parents includes "cautionary messages" like use of contraception including issues related to love and how to treat a woman properly. It was concluded that though all sources communicate about sexual information there is difference in the content that was exchanged.

Wanje et.al (2017) studied parents and teachers communication about sexual information to female students between the age group of 15 to 27 at schools in Kenya. The study was qualitative and employed In Depth Interviews (IDI) and Focus Group Discussions (FGD) with 26 participants from three educational institutions. It was found that most parents acknowledged they do not talk about sexual health to their adolescent girls mostly because they feel that sexual contacts should be made only after marriage, hence even if they do talk about sex it is to advise their children not to engage themselves in sexual activity before marriage as boys would probably not take any responsibility if they are impregnated. Female parents converse more about sexual health to their children than male parents do as mothers talked about menstrual cycles and other related personal issues while fathers do not. Also, it was mentioned that the strength of mother-daughter relationship determines the depth of communication about this topic to their children while it is not necessarily a determinate with fathers. It was also found that teachers feel parents do not give importance to talking about sexual activity and that most parents leave it to teachers to pass on crucial and important sexual information to their adolescent girls. Lastly, participants were also interviewed to understand their level of knowledge about STIs where it was found that most parents and teachers believed they have inadequate knowledge about the topic and they do have misconceptions about STIs.

Bastien, Kajula and Muhwezi (2011) conducted a review of studies on caregiver/parent-child communication about sexuality and HIV/AIDS in sub-Saharan Africa. A number of 23 articles meeting various criteria that were published between 1980 to April 2011 were reviewed. Studies on communication include those which describe the frequency and topic, content, triggers, factors, tone, barriers of the discussions and the like. It was found that the frequency of discussion increased over time and topic mainly involves abstinence, unplanned pregnancy and HIV/AIDS while it was also found that parents were less likely to talk about condom use and contraceptions. Majority of the adolescents reported that they feel more comfortable discussing sex-related matters with their mothers although it was also found that some young people feel more comfortable have the discussion with parent of the same sex and vice versa. It was also found that those that received information from parents were less likely to engage in sexual behaviour than those who received from peers who were sexually experienced.

Most frequently relatives who had died of AIDS and the severity of the disease were used by parents to initiate discussion on sex-related matters and this discussion was associated with educational level of parents. Further, it was found that parents used vague terminology and employ threats rather than dialogue while communicating with their children. It was also reported that if their child initiated the discussion they perceive it as a plan to become sexually active or that they already were. Barriers to communication between parent and child about sex-related matter include socio-cultural and religious barriers as well as parent's inadequate knowledge about the topic because they were not educated by their own parents. Lastly, parents reported that they put off discussing the matter because they believe that talking about sex and sexuality encourages sexual behaviour.

In 2008 Weinman et.al conducted a study among 290 female adolescents who attended family planning clinics to examine the impact of risk factors, beliefs (including participants and peers), and parental communication on condom use. The questionnaire for the study comprise of various domains of participant's sexual history as well as current sexual behaviour including several domains from major existing adolescent risk behavior surveys. It also includes respondents' and their friends' belief on having sex and condom use and also their communication with their parents about the topic. It was found that a little more than half of the respondents did not use condom the last time they had sex among which majority of them use alcohol or drugs before sex during the last three month and adolescents who have multiple sex partners were less likely to practice safe sex and use condoms. In terms of communication with parents, respondents who do use condom the last time they had sex score significantly higher in all domains which includes questions such as communication in the last year about sex, birth control, risks/dangers of STDs, importance of delaying pregnancy. It was also found that those who used condoms the last time they had sex have stronger belief in the consistent use of condoms for safe sex, than those who did not, and this belief remains the same among their respective peers as well. The study concluded that parent-child communication about safe sex contributes lowering risky sexual behaviour of adolescents by the practice of condom use.

According to Izugbara (2008) parents who talked about sex and sexuality with their adolescent children provides an opportunity for them to access accurate and adequate information and enable them to have authority over their own sexual identity. A study was conducted in rural Nigeria where a total of 187 households who have adolescents between the age group 10 to 21 were interviewed to gather information about parent-child communication. It was found that only few of the parents have discussed sexuality related issues with their children out of whom fewer recalled ever having received the same from their parents. Although only few parents have discussed the topic with their children, most participants agree that communicating about sex-related matters to their children would have an advantage in keeping their children chaste and delaying their sexual debut. Also, parents mainly discussion about safe sex to protect their children from unplanned pregnancy, contracting HIV/AIDS and other sexually transmitted infections and diseases. Most parents were initiators of the topic and revealed that they would be unhappy if their children started asking questions about sex-related matters because they believe that it would mean their children are either sexually active or plan to be. It was found that majority of the parents feel discussing about sex before puberty may have an indication in their children that sex is an important issue and hence may prompt them to experiment before they are ready which could be very dangerous to them. The study concluded that besides Nigerian parent's reluctance to talk about sex with their children, even those that do communicate use it as a form to scare their children in engaging in sexual activity before reaching a proper age.

Wyckoff et.al (2008) conducted a study to understand the patterns of communication involving sex-related issues between parents and their pre-adolescents children. A total of 135 African-American children between the age group of 9 to 12 along with both parents constituting 135 mothers and 135 fathers participated in the study through automated-interviews. Results showed that under risk factors which include talking about using drugs and drinking alcohol, it was found that daughters reported higher percentage than sons and mother discussed more about the issue to their children as compared to fathers. It also showed that mothers discussed more with their daughters while fathers talked about the issue more to their sons. It was also found that communication includes topics like puberty, menstruation, reproduction, dating, sex and,

abstinence. Although, many families discussed about puberty, menstruation, reproduction, and dating only few covered topics on what sex is and abstinence. Thirdly, on the topic of sexual risk reduction which involves discussion about condoms and HIV/AIDS, it was found that there was higher discussion with mothers as compared to fathers, and also condom use was not discussed as often as HIV/AIDS. The study concluded that mothers are more open to discussion about sexual health messages as compared to fathers and also preadolescence age may be the right time to deliver these messages.

According to Taris and Semin (1997), it was found that positive parent-child relationship do not necessarily delays sexual initiation of their children. The study was conducted on mother and adolescent pair with the support that many research have found mothers to be more communicative to their children. A total number of 255 pair of mother-adolescent completed questionnaires through which information were collected and examined on rearing styles, sexual permissiveness, intra-family conflict and adolescent sexual behavior. It was found that there is greater conflict between mother and adolescent if mother suspects their children of being sexually active and this conflict shows lower score if both the parties try to understand the situation and develop a sense of closeness with each other. Further, it was found that when mothers try to control their children with extreme discipline there is greater intra-family conflicts. Mothers with deep religious values as well as low education tend to be more disciplinary as compared to those who are not. Data also revealed that adolescent's and mother's sexual permissiveness is positively correlated where it was found that the more permissive mothers are it leads to an early initiation of their children's sexual debut. When mothers are open to discussion about sex-related issues it comes across their adolescent's mind as a permission to engage in sexual behavior. The study thus reveal that when there is less intra-family conflict resulting in closeness between mothers and their adolescents, mothers tend to be more open about communicating sex-related issues thus facilitating their children's sexual permissiveness and engaging sexual initiation.

The extent of parent-child communication about sex-related issues in rural India was studied by Ramos et.al (2012). The study includes 40 participants consisting of 10

mothers, 10 fathers, 10 boys and 10 girls from 20 households. The tool for data collection was in-depth interview for which prior consent was taken by the researchers. Result indicated that boys have a higher knowledge and awareness about HIV/AIDS as compared to girls while both gender reveal that the topic is rarely discussed with their parents and they mostly get their information from TV programs and people who came to discuss about it in their schools. Barriers to communication about sex-related issue were identified which include lack of information, embarrassment and age-inappropriateness. There was also a report of adolescents living in fear if their parents were to find out about their sexual activities because the main content of message adolescents received from their parents was not to engage in sex prior to marriage which was collaborated by the parents. It was also reported by the adolescents that parents should take the initiative in opening discussion about sex-related matter which should be consistent, direct, timely and accurate because they felt that it will prevent them from unwanted pregnancy as well as contracting sexually transmitted diseases and enable them to make informed and healthy sexual choices while parents do not recognize the same need. The study concluded that rural Indian parents lack communication on sexual information to their children and there is the need for adolescent's family-based HIV/AIDS awareness and prevention.

According to Jain and Singhal (2017) although parents and adolescents in urban India acknowledge the importance of having open discussion about sexual and reproductive health, they found that communication about the topic between both parties is relatively low. Interviews with adolescents revealed that only some parents talked about sex related issues which was confined to information like appropriate age and the dangers of having sexual intercourse before the right age while discussions about sexual and emotional changes during puberty or safe sex were not opened. Adolescents also reported that they find it more comfortable discussing the issue with their mother as compared to their fathers. While some adolescents discussed about romantic relationships with their parents, a few did not disclosed the same for fear of conflict. Barriers to communication that were identified by adolescents include conservative mindset of parents and lack of quality time. Interviews with parents reveal that although some do discuss the matter with their adolescents other feel that they have not done so because

they believe that their children are already informed about it. Parents also reported that they do not mind if their children watch pornography as long as they do not engage in sexual behaviour and in fact the activity might actually throw a light for them on the subject. Further, the study revealed that both adolescents and parents would like to have sex education as part of the curriculum and that parents who have sexual discussions with their adolescents reported delay in sexual initiation.

## **2.5 Peer Group Relationship and Sex and Sexuality**

Little is known about the influences of peer groups on the sexual behaviors among adolescents in Africa, and the country being one of the highest HIV prevalence in the world, in depth understanding of these issues could lead to more effective sexual health interventions among adolescents in Africa (Bingenheimer, Asante and Ahiadeke, 2015). A survey was conducted among 1,275 adolescents in two southeastern Ghanaian towns, to examine potential associations between peer group characteristics and self-reported sexual initiation as well as multiple partnerships during a 20-month follow-up period. Results revealed that there was peer influence among the respondents and there is no significant gender difference found. It was found that there was associations between peer norms and sexual behavior among the respondents where adolescents who have sex favoring peers have increased odds to initiation of sexual intercourse. It was also found that when adolescents have more friends it increased the likelihoods of acquiring multiple sex partners especially among male adolescents. The study concluded that the country needs to formulate peer-based intervention programmes to promote healthy sexual activities of young adolescents.

Lefkowitz, Boone, and Shearer (2004) wrote that during transition to adulthood, relationships with close friends may be particularly important and influential, where communication about sex related information occurs greatly which can influence their attitudes and sexual behaviors. They studied 250 college students who completed a self administered questionnaire which includes information about the frequency of their sex-related conversations as well as the quality of these conversations with same-sex best friends, including their attitudes towards sex and sexual behaviors. Findings revealed that these conversations were more frequent between females peer group, and between

less religious adolescents. It was found that discussion about sex related issues was more frequent among sexually active peer groups as compared to abstinence group, but the topic of abstinence was discussed more frequently among the abstinence group than the sexually active group. Moreover, results showed that frequent and calm conversations about sexual information were positively associated with a more liberal sexual attitudes, as well as more positive condom-related attitudes.

Cohan (2009) tried to understand the influence of peer pressure among male groups. Many boys reported that they are a part and aware of a male peer group where membership credential includes losing one's virginity. But being a virgin male does not exclude them from joining the peer group but are seen as somebody who has not accomplished his manhood and placed him in a lower status than the rest, when he loses his virginity he then gains full membership in the peer group. Engaging in sexual intercourse also means great achievement for male peer groups because they draw on higher sexual achievement for higher position like 'jockey' within the fraternity. It was also found that some respondents have been made to watch pornography through peer pressure to prevent them from engaging in homosexual behavior which highlights the fact that there is still a certain level of homophobia among male peer groups.

The current study tested the influence of sexual values, perceived awareness and care and beliefs about parents and peers knowledge and care about students' behavior, on sexual behavior during their transitional period from high school to college. Participants include 1847 students and results indicated that individuals with high levels of both parental and peer perceived awareness and care have a lower frequency of sexual behaviors and was found that this perception tends to control the respondents sexual values on sexual behaviors. Furthermore, it was found that peer group plays a significant role in shaping high school sexual values, and predicted the number of sexual partners during their first semester in college. Students who have a more permissive peer groups during high school tend to have liberal sexual values which increases their sexual passiveness in college. The study suggested that this transitional period is a crucial time for adolescents and young adults and may be an ideal time for interventions towards safer sex (Wetherill, Neal, and Fromme, 2010).

Ajilore (2015) studies the role of peer influence on risky sexual behavior among 1873 adolescents. Results indicated that there is a direct peer influence with respect to respondent's early sexual debut where those who have peers who are sexually active increased the likelihood of adolescent's sexual initiation at an earlier age. Peer pressure was also found among male respondents where they are pressured by their peers to lose their virginity and also increased the frequency of unprotected sexual behaviors. Also, boys are more likely than girls to engaged in sexual activity with increased sexual behaviors by the peer group however, male peers decreases the likelihood of respondents engaging in casual sex.

The present research examined the association of adolescent peer acceptance and their sexual behavior among 11,000 adolescents in the United States. It was found that adolescents who were popular and well liked were more likely to have sexual intercourse at an earlier age than those who were not accepted by their peers, and overall, they were also more likely to indulge in more sexual intercourse. There was gender difference in the number of sexual partners and peer acceptance where boys with peer acceptance have more sexual partners as compared to girls who were also accepted by their friends. It was also found that adolescent peer acceptance has no significant relationship with sex without condom or casual sex and adolescents who have peer acceptance were also less likely to be diagnosed with sexually transmitted infections, and there was no gender difference found in these variables. The study concluded that though peer acceptance may increase the probability of adolescents engaging in sexual intercourse, no influence was found on risky sexual behavior (Wesche, 2019).

Sack, Keller and Hinkle (1984) conducted a study to understand the relationship between sexual behaviors of close friends on college student's approval in pre marital sex. A total of 467 in campus students from a large mid- Atlantic university participated in the study and findings revealed that for both male and female there greater number of non virgin close friends, the greater is their likelihood of them being a non virgin as well. There was gender difference in the association between peer approval and engaging in sexual intercourse, where no association was found among male students, but significant relationship was found among female students in the need for approval and engaging in

sexual intercourse. But there was no gender difference found in sex guilt where both the sexes reported no guiltiness for engaging in sexual intercourse.

Babalola (2004) assess the relationship between perceived peer behavior and the timing of sexual initiation among Rwandan youth. A total of 1327 male and female youth between the age group of 15 to 24 were interviewed using multistage sampling. Questionnaire includes information respondent's sexual attitudes as well as their sexual behaviors. The findings showed that perception towards peers being sexually active is associated with increased likelihood of experiencing early sexual debut. For both sexes, young adults rather than adolescents show a stronger association between sexual initiation and perceived peer sexual behavior. Results further revealed that when there is the presence of father, peer sexual behaviors show a weaker influence among females but similar inclination is not found among male youth.

Berten and Rossem (2011) conducted a study to assess the relationship friend's influence and adolescent's sexual behavior. The study includes 11872 secondary school adolescents from 160 schools in Europe. Results indicated that best friends influence adolescents' sexual behavior as well as their school deviancy. They found that there was gender difference in lower education which tends to disappear as classes get higher. They also found that peer influence or best friend's influence is more significant in higher education and students who have sexually active friends are more likely to engage in the same.

## **2.6 Mass Media Exposure and Sex and Sexuality**

In a study conducted by Doring et al. (2017) male and female college students of four countries vis. Canada, Germany, Sweden, and the U.S. were compared on their experiences and frequency of online sexual activities. These sexual activities include sexual information, sexual entertainment, sexual contacts, sexual minority communities, sexual products, and sex work, collected from 2690 participants of college students from the four participating countries. ANOVA and Chi-Square Test were administered using SPSS and also frequency distributions, means as well as standard deviations were examined. Data showed that in terms of frequency, internet was mainly used to gather sexual information, sexual entertainment where respondents use online access to get

sexually stimulating material, thirdly it was used as a source for sexual products where students used it for browsing and purchasing sexual products. Also, it was used for making sexual contacts by indulging in cybersex and to find offline sex partners. Further, results revealed that students used it to participate in online sexual minority communities, and for sex work which includes activities from paying for online sexual services to advertising offline sexual services as well. In terms of gender and culture, there was only little difference found which shows that internet is used by young people and different cultures to gain access to sexual materials and its related components.

Tomic, Buric and Stulhofer (2017) wrote that, in Western countries, the use of sexually explicit material (SEM) has become a part of adolescent sexual socialization which has been associated with engaging in risky sexual behavior. They studied 1265 Croatian adolescent to understand their media use and its effect on sexual behavior and if parent monitoring contributes to respondent's online sexual experiences. Results indicated that there was an association between viewing of sexually explicit materials with sexual experience and sexting where students who scored higher accessing sexually explicit materials were found to be more active in their sexual behavior as well as in sexting. Further, it was also found that students who have higher parents monitoring reported less use of SEM and also showed evidence of lower sexual permissiveness. The study concluded that adolescents frequently view SEM which in turn modifies their sexual behavior and since parents monitoring can lessen its effects it suggested that proper trainings and awareness are provided to parents about the case.

In the United States, black men who have sex with men (MSM) bear the burden of human immune deficiency virus (HIV) and there is very little research to find out the relationship between use of social media and sexual behavior among Black MSM (Broaddus, 2015). Broaddus conducted a survey among 205 Black MSM to find this association. Results revealed that respondents spend a lot of their time on social media sites and more than half of them have arranged casual sex through online in the past three months with an average of 10 times per respondent. It was found that men who use social media and arranged casual sex have more casual sex partners and engaged more frequently in unprotected anal intercourse and other risky sexual behaviors as compared

to those who do not arranged for sexual partners using social media. Further mean score indicated that there were more sero-positive patients among users of social media of casual hookups as compared to those that do not use it for the same purpose. The study concluded that the use of social media definitely resulted in more risky sexual behaviors among Black MSM and makes them more vulnerable to HIV infection.

Ortega et al. (2015) stated that the availability of sexual information on the internet is very prevalent and it is likely that adolescents are using the media to learn about sex and its related behavior through online. To study this proposition, they conducted a study to examine the amount of information that adolescents gathers from the internet and its effects on their sexual behavior. Respondents consist of 3809 Spanish adolescents from higher secondary education who completed a self-administered questionnaire. Findings revealed that boys gathered more information of sexual content as compared to female students. This frequency also positive associated with sexual activities like masturbation, and engaging in non penetrative and penetrative sexual behavior as well. However, viewing of sexual content through internet does not have any relationship with the use of condoms at first sexual intercourse among respondents.

A study was conducted to understand media and sexual behavior among Hongkong adolescents. It was found that the magazines, videos, comics, and movies were the most significant sources of sexual media and gender difference was identified where male adolescents view more sexual content as compared to female adolescents. Results revealed that there was also a strong association between sexual media use and age, number of sexual partners, masturbation, family problem, low attendance in school and Christianity as a religion. Further, it was also found that adolescents purchased and rented sexually explicit materials and gender difference was again identified where male adolescents engaged more in this practice as compared to females and the study showed that the use of media does not increase knowledge and awareness about sexual behavior among adolescents (Janghorbani, Lam and TYSSSTF, 2013).

Nelson, Carey and Perry (2019) conducted a research to find out how viewing of sexual materials online can affect adolescent MSM. The study includes 206 adolescent sexual minority males across the United States who answered a set of self administered

questionnaires through email. Results showed that majority of the respondents have viewed sexual content through media which was carried out mostly through phones and computers. It revealed that viewing of sexually explicated materials through media has significant affect on adolescent MSM because respondents reported that these materials make them think about sex with male partners, and make it look like most young males who showed interest interested in sexual activities with a male partner are doing s. they also reported that viewing of sexual context made them think that popular people have sex, and that even without protections sexually transmitted infections rarely happen, and revealed that watching pornography triggers homosexual tendencies.

Landry et al. (2017) tried to find if there is a link between social media and sexual behavior among adolescents. The study found that there was significant positive association between high-frequency of media use and increased sexual risk behaviors. It was pointed out that young adolescents have the need for social acceptance and belongingness and are still learning how to control themselves, and social media has made them vulnerable to sexual pressures and risky sexual behaviors. They also wrote that social media has the potential to develop, increase and magnify peer influences, which are have been documented by many researches as an influencing factor for sexual risk behaviors. Further, social media provides an opportunity to access a more experienced peer which leads to communication about sexual activities and increases the likelihood of engaging in sexual intercourse. Thus, those adolescents who are more active on social media could participate in more sexual risky behaviors because of a wider peer network influencing their behavior, attitudes and social norms.

Olarinmoye et al. (2012) tried to find out effect of mass media and internet on sexual behavior of undergraduate students in South Western Nigeria. Results showed that majority of the respondents were aware of the various forms of mass media and used television and the internet most frequently. They used these two forms of media as their primary sources of sexual information and for gaining access to sexually explicit materials. Majority of the respondents stated that internet has a negative influence on youth's sexual attitudes and behaviors although they feel the use of internet to access sexual information and materials was acceptable. Those who stated that accessing the

internet for sexual material is not acceptable were also found to be sexually less experienced. Although respondents were engaged in various sexual behaviors like penetrative sex, oral sex, masturbation, and anal sex, there was high frequency of condom used during sexual activity which indicated that media and internet may have an influence to students in practicing safe sex.

## **2.7 Religiosity and Sex and Sexuality**

In a study conducted by Luquis, Brelsford and Guyler (2011) a number of 960 students participated to determine whether religiosity, spirituality, and sexual attitudes accounted for differences in sexual behaviors among college students which include respondents from different religious affiliations. The study showed that there is gender difference towards engaging of sexual intercourse where majority of the respondents have participated in sexual activities which include vaginal, oral and anal sex. There was higher percentage among female students as compared to male students who have engaged in vaginal intercourse within the last three months. Male students reported a higher level of sexually permissive behavior than females while female students are reported to have more positive views with regards to use of birth control as compared to male. In terms of religious contributions it was seen that sexually permissive behaviors, private religious practices and daily spiritual experiences contributed to engaging in sexual intercourse among both male and females. Surprisingly though, daily spiritual experiences is one factor that contributes to having low or high number of sexual partners among male students whereas in female only sexually permissive attitudes has its contribution towards the same.

A study by Jensen, Newell and Holman in 1986 includes 423 single man and women from two Universities in United States where students were asked to administer a survey to find relationship between religiosity and sexual behavior among the youth. The study includes questions pertaining to belief about pre marital sex, church attendance, frequency of sexual intercourse and the like to meet the objectives of the study. Data were analyzed using a five-way analysis of variance with race as a covariate where dependent variable was frequency of sexual intercourse among the participants. Results show that there is gender difference between attitudes towards pre marital and sexual

intercourse where male students report to drastically decline in sexual intercourse among those to see pre marital sex as unacceptable as compared to males where there is only a slight decline in their sexual intercourse in relation to their attitude towards pre marital sex. It was also found that in terms of church attendance, the highest frequency of sexual intercourse was found among students who attend church only a few times a year as compared to those who attend every week and has the lowest frequency of premarital sexual intercourse. The study thus concluded that church attendance is indeed a predictor for sexual intercourse.

In 2010, Gannon, Becker and Moreno tested explored the relationship between religion and sex among college students through social networking site called Facebook. The study included 380 undergraduate freshmen who were over 18 years based on displayed date of birth, and have updated their profile within 30 days as shown by late date of activity to ensure that the profile or account has been used actively. Data revealed that prior to entering college, more than half of the participants displayed their religious affiliation whereas by the end of the academic year it was significantly reduced. Further, although female students were more likely to the make their sexual references private but among those that do display sexual behaviors their frequency was much higher than male students displaying their sexual references. Results also reveal that students who displayed religious references demonstrate fewer sexual behaviors on social media such as Facebook and when compared across all time periods, profile owners with at least one reference to their religious beliefs displayed fewer references to sexual behaviors than non-displayers. This study supports the need to examine the relationship between sex and religion.

Leonard and Jones (2010) conducted a study where it was found although adolescents find religion as an important aspect in their lives there is negative correlation between their religiosity and self reported sexual behaviour. A total number of 118 high school students from Boston participant for the study and the tool for data collection was questionnaire which includes three main subjects viz. religious beliefs, private religious practices, and application of religious beliefs to everyday life. Results indicated that majority of the student find religiosity to be very important and they apply religious

beliefs to their everyday lives. However, when it comes to sexual activity, it was found that majority of the participants said they would engaged in sexual relationship if they were in a committed relationship. In fact most high school seniors reported that they have already engaged in sexual intercourse with a mean average age of 15.7 years as their first age of the sexual activity. It was also found that only few students do not use contraception while majority of them use condoms, contraceptive pills and withdrawal as a method of preventing unwanted pregnancy. Further, approximately half of them reported that their religion do not teach them about sexual behavior and the remaining half reveal that their religion teaches them about sex out of which only a few actually follow these teachings.

In a study conducted by Luquis, Belsford and Perez (2015) 230 undergraduate college students from western USA were examined to find out the relationship between religiosity, spirituality, sexual attitudes, and sexual behaviors among Latino and non-Latino college students. Participants were recruited on a voluntary basis and students who gave their consent for their participation were given a set of questionnaires and those that prefer to participant through online were also given the URL for the study for gaining the electronic version of the questionnaire. Brief Sexual Attitude Scale was used to measure sexual attitudes of the participants and other 5 scales were integrated to measure their spirituality and religiosity. Data reveal that majority of Latino students reported having had sexual intercourse while it remains almost the same for non-Latinos and a huge majority of those reported having had sexual intercourse during the last three months. Additionally, less than half reported using condom the last time they had sexual intercourse. A significant difference regarding student's frequency of attendance to religious services was found where Latino students reported higher score as compared to non-Latino students while in was seen that Latinos students were more sexually permissive than non-Latinos students.

Fehring et.al. (1998) studied 82 undergraduate college students from a Roman Catholic institution to examine the relationship between sexual activities and religiosity. All participants were unmarried between the ages of 17 to 21 and majority of them are sexually active. Results showed that church attendance increased sexual guilt as well as

sexual activity. It was also found that religiosity has a positive correlation with attitudes towards sexual permissiveness but not sexual behavior. Most participants reported being in a committed relationship as well as being in love to be the most influencing factors for initiation of sexual contact. Furthermore, data indicated that student who has greater participation in organized religious activities express more importance to their faith and engaging in less sexual activity score higher in sexual guilt.

Puzek, Stulhofer and Bozicevic (2012) conducted a study to find out if religiosity acts as a barrier to practicing safe sexual and reproductive health. They assessed 1005 young Croatian adults within the age group of 18 to 25 at three different religious levels including “religious upbringing, personal religiosity, and social network religiosity” and also include their sexual risks. The study was conducted using interviews where interviewers were given prior training on how to collect sexually related information from the participants. After the interview participants were offered Chlamydia testing which is free of cost to and 273 sexually active youth given their urine samples. Results indicated that many participants do not attend religious services while few of them also stated that they are not raised religiously at home. Half of them reported having sexual intercourse before the age of 18 and have had more than 8 or more sexual partners with reported failure to condom use the last time they had sex. Results indicated that rather than religious upbringing, personal religiosity has a more significant association with the numbers of sexual partners than participants have had and Chlamydia tests result showed there was no relationship found between religiosity and diagnosed STI. It was further found that STI was tested positive among some participants who reported being raised in a strictly religious home while only a few were found among those that were not raised in a religious household. The study concluded that personal religiosity decreased early sexual debut of young adults among Croatians, and religious upbringing at home as well as discussions with religious peers about sex-related information highly contribute to lowering the numbers of participants having multiple sex partners and it was also found that religiosity of participants does not affect their condom use.

In 2018 Taggart et al. studied 1170 American black adolescents between the age group of 13 to 17 years to understand the role of religion and religiosity on sexual

initiation of adolescents. The tool for data collection was interview which was carried out by trained interviewers after taking informed consent from the adolescent's caretakers as well as the adolescents themselves. Results indicated that when adolescents have an increased religious socialization it tends to foster religiosity among them which moulds various religious norms and cultures and resulted in delayed sexual initiation of adolescents. Further there was the association between religiosity and sexual initiation was not as strong as it was with older adolescents as compared to younger ones which can be explained by the fact that older adolescents have more opportunities of exposure to sex-related situations and also the older adolescent become there is decreased in parental monitoring as well. The study also found gender differences in religiosity and sexual activities where girls are found to be more active in their religious participation than boys and also less likely to be engaged in sexual behaviors as well. The study concluded that religiosity and religious socialization do contributes to delaying sexual initiation of adolescents.

Farmer, Trapnell and Meston (2009) studied a total of 1,303 undergraduates between the age group of 18-25 to find out the relationship between religion and sexual behavior. Majority of the participants have religious affiliations except for negligible students who reported being an atheist. There was gender difference in sexually active participants where majority of women were found to be sexually active as compared to men. Results also showed gender difference in sexual orientation fantasies where men scored higher in most variables which include Heterosexual with no homosexual fantasies, Heterosexual with some homosexual experience, and Homosexual with occasional heterosexual fantasies or experience except for Heterosexual with no homosexual fantasies where women scored higher than men. Data also revealed that there were more homosexuals among men as compared to women. It was found that religion do have its impact on sexual behaviors among young adults where it was found that adults who have religious afflictions were less likely to report homosexual fantasies and activities as compared to those who do not have any religious affiliation and participants who reported being an atheist. Besides this gender difference was found for age at first sexual experience where men who have religious affiliations reported having their first sexual experience at a younger age than those that do not where it was vice versa in

women. Also men score higher than women in other sexual behaviors like masturbation, petting, oral sex and sexual intercourse. The study concluded that religious affiliations do have an effect on sexual behaviors of young adults but significant gender differences are found in various sexual activities.

According to Elifson, Klein, and Sterk (2003) religiosity plays a significant role in women's HIV risk behaviors. The study examine 250 women along with their daughters categorized into 4 dyads; women and daughter using drugs, mother only using drugs, daughter only using drugs, and last both women and daughter who are not using drugs. Results indicate that religious attendance and self perceived impact of religion on behavior correlated with HIV risk behavior where respondents who score higher in both variables are less likely to indulge in HIV risk behavior, also, younger women score higher in HIV risk behaviors. The study found that when other variables like childhood mistreatment experiences, psychosocial measures, experiences and relationships with other persons, exposure to substance abusers, and condom-related beliefs and attitudes were also considered, religiosity is found to be a strong predictor of women's involvement in HIV related risky behaviors. It concluded that when women increased their frequency of attendance in religious and worship services there is an increased perceived influence on their behaviors which resulted in less involvement of HIV risk behavior.

Shah (2004) examines the role played by self-religiosity, father's religious attitude in the formation and practices of moral behaviour of youth from both religious and non religious schools. He studied 100 male Malay youth between the age group of 15 to 17 years and selection of participants was done equally from religious and non religious schools consisting of 50 participants from both the category of schools. The tool for data collection was questionnaires which consisted parameters measuring self-religiosity, father's religious attitude and moral behaviour of the respondents. Results indicate a significant relationship between self-religiosity and the moral behaviour of the respondents as well as between self-religiosity and father's religious attitude. A stronger correlation was found between self-religiosity and moral behavior as compared to self-religiosity and father's religious attitude. Further, there is a difference between religious

and non-religious school in terms of respondent's moral behaviour where students from religious school have a higher mean score of as compared to non-religious school students. Respondents from religious school score higher in self religiosity. In terms of father's religious attitude, it was found that fathers from religious school have a higher mean score as compared to fathers from non-religious school showing that father of adolescents from religious schools were more religiously-oriented than those from nonreligious schools. The study concluded that students from religious schools were more morally-oriented as compared to those from nonreligious schools and that father's religious attitude and religious teachings greatly affects self religiosity of children which further result in adopting moral behavior.

A study was conducted among 408 undergraduate students in a University to test if frequency of religious attendance and perceived degree of religiosity could distinguish between those students who have and have not participated in selected sexual behaviors. Results indicate that religious conviction plays a major role for many individuals with regards to sexuality. Participants with more frequent worship attendance and stronger religious feelings tend to be more conservative and for students who have had non-traditional sexual experiences like pre-marital sex or infidelities decrease their religious involvement. It was also found that rather than religiosity or perceptions on God's view of sex, frequency in attendance of religious services seem to have higher affect on limiting sexual behaviors of the respondents (Penhollow, Young & Denny, 2005).

Shaw and Bassel (2014) reviewed 137 articles where they found that most studies identified higher religiosity result in lower sexual HIV-risk behavior. Studies include sample from United States, Europe, Asia and Middle East. Association between religiosity and condom use, sexual initiation, sexual partners and paid sex was found. It was also found that higher the religiosity of respondents higher is their condom use, and there is delayed in their sexual initiation. Further, respondents who have higher score in religiosity tend to have fewer sexual partners and were less likely to engage in paid sex. It was seen that attendance to religious services was associated with abstinence, but surprisingly among sexually active participants, there was an association between increased in attendance and levels of condom use. It was further found that religious

upbringing of respondents have an association sexual initiation where it was found that respondents who reported having religious upbringing were more likely to delay their sexual debut. The study concluded that religion and religiosity do have an association with sexual HIV risk behavior where respondents who received religion to be a significant influencing factor of their sexual behavior reported are likely to report practicing safe sex.

## **2.8 Substance Use and Sex and Sexuality**

Kaljee et al. (2011) conducted a study to understand gender related alcohol consumption patterns and engagement in sexually intimate behaviors among adolescents and young adults in Viet Nam. A total of 880 youth between the age group of 16 to 22 participated in the study. Results indicated that participants report an increase in degree of sexual intimacy, from no intimacy to touch only to anysex with progressive increase in alcohol consumption. Further, findings reveal that when an increase in the quantity of alcohol consumption participants show significant odds of engaging in sexual intimacy where males who have a peak of 5 or more drinks have an increased likelihoods of engaging in anysex compared to those peaking at 1 to 4 drinks in an episode and even greater odds when compared to those not drinking. In females respondents, the quantity of peak alcohol was much less, however, at a threshold of 2 or more drinks consumed during a single episode compared to no drinking, there was an increased odds for touch only and any sex. Although there was no relationship found between alcohol consumption and condom use, among male respondents it was found that those that reported higher frequency in alcohol consumption have increased sex partners.

Livingston et al. (2012) wrote that experimenting with alcohol and sex is a normal pattern of adolescent development but poses a risk especially to female adolescents when these two intersect. To understand the association between the two they conducted focus group discussion among 97 adolescent females across Northern United States. Findings revealed that participants acknowledge the risks of combining alcohol and sexual activities, but also perceived advantages to mixing the two. These advantages include facilitating social as well as sexual interactions, and explaining away or excusing their unsanctioned sexual behaviors as an influence of alcohol consumption. Further, consuming alcohol was also related to an increased sexual regret and an agent which

impair their judgment and their ability to make wise decisions about engaging in sexual activities.

Asante, Weitz and Petersen (2014) conducted a study among 227 children and youth living in the streets of Ghana to understand the relationship between substance use and risky sexual behavior. It was a cross-sectional survey and convenient sampling was used for data collection. It was found that substance use was relatively high as many respondents reported daily consumption of alcohol and marijuana. Gender and age differences were found among the samples where there were more females who smoked cigarettes, marijuana and drink alcohol. Findings also revealed that alcohol consumption decreases with age but smoking of marijuana increases and respondents get older. Results further showed that consumption of alcohol increases different dimensions of sexual activities like sexual initiation, increased multiple sex partners, survival sex, and decrease in condom use. In terms of types of substance use, an association was found between marijuana use and ever having sex multiple sex partners and survival sex while alcohol consumption and other substances were associated with non-condom use.

Youth Risk Behavior Surveys were used to examine the differences between heterosexuals and sexual minority students in their experience with violence and victimization while dating in relation to substance use. It was found that sexual minority students were more likely to consume different types of substance like marijuana, alcohol and other illicit drugs as compared to heterosexual students. It was also reported that more sexual minority students experienced violence and victimization while dating which was more frequent among females as compared to males. Further there was an association between like smoking marijuana, consumption of alcohol and other illicit drugs among male gays and bisexual students with risk for experiencing violence and victimization during dating. Findings concluded that due to the association found between substance use and experience of violence and victimization while dating among sexual minority students, respondents may benefit from integration of substance use prevention (Rostad, 2019).

Staton (1999) talked about how consumption of alcohol and other drugs prior to sex can lead to risky sexual behavior. They conducted a study among 950 respondents

between the age group of 19-21 to understand the relationship between substance use and risky sexual behavior. Results indicate that respondents who reported early use of alcohol and marijuana were more likely to engage in earlier initiation of sexual behavior and early use of alcohol and marijuana was also found to be related with risky sexual behaviors among the respondents. Also, gender differences were found among respondents who use marijuana and alcohol with more males than females engaging in risky sexual activities. Further results from this study also showed that males who are frequent user of alcohol and marijuana at an early age, prior to sex, report more sexual partners than those who use the substances at later stage of the development. The study concluded that young adults who use substances prior to sexual activities are found to engaged more in risky sexual behavior and hence make them more vulnerable to sexually transmitted diseases like HIV/AIDS.

Gillmore et al. (1992) also conducted a study to examine the association between substance use and risky sexual behavior. The study was conducted among 241 unmarried pregnant adolescents. Results indicated that majority of the respondents were substance users which include alcohol, marijuana, cocaine and stimulants. Among these substances, alcohol was most commonly used and cocaine was least frequently used. It was also found that there was an association between substance use and sexual risk behaviors which include multiple sex partners, casual sex, sex with injecting drug users, and engaging in anal sex. Majority of the respondents had run away from home at one point in their lives, had been suspended from school, and some reported being expelled from school, and have been charged with a crime. Further relationship was also found with exchanging sex for money and drugs and when asked about the use of contraceptions majority of the pregnant adolescents reported not using any form of contraceptives in more than half their sexual intercourse. The study concluded that a positive association was found between the use of drugs and alcohol with risky sexual behavior.

A study was conducted among 7441 unmarried young people between the age group of 14-22 to understand the association between substance use and sexual behaviors. The study was cross-sectional and use self administered questionnaire which includes information about substance use during last sexual intercourse, condom use at

last sexual encounter, substance use in the last 30 days, different substances ever used, age at initiation of alcohol consumption, and number of lifetime sexual partners. Findings revealed that there was a strong relationship between lifetime substance use and failure to use condom, where the earlier respondents initiate substance use there was decrease in their condom use during sexual intercourse. It was found that once substance use is controlled there was no association found with condom use. Also, the use of alcohol or drugs was found to be significantly correlated with having more than sexual partner in the last three months. Among respondents who reported having used substances in their last sexual intercourse, almost two-third of them reported having had multiple partners and among females early initiation of substance use is found to increase the probability multiple sex partners (Santelli et al. 2001).

DeSimone (2010) found a relationship between binge drinking and risky sexual behaviors. He conducted a study to examine the relationship between the two variables and he used cluster sampling among 4,814 college students between the age group of 18-24 years. Findings revealed that there was a strong relationship between promiscuity and binge drinking in multiple occasions and that when alcohol use in the form of binge drinking is executed prior to sexual intercourse it directly leads to risky sexual behaviors including multiple sex partners and sex failure to use condoms. Also binge drinking-induced promiscuity is found among students who were involved in long-term and serious relationships, especially among male students.

A study was conducted to examine the relationship between risky sexual behavior and alcohol use among 221 sexually active, heavy drinking college students. Using structured interview schedule participants reported their sexual behavior as well as alcohol and drug use over a three-month period. It was found that students were extremely sexually active and there was high number of vaginal and anal sexual intercourse reported. However there was no association found between condom use and drinking, in both cases when students when heavily drinking or there was no alcohol consumption prior to sexual intercourse. Gender difference was found in condom use, where females report less condom use when they are involved in a steady relationship but it was also found that failure to use condom during sexual intercourse is significantly

correlated to consumption of alcohol prior to sexual activity both with casual and steady partners (Lori, et al. 2010).

## **2.9 Analysis of Review of Literature**

The review of literature helps in drawing the following conclusions:

- The most frequently tool for data collection used was questionnaire and importance was given to respondent's anonymity.
- Youth population lack accurate knowledge and awareness in sex and sexuality, and are exposed to misinformation because of myths and sexual traditional practices.
- Young adults are sexually active and do not necessarily have sexual guilt especially those that are in a committed and long term relationships.
- It was also found that there is gender difference towards LGBT community where females are more accepting as compared to males.
- There is lack of parental communication about sex and sexuality which can pose a threat to proper sexual development of youth population because they do discuss it with their peers and gather information from unsanctioned media sources.
- Peer group influence is found to be very strong among the youth which pressurize them to indulge in sexual behaviors before they are ready.
- Media is used as source of sexual contacts, purchasing sexual products, and to access sexually stimulating materials.
- Religion and religiosity plays an important role in delaying sexual initiation among youth and reduces their sexual permissiveness.
- There was a strong association found between consumption of substances and engaging in risky sexual behaviors.
- Sex education as part of the curriculum from lower education is highly recommended.

## **2.9 Research Gaps**

From the above review of literature the following research gaps were identified.

1. Majority of the studies include knowledge on sexually transmitted infections and diseases and did not include knowledge and awareness of youth on sex and sexuality itself.
2. Literature was not found on youth's knowledge about legislations pertaining to sexual health and sexual rights in particular.
3. There were only few studies that consist of youth attitudes toward risky sexual behaviors like multiple sex partners and participating in group sex as well as their attitudes towards sexual contacts through media.
4. Studies on parent-child communication concentrate only on communication about sexual health and did not involve other aspects of sex and sexuality.
5. There was limited study conducted on sex and sexuality among Indian youth as well as youth in Mizoram.

Mizoram is a one of States in North East India with Aizawl as its capital. As per census 2011, the total population of the State is 10.97 lakhs with a literacy rate of 91.33 which ranks third in the country. Mizoram has 11 districts, including the newly created three districts in 2019. There are multiple and diverse sub tribes and the State shares an international border with Myanmar and Bangladesh.

It is a hilly area with beautiful flora and fauna and the Mizo people are known for their love for music and sports. The main occupation of the people is agriculture and majority of the people are Christians and according to 2011 census, there are 87.16% Christians in the State. Mizo people are hospitable and honest and their moral code of ethics is based on rendering help and assistance to people with no exceptions. This traditional value is enforced through the concept of '*tlawmngaihna*' which translates to a sense of altruism.

The Mizo society has seen tremendous changes, from the practice of animism and headhunting, to being the largest Christian state and one of the most peaceful states in the country. As part the various developments in the society, Mizo youth has been a victim of cultural lag resulting in generation gap and social problems. Pre-marital sex, teenage pregnancy, abortion, suicide among the youth is increasing. Youth identify themselves to various sexual orientations, and metro-sexuality has become the trend in understanding themselves as social beings. These practices have increased their vulnerability in terms of health issues such as tuberculosis, HIV/AIDS and other venereal diseases.

### **3.1 Research Design**

The study is exploratory in design and cross-sectional in nature. Both qualitative and quantitative methods were utilized for the study.

### **3.2 Sources of Data Collection**

Data was collected from both primary as well as secondary sources. The primary sources include data collected from the respondents which includes the college students and key-informants and secondary sources include data and information collected through published reports, books, etc. from government and non-government sources.

### 3.3 Sampling Procedure

The unit of study was college going student and all college students in Mizoram constitute the population of the study.

A Multi-stage sampling procedure was utilized for the study. In the first stage, two (2) districts namely Aizawl and Lunglei, the highest populated districts, representing North and South Mizoram was purposively selected. In the second stage, a list of all colleges within the two selected districts was obtained from Mizoram University. In the third stage, the number of seats available in all the colleges from the selected districts was collected from the authorities of the colleges and the numbers were listed out. In the fourth stage, one (1) college each representing the selected districts with the highest number of student's enrollment was selected. The college representing Aizawl District had students enrollment of 2505 and the college representing Lunglei District had student enrollment of 471. In the fifth stage, out of the total enrollment of both colleges from Aizawl and Lunglei, only 1<sup>st</sup> year students across departments from the two selected colleges formed the final sample. All students who were present during data collection from 1<sup>st</sup> year across the departments of the two selected colleges were distributed the questionnaires. Sample of 546 students was collected from College-I in Aizawl and 198 students from College-II in Lunglei. The total sample size of the study was 744 students including 397 females and 347 male students. Gender representativeness could not be taken because the tool of data collection was a questionnaire.



### **3.4 Tools of Data Collection**

A semi-structured questionnaire formed the tool for data collection. Information regarding the socio-demographic profile of the college students was included in the tool to understand the profile and sexual orientations of college students in Mizoram. Different scales were constructed to measure the knowledge and awareness on sex and sexuality, frequency of indulgence of all forms (normal and overt) of sexual behavior, acceptance level of attitude towards all forms (normal and overt) of sexual behavior, acceptance level of attitudes towards LGBT community, frequency of parent child communication, peer group relationship, exposure to mass media, religiosity, and substance use among college students in Mizoram.

The various dimensions and items to measure the parent child communication was based on the literature Horstman, Hays and Maliski (2016), peer group pressure was based on Tome (2012), mass media exposure was based on Janghorbani, Lam, and The Youth Sexuality Study Task Force (2013), religiosity was based on Luquis, Brelsford and Guyler (2011), and Puzek, Stulhofer and Bozicevic (2012), and substance use was based on Kaljee et.al.(2011), Livingston et al. (2012), and Staton (1999).

The different items to measure knowledge and awareness on sexuality, sexual behavior, attitude towards sexual behavior and attitude towards LGBT community were based on Renaud et al. (2010) and Jerome, B., Leda, C., & John, T. (1992), The Protection of Children from Sexual Offences (POCSO) Act 2012, Tang, Lai and Chung (1997), and Kanwetuu, Mokulogo and Azumah (2018)

Qualitative methods such as 6 case vignettes, 3 focus group discussion and 2 in-depth interviews with health care practitioners were also conducted to meet the objectives of the study. After preparation of the tool, pre-testing was conducted to check the reliability of the tool and alterations and changes were made accordingly to maintain ethical standards of research.

**Table 1 Reliability of Scales Constructed**

Sl.No	Scale	Sample Size	Number of Items	Scales	Alpha	Parallel
1	Knowledge and Awareness	744	15	2 point scale; 0 =No; 1 = Yes	0.78	0.78
2	Sexual Behavior	744	16	5 point scale; 0 = Never; 1 = Seldom; 2 = Sometimes; 3 =Often ; 4 =Always	0.90	0.90
3	Attitude towards Sexual Behavior	744	19	5 point scale; 0 =Strongly Disagree; 1=Disagree; 2 =Neutral; 3 =Agree; 4 =Strongly Agree	0.91	0.91
4	Attitude towards LGBT community	744	4	5 point scale; 0 =Strongly Disagree; 1=Disagree; 2 =Neutral; 3 =Agree; 4 =Strongly Agree	1.00	1.00
5	Parent Child Communication	744	10	5 point scale; 0 =Never; 1=Seldom; 2 =Sometimes; 3 =Often ; 4 =Always	0.92	0.92
6	Peer Group Relationship	744	8	5 point scale; 0 =Never; 1=Seldom; 2 =Sometimes; 3 =Often ; 4 =Always	0.90	0.90
7	Mass Media Exposure	744	10	5 point scale; 0 =Never; 1=Seldom; 2 =Sometimes; 3 =Often ; 4 =Always	0.76	0.76
8	Religiosity	744	10	5 point scale; 0 =Never; 1=Seldom; 2 =Sometimes; 3 =Often ; 4 =Always	0.90	0.90
9	Substance Use	744	7	5 point scale; 0 =Never; 1=Seldom; 2 =Sometimes; 3 =Often ; 4 =Always	0.76	0.76

*Source: Computed*

The tool was administered by getting prior permission from the college Principals and respective Heads of each department. The researcher was given a time slot according to the convenience of the department and detailed instructions were given to the students before administering the questionnaire. Students were seated in a manner to ensure their responses are independent and not influence by their peers.

### **3.5 Data Analysis**

The quantitative data were analyzed using Microsoft Excel and SPSS package. Descriptive statistics, simple frequency and means were presented to find out the understanding of sex and sexuality among college students in Mizoram. Pearson's correlation co-efficient was used to find out the relationship among and between parent-child communication, peer group, media, religion and substance use and the understanding of sex and sexuality among college students in Mizoram. T test was also used to compare means on awareness on sex and sexuality, sexual behavior, attitude towards sexual behavior and attitude towards LGBT community across gender. Case vignettes, focus group discussion and in-depth interview are presented accordingly to get an in-depth knowledge about the objectives of the study.

### **3.6 Ethical Consideration**

The subject of sex and sexuality is a sensitive issue and a personal topic. Keeping this in mind, consent was sought from the concerned authorities to conduct the study in the colleges. Similarly, informed consent was also sought from the college students and only those students who give consent were included in the sample. All names of the respondents are concealed to maintain confidentiality and the same is applied for the colleges.

#### 4.1 Socio demographic profile

This section will cover the characteristics which include gender, age, marital status, Information regarding respondent's children, religion, denomination, course, type of family, form of family, primary occupation of family, secondary source of income, monthly income of family, socio-economic status.

**Table 2 Gender**

Sl.No.	Gender	Frequency
1	Female	397 (53.4)
2	Male	347 (46.6)
Total		744

*Source: Computed Figures in parenthesis indicates percentages*

Table 2 shows the distribution of respondents according to the gender. The table shows that more than half (53.4%) of the respondents are female and almost half (46.6%) of them are male. This indicates gender representativeness in the study.

**Table 3Age**

Sl. No	Age Group	Gender		Total N= 744
		Female n=397	Male n=347	
1	18 to 25 Years	358 (90.18)	322 (92.79)	680 (91.4)
2	17 Years and below	39 (9.82)	23 (6.63)	62 (8.33)
3	26 Years and Above	0 (0.0)	2 (0.58)	2 (0.27)

*Source: Computed Figures in parenthesis indicates percentages*

Table 3 indicates the distribution of respondents according to their age group which will highlight the most significant age group of college students in Mizoram.

From the table, majority (91.4%) falls under the 18 to 25 years age group. Less than a tenth (8.33%) are from the age group 17 years and below. Very few (0.27%) of them are from 26 years and above age group.

In the female category, we also find that majority (90.18%) of them are from the age group 18 to 25 years followed by less than a tenth (9.82%) who are from the 17 years and below age group. In the male category, we also find similar trend where majority (92.79%) of the respondents are from the 18 to 25 years age group followed by less than a tenth (6.63%) from the 17 years below age group and very few of them from the 26 years and above age group.

Across the distribution in different age groups we find gender difference where there are more females in the age group of 18 to 25 years and 17 years and below whereas there are more males in the category of 26 years and above.

**Table 4 Marital Status**

Sl.No	Status	Gender		Total N=744
		Female n=397	Male n=347	
1	Unmarried	392 (98.74)	346 (99.71)	738 (99.2)
2	Married	3 (0.76)	0 (0.00)	3 (0.40)
3	Divorced	2 (0.50)	1 (0.29)	3 (0.40)

*Source: Computed Figures in parenthesis indicates percentages*

Table 4 shows respondent's distribution according to their marital status and will reveal if respondents are bonded by matrimony.

We find that majority (99.2%) of the respondents fall under the category of unmarried and an equal number (0.40%) falls under the category of married and divorced. No respondents were found in the categories of remarried, widow and widower.

In female category, majority (98.74) of them are unmarried, less than a tenth (0.76) falls under the category of married and a few (0.50) of them are divorcees. We find the same pattern in male category as well, where majority (99.71%) fall under the category of unmarried, there is no respondent for married category while a few (0.29%) fall under divorced category.

Across the distribution in marital status, gender difference is found where there are more unmarried female students as compared to unmarried males, and we do not find

any male student in the married category. Also, there is a slight difference in the divorce category where there are more divorced females than male students.

**Table 5 Information about children**

Sl.No	Item	Gender		Total N=744
		Female n=397	Male n=347	
1	Do not have children	391 (98.48)	338 (97.41)	729 (97.98)
2	Have children	6 (1.52)	9 (2.59)	15 (2.02)

*Source: Computed Figures in parenthesis indicates percentages*

Table 5 highlights if respondents have children or not which will show if they are pursuing their education while performing the role of a parent as young adults.

We find that majority (97.98%) of them do not have children while a few (2.02%) are young parent.

In the female category, majority (98.48%) of the respondents are without children and few (1.52%) have given birth to a child. In the male category, we also find that majority (97.41%) are without children and few (2.59%) of them stated that they are young fathers.

Across distribution, we find gender difference where there are more females without children and more males with children.

**Table 6 Religion**

Sl.No	Religion	Gender		Total N=744
		Female n=397	Male n=347	
1	Christianity	393 (99)	345 (99.42)	738 (99.19)
2	Hindu	3 (0.75)	1 (0.29)	4 (0.54)
3	Muslim	1 (0.25)	1 (0.29)	2 (0.27)

*Source: Computed Figures in parenthesis indicates percentages*

Table 6 indicates distribution of religion among the respondents and shows how students identify themselves based on various religions.

We find that majority (99%) of them are Christians, few (0.54) are Hindus, and a few (0.27%) are Muslims. This finding is not unexpected as Mizoram is a Christian State where almost all families identify with the religion. In fact, according to 2011 census 87.16% of the total population follow Christian religion.

In the female category, majority (99%) are Christians, a few (0.75%) are Hindus, and very few (0.25%) of them are Muslims. In the male category, we find similar trend where majority (99.19%) identify themselves as Christians, and an equal number (0.29%) are Hindus and Muslims.

Gender difference was also identified where there are more female Christians and Hindus, but this difference is not found in Muslim religion.

**Table 7 Denomination**

Sl.No	Denomination	Gender		Total N=744
		Female n=397	Male n=347	
1	Presbyterian Church of Mizoram	210 (52.9)	178 (51.29)	388 (52.15)
2	Baptist Church of Mizoram	121 (30.5)	89 (25.64)	210 (28.23)
3	United Pentecostal Church	20 (5.04)	31 (8.93)	51 (6.85)
4	Others	19 (4.7)	16 (4.61)	35 (4.7)
5	Roman Catholic	10 (2.53)	14 (4.05)	24 (3.22)
6	The Salvation Army	10 (2.53)	12 (3.46)	22 (2.95)
7	Seventh Day Adventist	7 (1.8)	7 (2.02)	14 (1.9)

*Source: Computed*

*Figures in parenthesis indicates percentages*

Table 7 shows the respondent's distribution in denomination and will highlight student's attachment to different denominations in the State.

Findings indicated that majority (52.15%) of the respondents are Presbyterian, more than one-fourth (28.23%) are Baptist, less than one-tenth (6.58%) are United Pentecostal Church, followed by less than a tenth (4.7%) who opted from others which include denominations like Church of Jesus Christ, Lai Ram Isua Krista Baptist Kohhran, and Evangelical Church of Maraland. Among respondents who opted for the category 'others' there were also students who identify themselves as an atheist and antagonist. Further we find few respondents in the category of Roman Catholic (3.22%), Salvation Army (2.95%), and Seventh Day Adventist (1.9%). Looking at table 6, we find that all respondents identify with a particular religion but we find items like atheist and antagonist in the denomination category which reveals that although respondents are assigned a religious identity at the time of birth by their parents, they do not follow the religion, nor do they believe in the existence of a higher being.

In the female category, we find that majority (52.9%) are Presbyterian, almost one-third (30.5%) are Baptist, and less than a tenth for other categories; United Pentecostal Church (5.04%), others (4.7%), Roman Catholic (2.53%), Salvation Army (2.53%), and Seventh Day Adventist (1.8%). Similar pattern was identified in the male category where majority (52.19%) are Presbyterian, one-fourth (25.64%) are Baptist, and the rest of the categories have less than a tenth of respondents each; United Pentecostal Church (8.93%), Others (4.61%), Roman Catholic (4.05%), Salvation Army (3.46%), and Seventh Day Adventist (2.02%).

Across the distribution in denomination gender difference was found where there are more females in the category of Presbyterian and Baptist and more males in the other categories of United Pentecostal Church, Others, Roman Catholic, Salvation Army, and Seventh Day.

**Table 8 Course**

Sl.No	Course	Gender		Total N=744
		Female n=397	Male n=347	
1	Bachelor of Arts (BA)	287 (72.29)	254 (73.19)	541 (72.72)
2	Bachelor of Science (B.Sc)	69 (17.39)	58 (16.71)	127 (17.07)
3	Bachelor of Commerce (B.Com)	26 (6.54)	22 (6.35)	48 (6.45)
4	Bachelor of Business Administration (BBA)	15 (3.78)	13 (3.75)	28 (3.76)

Source: Computed

Figures in parenthesis indicates percentages

Table 8 highlights distribution of respondents according to the course they are admitted and indicates that all courses offered in the two selected colleges are being represented.

Results indicated that majority (72.72%) of them have taken admission in Bachelor of Arts (BA), less than one-fifth (17.07%) opted Bachelor of Science (BSc), less than a tenth (6.45%) falls under the category of Bachelor of Commerce (BCom), and a few (3.76%) of them are from Bachelor of Business Administration (BBA) .

In the female category, majority (72.29%) are pursuing the BA course, less than one-fifth are continuing their education with B.Sc course and less than a tenth (6.54% and 3.78%) of the students opted both B.Com and Others respectively. In the male category we find similar trend where majority (73.19%) opted for BA course, less than one-fifth (16.71%) opted for B.Sc course, and less than a tenth (6.35%) opted for B.Com and (3.75%) for others.

Gender difference was found across distribution of courses where there were more female students in all four categories.

We find that majority of the sample is from Bachelor of Arts because both the colleges offer more courses in BA as compared to other courses.

**Table 9 Type of Family**

Sl.No	Type	Gender		Total N=744
		Female n=397	Male n=347	
1	Nuclear	252 (63.48)	186 (53.60)	438 (58.87)
2	Joint	145 (36.52)	161 (46.40)	306 (41.13)

Source: Computed Figures in parenthesis indicates percentages

Table 9 shows distribution of respondents according to their family type and will highlight the type of family that students are currently living in.

It was found that out of the total respondents more than half (58.87%) of the students live in a nuclear family while a little less than half (41.13%) live in joint family which include family members other than father, mother, and siblings.

In the female category, majority (63.48%) have opted for nuclear type of family while the rest constituting more than one-third (36.52%) live in a joint family system. In the male category, difference was not as significant as it was with females where more than half (53.60%) live in nuclear family and a little below half (46.40%) live in joint family.

Gender difference in the distribution for type of family was identified where there were more females living in nuclear families as compared to male students and more male respondents were found in joint families.

**Table 10 Form of Family**

Sl.No	Course	Gender		Total N=744
		Female n=397	Male n=347	
1	Stable	346 (87.15)	304 (87.61)	650 (87.36)
2	Broken	30 (7.56)	24 (6.92)	54 (7.26)
3	Reconstituted	21 (5.29)	19 (5.47)	40 (5.38)

Source: Computed Figures in parenthesis indicates percentages

Table 10 indicates respondent's distribution in form of family and will give a background on the form of family that students are depending upon.

Findings indicated that majority (87.36%) of the respondents comes from a stable form of family, whereas less than one tenth (7.26%) comes from broken family and a few (5.38%) from reconstituted families.

In the female category, majority (87.15%) of them falls under the stable form of family, a little less than a tenth (7.56%) are from broken families, followed by a few (5.29%) from reconstituted family. Similar pattern is also found in the male category where majority (87.61%) comes from stable family, less than tenth (6.92%) from broken family, and few (5.47%) of them live in a reconstituted form of family.

There is gender difference found in form of family where there are more females living in stable, broken and reconstituted form of family.

**Table 11 Primary Occupation of Family**

Sl.No	Source of Income	Gender		Total N=744
		Female n=397	Male n=347	
1	Government Service	200 (50.38)	164 (47.26)	364 (48.92)
2	Agriculture	74 (18.64)	101 (29.10)	175 (23.52)
3	Self Employed	64 (16.13)	36 (10.38)	100 (13.44)
4	Petty Business	40 (10.07)	32 (9.22)	72 (9.68)
5	Large Business	12 (3.02)	10 (2.89)	22 (2.96)
6	Others	7 (1.76)	4 (1.15)	11 (1.48)

*Source: Computed*

*Figures in parenthesis indicates percentages*

Table 11 shows the distribution of respondents according to the primary occupation of family which highlight the main source of income of the respondents.

Data revealed that almost half (48.92%) stated 'Government Service' as their primary source of income for the family, almost one-fourth (23.52%) opted 'Agriculture', more than one-tenth (13.44%) stated 'Self Employed' as the primary source of income,

followed by less than a tenth (2.96%) opting for ‘Large Business’, and finally a few (1.48%) opted the category ‘Others’ which includes daily laborers, working in shops, etc.

In the female category, we find that majority (50.38%) of the respondent have government service as the primary occupation of the family, a little less than one-fifth (18.64% and 16.13) opted agriculture and self-employed respectively, a tenth (10.07%) opted for petty business, and a few (3.02%) have large business as their primary source of income, while the rest (1.76%) opted for the category ‘others’. In the male category, similar trend is identified where majority (47.26%) opted for government service, more than one-fourth (29.10%) opted agriculture, while a tenth (10.38%) opted self employed, less than tenth (9.22%) opted for petty business, and a few (2.89%) opted for large business and the rest (1.15%) opted for the category ‘others’

Primary occupation of family shows gender difference where we find more females opting for the categories of government service, self-employed, petty business and large business, and more male students opted for the categories agriculture, and others.

**Table 12 Secondary Source of Income**

Sl. No	Source of Income	Gender		Total N=744
		Female n=397	Male n=347	
1	No Secondary Occupation	214 (53.90)	175 (50.44)	389 (52.28)
2	Self Employed	47 (11.84)	39 (11.24)	86 (11.56)
3	Agriculture	39 (9.83)	43 (12.39)	82 (11.03)
4	Petty Business	32 (8.06)	44 (12.68)	76 (10.22)
5	Government Service	40 (10.07)	29 (8.36)	69 (9.27)
6	Large Business	14 (3.53)	14 (4.03)	28 (3.76)
7	Others	11 (2.77)	3 (0.86)	14 (1.88)

Source: Computed

Figures in parenthesis indicates percentages

Table 12 highlights respondent's distribution on secondary source of income which shows if their families have other source of income.

Results indicated that majority (52.28%) of the respondents do not have secondary source of income, over a tenth (11.56%) opted for self-employed as their secondary source of income, followed by a little over a tenth (11.03%) opting for agriculture. Further, one-tenth (10.22%) of the respondents opted petty business as their secondary source of income, less than a tenth (9.27%) opted for government service, and a few (3.76% and 1.88%) opted for large business and others respectively. The category for 'others' includes daily laborers, who work in their neighbors fields and there were also others who cited 'pensioners' as their secondary source of income. This finding shows that there are many families who depend on only one source of family income to take care of its members.

In the female category, we find that more than half (53.90%) have no secondary source of income, a little over a tenth (11.84%) opted for self-employed, while less than one-tenth (9.83%) of the respondents opted for agriculture, a little less than a tenth (8.06%) opted for petty business, a tenth (10.07%) of the respondents opted for government service, and a few (3.53% and 2.77%) opted for large business and other source of income respectively. In the male category, we find that half (50.44%) of them do not have secondary source of income, a little over a tenth (11.24%) opted for self employed, and over a tenth (12.39% and 12.68%) opted for agriculture and petty business as respectively. Also, we find that less than a tenth (8.36%) opted for government service, and a few (4.03%) respondents opted large business as their secondary source of income with a negligible (0.86%) opting for others.

Gender difference is found in this table where females score higher in the category for no secondary occupation, self employed, government service and other source of income while male respondents have higher scores in agriculture, petty business and large business as their secondary source of income.

**Table 13 Monthly Income of Family**

Sl. No	Income	Gender		Total N=744
		Female n=397	Male n=347	
1	Rs. 10,000 to Rs. 30,000	115 (28.97)	98 (28.24)	213 (28.63)
2	Rs. 30,000 to Rs. 50,000	113 (28.47)	87 (25.08)	200 (26.88)
3	Rs. 50,000 to Rs. 1 Lakh	98 (24.68)	81 (23.35)	179 (24.06)
4	Less than Rs. 10,000	37 (9.32)	47 (13.54)	84 (11.29)
5	Rs. 1 Lakh and Above	34 (8.56)	34 (9.79)	68 (9.14)

Source: Computed

Figures in parenthesis indicates percentages

Table 13 shows respondent's distribution on monthly family income to highlight the economic background of the participants.

Findings revealed that over one-fourth (28.63%) of the respondents have monthly family income of Rs. 10,000 to Rs. 30,000, a little over one-fourth (26.88%) opted for 'Rs. 30,000 to Rs. 50,000', less than one-fourth (24.06%) opted for 'Rs. 50,000 to Rs. 1 Lakh', and over one-tenth (11.29%) opted for 'less than Rs. 10,000' followed by almost a tenth (9.14%) opting for 'Rs. 1 Lakh and above' as monthly income of the family.

In the female category, we find that over one-fourth (28.97% and 28.47%) have monthly family income of Rs. 10,000 to Rs. 30,000 and Rs. 30,000 to Rs. 50,000 respectively, a little below one-fourth (24.68%) have Rs. 50,000 to Rs. 1 Lakh, and less than a tenth (9.32% and 8.56%) opted for "less than Rs. 10,000' and 'Rs. 1 Lakh and above' respectively. Similar pattern is also found in the male category where over one-fourth (28.24%) of the respondents have monthly family income of Rs. 10,000 to Rs. 30,000, followed by one-fourth (25.08%) of the respondents in the category of 'Rs. 30,000 to Rs. 50,000, a little below one-fourth (23.35%) opted for Rs. 50,000 to Rs. 1 Lakh, and over than a tenth (11.29%) opted for "less than Rs. 10,000' with less than a tenth (9.14%) opting for 'Rs. 1 Lakh and above'.

A slight gender difference is found in monthly income of the family where we see that females opted more for the categories of 'Rs. 10,000 to Rs. 30,000', 'Rs. 30,000 to

Rs. 50,000’, and ‘Rs. 50,000 to Rs. 1 Lakh’, while male respondents opted more for the rest of the categories including ‘less than Rs. 10,000’, and ‘Rs. 1 Lakh and above’ as their monthly family income.

**Table 14 Socio-Economic Category**

Sl. No	Category	Gender		Total N=744
		Female n=397	Male n=347	
1	Above Poverty Line (APL)	224 (56.42)	214 (61.67)	438 (58.87)
2	Don't Know	97 (24.44)	59 (17)	156 (20.97)
3	Below Poverty Line (BPL)	60 (15.11)	61 (17.58)	121 (16.26)
4	Antyodaya Anna Yojana (AAY)	13 (3.27)	10 (2.89)	23 (3.09)
5	No Category	3 (0.76)	3 (0.86)	6 (0.81)

*Source: Computed*

*Figures in parenthesis indicates percentages*

Table 14 highlights the distribution of respondents according to their socio-economic status. It shows us the social standing or financial class of the students.

Results indicated that more than half (58.87%) of the students fall in the category of ‘Above Poverty Line’, one-fifth (20.97%) stated that they do not know their socio-economic status, less than one-fifth (16.26%) belong to ‘Below Poverty Line’, while less than a tenth (3.09%) are in the ‘Antyodaya Anna Yojana’ category and a few (0.81%) who stated that they have no socio-economic category. This data shows that there are many students who do not know their socio economic status which indicate the need for sensitizing college students about the different categories of socio-economic status and criterion and measurement for each status.

In the female category, we find that more than half (56.42%) of the respondents belong to ‘Above Poverty Line’, a little less than one-fourth (24.44%) stated that they do not know their category, above one-tenth (15.11%) belong to the category of ‘Below Poverty Line’ while less than a tenth (3.27%) belong to ‘Antyodaya Anna Yojana’ with a few (0.76%) respondents under ‘No Category.’. In the male category, we find that majority (61.67%) of them belong to ‘Above Poverty Line’ category, a little below one-

fifth (17%) stated that they do not know their socio-economic status, while almost the same number (17.58%) belong to 'Below Poverty Line'. Further, less than a tenth (2.89%) of the male respondents falls under the category of 'Antyodaya Anna Yojana', with a few (0.86%) under 'No Category.'

Socio economic status show gender difference as there are more male students under the categories of 'Above Poverty Line', and 'Below Poverty Line', while there are more females students in the other categories of 'Don't Know', and 'Antyodaya Anna Yojana'. Both gender shows equal number in the 'No Category'.

Finding which reveal that almost a fourth of the students not knowing their socio-economic status is alarming because it indicates that there is no awareness on various socio-economic categories and the criteria for each category.

#### 4.2 Respondents and parents, peers, mass media, religion, and substance use

This section will discuss the frequency of parent child communication, peer group relationship, mass media exposure, religiosity, and substance use.

**Table 15 Parent Child Communication**

Sl. No	Items	Gender				Total N=744	
		Female n=397		Male n=347		Mean	SD
		Mean	SD	Mean	SD		
1	Importance of Health	3.20	1.00	2.92	1.11	3.07	1.06
2	Responsiveness to Needs	3.14	1.09	2.92	1.20	3.04	1.15
3	Career and work	3.06	1.01	2.88	1.07	2.98	1.04
4	Education in making sense about the world	2.78	1.20	2.66	1.19	2.72	1.19
5	Coping Strategies	2.76	1.22	2.52	1.24	2.65	1.23
6	Respect in beliefs and opinions	2.62	1.18	2.44	1.21	2.54	1.20
7	Importance of privacy	2.59	1.25	2.33	1.20	2.47	1.23
8	Encouragement on participation in all family interactions	2.55	1.25	2.28	1.26	2.43	1.26
9	Gender awareness	2.31	1.11	2.03	1.22	2.18	1.17
10	Communication on sex and sexuality	1.70	1.35	1.22	1.26	1.48	1.33
Total Mean		2.67	1.17	2.42	1.20	2.55	1.19

Source: Computed

Table 15 shows the distribution of respondents according to the frequency of parent child communication. This dimension has 10 items and the frequency of parent child communication was scored based on 5 point scale viz. 0 Never, 1 Seldom, 2 Sometimes, 3 Often, and 4 Always. The dimension of parent child communication has ten items covering various aspects communication. Majority of the items were based upon Horstman, Hays and Maliski (2016).

From the table we see that the overall frequency of parent child communication is high (2.55). Among those items where parent-child communication were high, they include communication regarding health (3.07), responsiveness to needs of the respondents (3.04), career and work (2.98), making sense about the world (2.72), coping strategies (2.65), and respect in beliefs and opinions (2.54). Frequency of communication is moderate on items relating to privacy (2.47), participation in family interactions (2.43), and gender awareness(2.18). Frequency of communication is poor on awareness on sex and sexuality (1.48).

Among the female students we find that the frequency of parent-child communication is high among items related to health, parent's responsiveness to needs, career and work, making sense about the world, coping strategies, respect in beliefs and opinions, gender awareness and encouragement for participation in family interactions. Further, frequency of communication between parents and female students is moderate in items such as gender awareness but low on communication about sex and sexuality.

In the male category, it was found that frequency of parent-child communication is high on items such as health, responsive to needs, career and work, making sense about the world, and coping strategies. It was also found that among male students, frequency was moderate on respect in beliefs and opinions, importance of privacy, encouragement for participation in family interactions, and low on awareness related to gender, sex and sexuality.

Gender difference was found in parent-child communication where female students have more discussion with parents as compared to male students. Similar

findings were also seen in Wanje et.al (2017) where mothers and daughters communicate more about sexual topics as compared to their sons.

**Table 16 Peer Group Relationship**

Sl. No	Items	Gender				Total N=744	
		Female n=397		Male n=347		Mean	SD
		Mean	SD	Mean	SD		
1	Sharing experiences.	2.39	1.19	2.41	1.15	2.40	1.17
2	Sharing feelings.	2.44	1.16	2.29	1.01	2.37	1.10
3	Help in solving challenges	2.33	1.07	2.33	1.06	2.33	1.06
4	Help in academic performance	2.27	1.08	2.37	1.06	2.32	1.07
5	Promoting confidence and self-esteem	2.18	1.22	2.16	1.12	2.17	1.17
6	Teach conform with norms of society.	2.13	1.07	2.19	1.08	2.16	1.08
7	Help in sense of belonging in community	2.09	1.05	2.13	1.08	2.11	1.07
8	Communication on sex and sexuality	1.73	1.24	2.24	1.28	1.97	1.28
Total Mean		2.19	1.14	2.27	1.10	2.23	1.12

Source: Computed

Table 16 shows the distribution of respondents according to the frequency of peer group relationship. This dimension has 8 items and frequency of peer group relationship was scored based on 5 point scale viz. 0 Never, 1 Seldom, 2 Sometimes, 3 Often, and 4 Always. Majority of the items were based upon Tome (2012).

Findings reveal that overall frequency of peer group relationship is moderate (2.23). Frequency of peer group relationship was moderate on items such as sharing experiences (2.40) and feelings (2.37), solving challenges (2.33), help in academic performance (2.32), promotion of confidence and self-esteem (2.17), help conform with societal norms (2.16), and sense of belongingness (2.11), while it was low (1.97) on awareness on sex and sexuality. Kakavoulis and Forrest (1999) also found that among college students, peers are rated as the highest source of information on sex and sexuality.

In the female category it was found that the frequency is moderate for all the items except on awareness on sex and sexuality whereas it was moderate in all eight items for male students.

Gender difference is found in peer group relationship where frequency of peer group relationship for female students were higher on items such as sharing of feelings and promotion of self-esteem while male students scored higher in all the other items. Significant gender difference was found especially on the item awareness on sex and sexuality where females mean score is low (1.73) and male students score is moderate (2.24) indicating that males students discuss more about the topic with their peers as compared to female students.

**Table 17 Mass Media Exposure**

Sl. No	Items	Gender				Total N=744	
		Female n=397		Male n=374		Mean	SD
		Mean	SD	Mean	SD		
1	Mobile phone usages	3.40	0.97	3.34	0.90	3.37	0.93
2	Watching internet related TV programmes	3.00	1.03	3.12	0.88	3.05	0.97
3	Browsing internet	2.85	1.08	3.10	0.90	2.97	1.01
4	Watching television	2.55	1.03	2.37	1.00	2.47	1.02
5	Computer usages	2.11	1.21	2.37	1.17	2.23	1.20
6	Reading books	2.28	0.96	2.08	1.03	2.19	1.00
7	Awareness on sex and sexuality through mass media	1.86	1.24	2.46	1.19	2.14	1.25
8	Reading newspapers	2.01	0.87	2.15	1.06	2.07	0.96
9	Reading magazines	1.87	0.88	1.79	1.02	1.83	0.95
10	Listening to radio	1.23	1.02	1.15	1.03	1.19	1.02
Total Mean		2.31	1.03	2.39	1.02	2.35	1.03

Source: Computed

Table 17 shows the distribution of respondents according to the frequency of mass media exposure. This dimension has 10 items and frequency of mass media exposure was scored based on 5 point scale viz. 0 Never, 1 Seldom, 2 Sometimes, 3 Often, and 4

Always. The dimension of mass media exposure has ten items covering various aspects of mass media and is based on different literature including Janghorbani, Lam, and The Youth Sexuality Study Task Force (2013).

It was found that overall frequency of mass media exposure of respondents was moderate (2.35). Frequency of exposure was high on mobile phone usages (3.37), watching internet related TV programmes (3.05), and browsing the internet (2.97). Frequency was moderate in items such as watching television (2.47), computer usages (2.23), reading books (2.19), usages of mass media for awareness on sex and sexuality (2.14), and reading newspapers (2.07), while it was low on reading magazines (1.83) and listening to radio (1.19).

In the female category, frequency was high for items like mobile phone usages, watching internet related TV programmes, browsing internet, and watching television, while it was moderate for computer usages, and reading books. Frequency of exposure was low on usages of mass media for awareness on sex and sexuality, reading newspapers, reading magazines, and listening to radio.

Among male students, mass media exposure was high on mobile phone usages, watching internet related TV programmes, and browsing the internet, while it was moderate on items such as watching television, computer usages, reading books, and usages of mass media for awareness on sex and sexuality. Further, it was low on reading magazines, and listening to radio.

Gender difference was identified for mass media exposure where female students score higher on mobile phone usages, watching television, reading books and magazines, and listening to radio, while male students score higher on watching internet related TV programmes, browsing the internet, using the computer, usages of mass media for awareness on sex and sexuality, and reading the newspapers. There was significant gender difference in usages of mass media for awareness on sex and sexuality where the mean score for females was low (1.86) and for male students it moderate (2.46).

Strasburger (2010) also found that there was very high exposure among teenage Americans on media and gender differences were also found. Similar findings can also be

associated with Yadav and Kumar (2011) where college students had high exposure to mass media.

**Table 18 Religiosity**

Sl. No	Items	Gender				Total N=744	
		Female n=397		Male n=374		Mean	SD
		Mean	SD	Mean	SD		
1	Praying to God	3.38	0.87	3.03	1.03	3.22	0.97
2	Attending religious programmes	2.66	0.97	2.51	1.07	2.59	1.02
3	Talking about God	2.64	0.99	2.38	1.04	2.52	1.02
4	Participating in church activities	2.58	1.03	2.42	1.08	2.50	1.06
5	Listening to religious songs	2.43	0.99	2.15	1.06	2.30	1.03
6	Reading religious scriptures	2.33	1.04	2.05	1.07	2.20	1.06
7	Reading religious books and stories	2.15	0.99	1.93	1.08	2.04	1.04
8	Watching religious movies/films/documentaries	2.03	1.00	1.80	1.07	1.93	1.04
9	Awareness on sex and sexuality by religion	1.94	1.23	1.72	1.26	1.84	1.25
10	Listening to sermons through media.	1.88	1.05	1.60	1.15	1.75	1.10
Total Mean		2.40	1.02	2.16	1.09	2.29	1.06

Source: Computed

Table 18 shows the distribution of respondents according to the frequency of their religiosity. This dimension has 10 items and frequency of religiosity was scored based on 5 point scale viz. 0 Never, 1 Seldom, 2 Sometimes, 3 Often, and 4 Always. The dimension of religiosity has ten items covering various aspects of the study and is based on different literature including Luquis, Brelsford and Guyler (2011), and Puzek, Stulhofer and Bozicevic (2012).

Results show that frequency of religiosity was moderate (2.29) among college students in Mizoram. Frequency was high on items such as praying to God (3.22), attending religious programmes (2.59), talking about God (2.52), and participating in church activities (2.50). Frequency was found to be moderate on items like listening to

religious songs (2.30), reading religious scriptures (2.20), and religious books and stories (2.04). Religiosity was low on watching religious movies/films/documentaries (1.93), awareness on sex and sexuality by religion (1.84), and listening to sermons through mass media (1.15).

Further, gender difference was also found in religiosity where female students score higher than male students in all the 10 items. Mean score of female students on religiosity was 2.40 while in males it was 2.16.

Penhallow, Young and Denny (2005) also reflects finding where college students are involved in various religious activities and plays an important role among undergraduate students in their understanding of sex and sexuality.

**Table 19 Substance Use**

SI No	Items	Gender				Total N=744	
		Female n=397		Male n=374		Mean	SD
		Mean	SD	Mean	SD		
1	Consumption of tobacco related products.	1.02	1.14	1.59	1.37	1.28	1.28
2	Drinking alcohol related beverages.	0.52	0.85	1.07	1.12	0.78	1.02
3	Smoking marijuana.	0.20	0.59	0.52	0.98	0.35	0.81
4	Using heroin	0.06	0.35	0.08	0.43	0.07	0.39
5	Using adhesives.	0.06	0.32	0.12	0.48	0.09	0.40
6	Using pills	0.22	0.65	0.25	0.64	0.23	0.65
7	Using cough syrup	0.19	0.53	0.27	0.65	0.22	0.59
Total Mean		0.32	0.63	0.55	0.80	0.43	0.73

Source: Computed

Table 19 shows the distribution of respondents according to the frequency of their substance use. The frequency of substance use were scored based on 5 point scale viz. 0 Never, 1 Seldom, 2 Sometimes, 3 Often, and 4 Always. The dimension of substance use

has ten items covering various aspects of the study and is based on different literature including Kaljee et.al.(2011), Livingston et al. (2012), and Staton (1999).

It was found that the overall frequency of substance use among respondents was low (0.43) and the mean score on various items also show that participants have low scores on each item.

Across the gender, frequency of substance use across the items is also low. Although the mean score in all items is low, the table also shows that college students in Mizoram do indulge in various substances by the time they are in their first semester of college education.

Gender difference was found in all the items of this dimension where male students having a higher mean score as compared to females in all the ten items. Significant difference was found on the consumption of alcohol where male mean score was 1.07 and female students score 0.52.

**Table 20 Gender Differences (t-test)**

Sl.No	Independent Dimensions	Gender				Total		t
		Female n=397		Male n=374		N=744		
		Mean	SD	Mean	SD	Mean	SD	
1	Parent Child Communication	2.67	0.87	2.42	0.91	2.55	0.90	<b>3.85</b>
2	Peer Group Relationship	2.19	0.89	2.27	0.83	2.23	0.86	-1.12
3	Mass Media Exposure	2.31	0.60	2.39	0.57	2.35	0.59	<b>- 6.45</b>
4	Religiosity	2.40	1.02	2.16	1.09	2.29	1.06	-1.81
5	Substance Use	0.32	0.63	0.55	0.80	0.43	0.73	<b>4.35</b>

Source: Computed

Table 20 shows gender differences across the independent dimensions which include parent-child combination, peer group relationship, mass media exposure, religiosity and substance use.

The mean score of the frequency of parent child communication among the respondents is high (2.55). Findings reveal that the frequency of parent child communication among female respondents is also high (2.67) whereas parent child communication among male students is moderate (2.42). The t-test score shows that there is significant gender difference in parent child communication (3.85) as the score of female respondent is significantly higher than male.

The mean score of the frequency on peer group relationship among the respondents is moderate (2.23). It was also seen that frequency of peer group relationship among female students is also moderate (2.19). Similar findings are also found among the male students (2.27). The t-test score shows that there is no significant gender difference in peer group relationship.

The mean score of the frequency of mass media exposure among the respondents is moderate (2.35). Frequency of mass media exposure is also moderate for male (2.27) and female (2.31). The t-test score of mass media exposure shows significant gender difference (-6.45) where the score of male students is higher than female respondents.

Respondent's mean score on frequency of religiosity is also moderate (2.35). Findings show that frequency of religiosity is moderate for both male (2.16) and female(2.40).The t-test score for religiosity shows no gender difference.

The mean score of the frequency of substance use among the respondents is low (0.38). The frequency is also low in both male (0.49) and female (0.28). The t-test score reveal that there is gender difference in substance use (4.35) as male respondents score significantly higher than female students.

### **4.3 Sex and Sexuality**

This section covers sexual orientation of the respondents, attitude towards LBGT community, respondent's knowledge and awareness on sex and sexuality, and their forms of sexual behavior. It also covers their attitude towards all forms of sexual behavior.

**Table 21 Sexual Orientation**

Sl. No	Sexual Orientation	Gender		Total N=744
		Female n=397	Male n=347	
1	Heterosexual	338 (85.14)	300 (86.46)	638 (85.76)
2	Bisexual	28 (7.05)	18 (5.19)	46 (6.18)
3	Homosexual	17 (4.28)	19 (5.47)	36 (4.84)
4	Pansexual	10 (2.53)	4 (1.15)	14 (1.88)
5	Asexual	4 (1.00)	6 (1.73)	10 (1.34)

*Source: Computed Figures in parenthesis indicates percentages*

Table 21 shows the distribution of respondents according to their sexual orientation.

Data shows that majority (85.76%) of the students are heterosexuals, less than a tenth (6.18%) are bisexuals, while a few (4.84%) are homosexuals, and very few (1.88% and 1.34%) are pansexuals and asexuals respectively. Renaud et al. (2010) also wrote similar findings where although majority of college students were heterosexuals, they also do identify other sexual orientations like homosexuals and bisexuals as well.

Among the females, we find that majority (85.14%) of them identify themselves as heterosexuals, less than one-tenth (7.05%) are bisexuals, less than a tenth (4.28%) of female students are homosexuals, and a few (2.53% and 1.00%) are pansexuals and asexuals respectively. In the male category, majority (86.46%) of the students stated that they are heterosexuals, less than a tenth (5.19%) are bisexuals, with almost an equal number (5.47%) of male students identifying as homosexuals, and a few (1.15% and 1.73%) of the respondents falls under the category of pansexuals and asexuals respectively.

Sexual orientation shows gender difference where it was found that there are more bisexuals and pansexuals among female students while there are more male heterosexuals, homosexuals and asexuals. Similar finding was also seen in Farmer,

Trapnell and Meston (2009) where they conducted a study among college students and found that there are more homosexual males as compared to females.

**Table 22 Attitude towards LGBT Community**

Sl.No	Item	Gender				Total N=744	
		Female n=397		Male n=347			
		Mean	SD	Mean	SD	Mean	SD
1	Acceptance towards Gay Men	1.69	1.12	1.53	1.13	1.62	1.13
2	Acceptance towards Lesbian Women	1.69	1.12	1.53	1.13	1.62	1.13
3	Acceptance towards Bisexuals	1.69	1.12	1.53	1.13	1.62	1.13
4	Acceptance towards Transsexuals	1.69	1.12	1.53	1.13	1.62	1.13
Total		1.69	1.12	1.53	1.13	1.62	1.13

Source: Computed

Table 22 indicates respondent's distribution on the attitude towards LGBT community. LGBT community included Lesbian, Gay, Bisexuals, and Transsexual. The attitude was scored based upon the acceptance level of 4 items indicating LGBT communities as normal members of society. The score of acceptance was based on a five point scale viz 0 Strongly Disagree, 1 Disagree, 2 Neutral, 3 Agree, and 4 Strongly Agree.

Among the female students, findings indicate that respondents remain neutral (1.69) towards gay men, lesbian women, bisexuals, and transsexuals, and male respondents are also neutral (1.53) towards LGBT community

Gender difference is found in this dimension as females score higher (1.69) as compared to male students (1.53). This shows that the acceptance level of LGBT community among female is higher than male. Therefore, the findings indicate that the attitude towards LGBT community is more positive among female respondents than the males.

This finding is also conclusive in a study conducted by Lim (2002) where it was found that women were accepting towards LGBT community as compared to male and

were more comfortable in interacting with homosexuals while the reverse holds true for male respondents. Janmaat and Keating (2017) also found that young people in Britain were tolerant towards LGBT community.

**Table 23 Levels of attitude towards LGBT Community**

Sl. No	Attitude	Gender		Total N=744
		Female n=397	Male n=347	
1	Very Low( $\leq 0$ )	75 (18.9)	90 (25.9)	165 (22.2)
2	Low(1 – 2)	86 (21.7)	59 (17.0)	145 (19.5)
3	Moderate(3 – 3)	142 (35.8)	135 (38.9)	277 (37.2)
4	High(4+)	94 (23.7)	63 (18.2)	157 (21.1)

*Source: Computed*

*Figures in parenthesis indicates percentages*

Table 23 highlights the distribution according to the respondent's level of attitude towards LGBT community across gender. Scores for the dimension are grouped into four categories viz. very low, low, moderate, and high based on visual binning statistics.

The overall score shows that level of respondent's acceptance towards LGBT community is positive as more than half (58.3%) falls within the levels of moderate(37.2%) and high (21.1%). This shows that for more than half of the respondents, the attitude towards LGBT community is positive.

For female students, the data reveals that 18.9 per cent of them have very low acceptance towards LGBT community, 21.7 per cent have low acceptance, 35.8 per cent of the respondents have moderate acceptance, and 23.7 per cent have high acceptance towards LGBTs. Among the male category, it was found that 25.9 per cent have very low acceptance towards sexual minority people, 17 per cent have low acceptance, 35.8 per cent have moderate acceptance, and 18.2 per cent of the respondents of high acceptance towards Gay, Lesbians, Bisexuals, and Transsexuals.

**Table 24 Knowledge and Awareness**

Sl.No	Item	Gender				Total N=744	
		Female n=397		Male n=347		Mean	SD
		Mean	SD	Mean	SD		
1	Sex refers to penetrative sex	.85	.36	.84	.36	.85	.36
2	Sex refers to gender differences	.76	.43	.75	.43	.76	.43
3	Sex refers to biological differences	.72	.45	.75	.43	.74	.44
4	There are laws against gender discrimination and inequality.	.65	.48	.66	.47	.66	.47
5	Sexuality refers to expression of sexual orientation	.66	.48	.64	.48	.65	.48
6	There are laws to protect the rights of LGBT community	.62	.49	.58	.49	.60	.49
7	There are laws related to abortion.	.62	.49	.58	.49	.60	.49
8	Sexuality refers to sexual attitudes	.60	.49	.60	.49	.60	.49
9	Sexuality refers to an integral part of our personalities	.54	.50	.54	.50	.54	.50
10	There are laws against pre-natal sex determination.	.56	.50	.50	.50	.53	.50
11	Sexuality refers to body image	.51	.50	.54	.50	.53	.50
12	Sexuality refers to the overt expression of sexual sensation	.52	.50	.50	.50	.51	.50
13	Sex refers to pornographic elements	.43	.50	.43	.50	.43	.50
14	Sex refers to phone/ internet sex	.33	.47	.35	.48	.34	.47
15	Sex refers to non-penetrative sex	.33	.47	.31	.46	.32	.47
Total		.58	.23	.57	.23	.58	.23

Source: Computed

Table 24 shows respondent's score on knowledge and awareness about sex and sexuality. The dimension has 15 items these items were scored as either 0 'No' or 1 'Yes'. Items on the dimension are based on different literature reviews including The

Protection of Children from Sexual Offences (POCSO) Act 2012; Burns, 2002; Olajide. et. al. 2014; Ogunlayi, 2005; Agarwal, 2015.

The mean score on knowledge and awareness indicate that student's awareness level is moderate (.58). Respondents have high mean score on the item of sex as penetrative sex' (.85) while they have moderate scores on other items which include sex as gender differences (.76), sex as biological differences (.74), existence of laws against gender discrimination and inequality (.66), sexuality as expression of sexual orientation (.65), existence of laws to protect the rights of LGBT community (.60), existence of laws related to abortion (.60), and sexuality as sexual attitudes (.60). Further, we also see that students have a low mean score on sexuality as an integral part of personalities (.54), existence of laws against pre-natal sex determination (.53), sexuality as body image (.53), sexuality as overt expression of sexual sensation (.53), sex as pornographic elements (.43), and is very low on items which include sex as phone/ internet sex (.34), and sex as non-penetrative sex (.32).

In the female category, we see that awareness level is high on the understanding that sex refers to penetrative sex, and is moderate on items like sex refers to gender differences, sex refers to biological differences, laws against gender discrimination and inequality, sexuality refers to expression of sexual orientation, laws to protect the rights of LGBT community, laws related to abortion, and sexuality refers to sexual attitudes. Further it was found that female student's knowledge on several items were low including sexuality as an integral part of our personalities, laws against pre-natal sex determination, sexuality refers to body image, sexuality as an overt expression of sexual sensation, sex referring to pornographic elements, and is very low on items which include sex refers to phone/ internet sex, and to non-penetrative sex.

Among male respondents, findings reveal that awareness level is high on the understanding that sex refers to penetrative sex, and is moderate on items like sex refers to gender differences, sex refers to biological differences, laws against gender discrimination and inequality, sexuality refers to expression of sexual orientation, while it is low on item like awareness on laws to protect the rights of LGBT community, laws related to abortion, and sexuality refers to sexual attitudes. Further, it was found that

female student's knowledge on several items were low including sexuality as an integral part of our personalities, laws against pre-natal sex determination, sexuality refers to body image, sexuality as an overt expression of sexual sensation, sex referring to pornographic elements, and sex refers to phone/ internet sex, and male respondents have a very low awareness on sex referring to non-penetrative sex.

There is gender difference found in this dimension as female students have a slight higher (0.58) score as compared to male respondents (0.57).

Various studies (Burns, 2002; Olajide. et. al. 2014; Ogunlayi, 2005; Agarwal, 2015) found similar findings on low level of knowledge and awareness as well as gender differences in the level on knowledge and awareness relating to sex and sexuality.

**Table 25 Levels of Knowledge and Awareness**

Sl.No	Level	Gender		Total N=744
		Female n=397	Male n=347	
1	Very Low(<= .34)	60 (15.1)	70 (20.2)	130 (17.5)
2	Low(.35 - .57)	113 (28.5)	82 (23.6)	195 (26.2)
3	Moderate(.58 - .81)	174 (43.8)	159 (45.8)	333 (44.8)
4	High (.82+)	50 (12.6)	36 (10.4)	86 (11.6)
Total		397 (100)	347 (100)	744 (100)

*Source: Computed*

*Figures in parenthesis indicates percentages*

Table 25 shows level on knowledge and awareness across gender. Scores are grouped into four categories of very low, low, moderate, and high on visual binning statistics

In the female category we see that 15.1 per cent have very low knowledge and awareness on sex and sexuality, 28.5 per cent have low knowledge, 43.8 per cent have moderate knowledge, and 12.6 per cent of the respondents have high awareness. Among the male students we find that 20.2 per cent respondents have very low knowledge, 23.6

per cent have low awareness, 45.8 per cent of the students have moderate awareness, and 10.4 per cent have high knowledge on sex and sexuality.

We find no relative gender difference in this dimension, as female and male have similar scores on moderate and high levels combined where for females it is 56.42 per cent and for male students 56.19 per cent.

**Table 26 Sexual Behavior of Respondents**

Sl. No	Statements	Response				
		Never	Seldom	Sometimes	Often	Always
1	Watching pornography	267 (35.9)	144 (19.4)	239 (32.1)	64 (8.6)	30 (4.0)
2	Indulgence in non-penetrative oral sexual stimulation	320 (43.0)	111 (14.9)	227 (30.5)	74 (9.9)	12 (1.6)
3	Masturbating	337 (45.3)	94 (12.6)	220 (29.6)	63 (8.5)	30 (4.0)
4	Indulgence in sex-ting	525 (70.6)	119 (16.0)	83 (11.2)	13 (17)	4 (0.5)
5	Giving/ receiving hand job	570 (76.6)	59 (7.9)	90 (12.1)	19 (2.6)	6 (0.8)
6	Indulgence oral sex	583 (78.4)	77 (10.3)	69 (9.3)	10 (1.3)	5 (0.7)
7	Indulgence in phone sex	587 (78.9)	81 (10.9)	61 (8.2)	10 (1.3)	5 (0.7)
8	Indulgence in frottage	601 (80.8)	60 (8.1)	60 (8.1)	15 (2.0)	8 (1.1)
9	Indulgence in penile / vaginal penetrative sexual intercourse	607 (81.6)	66 (8.9)	53 (7.1)	11 (1.5)	7 (0.9)
10	Indulgence unsafe sex	654 (87.9)	30 (4.0)	37 (5.0)	15 (2.0)	8 (1.1)
11	Using objects to pleasure oneself or others sexually	689 (92.6)	27 (3.6)	17 (2.3)	3 (0.4)	8 (1.1)
12	Indulgence multiple sex partners	699 (94.0)	25 (3.4)	13 (1.7)	3 (0.4)	4 (0.5)
13	Indulgence anal sex	705 (94.8)	20 (2.7)	9 (1.2)	6 (0.8)	4 (0.5)
14	Indulging in group sex	705 (94.8)	24 (3.2)	9 (1.2)	2 (0.3)	4 (0.5)
15	Indulging in paid sex	721 (96.9)	9 (1.2)	7 (0.9)	3 (0.4)	4 (0.5)
16	Forcefully have sex with partner	728 (97.8)	7 (0.9)	4 (0.5)	1 (0.1)	4 (0.5)

Source: Computed Figures in parenthesis indicates percentages

Table 26 shows the distribution of respondents according to their frequency of all forms of sexual behavior across gender. The dimension has 16 items and the frequency of indulgence is scored based on a 5 point scale viz. 0 Never, 1 Seldom, 2 Sometimes, 3 Often, and 4 Always. The items within the dimension of sexual behavior is based on different literature reviews including Tang, Lai and Chung (1997), Kanwetuu, Mokulogo and Azumah (2018), and The Protection of Children from Sexual Offences (POCSO) Act 2012.

Findings show that majority (64.1%) of the students have watched pornography, less than a third (56.9%) non-penetrative oral sexual stimulation including kissing and licking someone, more than half (54.7%) masturbates, almost half (44.7%) indulge in sexting which includes sending/receiving/forwarding sexually explicit messages/images of oneself to others and vice versa through mobile phones, almost a fourth (23.4%) of the respondents gives/receives hand job, more than a fifth (21.6%) indulge in oral sex which includes using mouth and tongue to stimulate partners genitals or anal area, more than fourth (21.1%) indulge in phone sex which includes conversation between two or more people on the phone where one or more of the individual is describing an act of sex, and almost a fourth (19.3%) indulge in frottage which includes rubbing any part of the body against sexual organ of another person.

Further, we find that less than a fourth (18.4%) of the respondents have indulge in penetrative sex by the time they are in their first semester of college, more than a tenth (12.1%) indulge in unsafe sex, almost a tenth (7.4%) use objects pleasure oneself or others sexually, less than a tenth (6%) have multiple sex partners, an equal number (5.2%) indulge in anal sex and group sex, and we also find that few (3% and 2% ) students engages in paid sex and forcefully have sex with their partners respectively.

This table shows us that students engage in all forms of sexual behavior by the time they entered their college education. We see that indulgence in watching porn and sex-ting involves using mass media which shows high mass media exposure to sex and sexuality. We also find that almost 20 out of every 100 students have already engaged in penetrative sex in their first semester of college which is alarming because more than a tenth of them stated that they indulge in unsafe sex making them vulnerable to sexually

transmitted infections, diseases, unplanned pregnancy and abortions. Further, student's involvement in multiple sex partners, group sex and paid sex shows risky sexual behaviors exposing them to higher risk of various impacts as a result of sexual behavior.

Townsend and Wasserman (2011), Kanwetuu, Mokulogo and Azumah (2018), Patrick and Lee (2010), Tang, Lai and Chung (1997) also reveals similar findings in their studies among college going youths who engage in one or more forms of sexual behavior at one or more point of time.

**Table 27 Mean Frequency of Sexual Behavior**

Sl. No	Items	Gender				Total N=744	
		Female n=397		Male n=347		Mean	SD
		Mean	SD	Mean	SD		
1	Watching pornography	0.71	0.93	1.88	1.06	1.26	1.15
2	Masturbating	0.45	0.86	1.91	1.04	1.13	1.20
3	Indulgence in non-penetrative oral sexual stimulation	0.91	1.06	1.37	1.14	1.12	1.12
4	Indulgence in sex-ting	0.31	0.69	0.63	0.88	0.46	0.80
5	Giving/ receiving hand job	0.25	0.68	0.64	0.99	0.43	0.86
6	Indulgence in oral sex	0.24	0.63	0.49	0.86	0.36	0.76
7	Indulgence in frottage	0.19	0.58	0.52	0.97	0.35	0.80
8	Indulgence in phone sex	0.22	0.61	0.47	0.85	0.34	0.74
9	Indulgence in penile / vaginal penetrative sexual intercourse	0.25	0.69	0.38	0.81	0.31	0.75
10	Indulgence in unsafe sex	0.19	0.63	0.30	0.82	0.24	0.73
11	Using objects to pleasure oneself or others sexually	0.12	0.51	0.16	0.62	0.14	0.56
12	Indulgence in multiple sex partners	0.09	0.45	0.11	0.48	0.10	0.46
13	Indulgence in anal sex	0.09	0.45	0.11	0.50	0.10	0.47
14	Indulging in group sex	0.09	0.44	0.08	0.41	0.09	0.43
15	Indulging in paid sex	0.08	0.44	0.04	0.37	0.06	0.41
16	Forcefully having sex with one's partner	0.05	0.35	0.04	0.37	0.05	0.36
Total Mean		0.27	0.62	0.57	0.76	0.41	0.73

Source: Computed

Table 27 shows the distribution of respondents according to their mean frequency of all forms of sexual behavior across gender.

Data reveal that sexual behavior is low (0.41). However, though low, findings indicate that college students do indulge in various forms of sex.

The mean frequency of sexual behavior is low among female respondents in all items whereas in the male category, frequency is moderate in watching pornography masturbation while it was low in all the other items of the dimension.

There is significant gender difference in sexual behavior as females have lower score (0.27) as compared to male students (0.57). This finding is also seen in Kanwetuu, Mokulogo and Azumah (2018), Tang, Lai and Chung (1997), and Sathe and Sathe (2005), where it was found that male respondents have more multiple sex partners as compared to females and male students indulge in masturbation was twice as many as times to females.

**Table 28 Levels of Sexual Behavior**

Sl.No	Level	Gender		Total N=744
		Female n=397	Male n=347	
1	Low(-.07 - .41)	324 (81.6)	159 (45.8)	483 (64.9)
2	Moderate(.42 - .89)	39 (9.8)	123 (35.4)	162 (21.8)
3	High(.90+)	34 (8.6)	65 (18.7)	99 (13.3)

*Source: Computed Figures in parenthesis indicates percentages*

Table 28 shows level on sexual behavior across gender. Scores are grouped into three categories of low, moderate, and high based upon visual binning statistics.

Findings reveal that students frequency of indulgence in various forms of sex is relatively high as almost all respondents fall under the category of low, moderate, and high,

Among the female students we find that 381.6 per cent have low sexual behavior, 9.8 per cent have moderate regularity in sexual activities, and 8.6 per cent have high indulgence. In the male category, 45.8 per cent have low sexual behavior, 35.4 per cent of the respondents have moderate sexual regularity, and 18.7 per cent have high sexual behavior among males.

**Table 29 Attitude towards Sexual Behavior**

Sl.No	Items	Gender				Total N=744	
		Female n=397		Male n=347		Mean	SD
		Mean	SD	Mean	SD		
1	Acceptance of non-penetrative oral sexual	2.27	1.03	2.44	1.09	2.35	1.06
2	Acceptance of Condom and contraceptive usages during and after sex	2.23	1.07	2.35	1.06	2.29	1.07
3	Acceptance of watching pornography	1.86	1.01	2.45	1.06	2.13	1.08
4	Acceptance of masturbation	1.78	1.06	2.48	1.09	2.11	1.13
5	Acceptance of post marital sexual affair	1.86	1.29	1.80	1.28	1.83	1.28
6	Acceptance of giving / receiving hand job is normal	1.48	1.01	1.88	1.17	1.66	1.11
7	Acceptance of pre-marital sex	1.57	1.30	1.69	1.23	1.63	1.27
8	Acceptance of having penile / vaginal penetrative sexual intercourse	1.37	1.06	1.82	1.13	1.58	1.12
9	Acceptance of oral sex	1.38	1.08	1.77	1.14	1.56	1.12
10	Acceptance of frottage	1.24	1.00	1.61	1.12	1.42	1.07
11	Acceptance of phone sex	1.25	0.99	1.54	1.08	1.39	1.04
12	Acceptance of sexting	1.14	0.98	1.61	1.12	1.36	1.07
13	Acceptance of object usages	1.13	1.01	1.44	1.04	1.27	1.04
14	Acceptance of anal sex	0.96	0.99	1.18	1.08	1.07	1.03
15	Acceptance of having multiple sex partners	0.77	0.92	0.98	1.00	0.87	0.96
16	Acceptance of performing paid sex	0.78	0.95	0.95	1.06	0.86	1.00
17	Acceptance of having unsafe sex	0.66	0.93	0.78	1.04	0.71	0.98
18	Acceptance of group sex	0.63	0.84	0.80	0.96	0.71	0.90
19	Acceptance of forcefully having sex with someone	0.30	0.61	0.25	0.58	0.27	0.59
Total Mean		1.30	1.01	1.57	1.07	1.42	1.05

Source: Computed

Table 29 shows respondent's distribution on attitude towards sexual behavior across gender. Attitude of sexual behavior is based upon the acceptance level of various forms of sex. The dimension has 19 items indicating various forms of sexual behavior as normal. The level of acceptance is based on 5 point scale viz. 0 Strongly Disagree, 1 Disagree, 2 Neutral, 3 Agree, and 4 Strongly Agree. Items on this dimension are based on various literature reviews including Luster et al. (2013), Askun and Ataca (2007), Ghule, Balaiah and Joshi (2007) and The Protection of Children from Sexual Offences (POCSO) Act 2012

Findings reveal that the overall attitude score towards sexual behaviour is low (1.42) but findings also indicate significant respondents who have positive attitude towards various forms of sex which include non-penetrative sexual behavior (2.35), condom and contraceptive use (2.29), watching pornography (2.13), masturbation (2.11), post marital sexual affair (1.83), and giving/receiving hand job (1.66), and we also find some students who agree to others items such as pre-marital sex (1.63), penetrative sexual intercourse (1.58), and oral sex (1.56). Although mean score is low on attitude towards certain items including attitude towards frottage (1.42), phone sex (1.39), sexting (1.36), using objects to pleasure oneself (1.27), having anal sex (1.07), and multiple sex (0.87), it is indicative that there are also few students whose attitude remain positive towards these sexual behaviors. Attitude was low towards paid sex (0.86), unsafe sex (0.71), group sex (0.71), and forced sex (0.27). The mean score indicates that although the mean score of student's attitude towards sexual behavior is low, we find a number of students to remain positive towards different items in this dimension.

Among female students it was found that respondents have positive attitude towards non-penetrative sex, condom and contraceptive use, and we also find some females who agree to watching pornography, masturbation, post marital affair, giving/ receiving hand job, and pre-marital sex. We also find a few female students who agree to the rest of the items for sexual behavior. In the male category we find that students have accepting attitude towards non penetrative oral sex, condom and contraceptive use, watching pornography, and masturbation, some students who agree to post marital affair, giving/ receiving hand job, pre marital sex, penetrative sexual

intercourse, oral sex, frottage, phone sex, sexting , and using objects for sexual pleasure. While only a very few male students agreed to group sex, and force sex.

We find significant gender difference in attitude towards sexual behavior as male students score higher (1.57) as compared to female students (1.30).

Askun and Ataca (2007) and Ghule, Balaiah and and Joshi (2007) also found that attitude towards various forms of sexual behavior was low and there were also significant gender differences where female were more conservative in their attitudes than males.

**Table 30 Levels of Attitude towards Sexual Behavior**

Sl. No	Level	Sex		Total N=744
		Female n=397	Male n=347	
1	Very Low ( $\leq .76$ )	80 (20.2)	45 (13.0)	125 (16.8)
2	Low (.77 - 1.42)	170 (42.8)	98 (28.2)	268 (36.0)
3	Moderate (1.43 - 2.08)	111 (28.0)	136 (39.2)	247 (33.2)
4	High (2.09+)	36 (9.1)	68 (19.6)	104 (14.0)
Total		397 (100)	347 (100)	744 (100)

Source: Computed

Figures in parenthesis indicates percentages

Table 30 indicates respondent's level of attitude towards sexual behavior across gender. Scores for the dimension are grouped into four categories viz. very low, low, moderate, and high based upon visual binning statistics.

Among female students we find that 20.2 per cent score very low on attitude towards sexual behavior, 42.8 per cent score low, 28 per cent of them score moderate, and 9.1 per cent score high on attitudes towards sexual behavior. In the male category, 13 per cent score very low on their attitude towards sexual behavior, 28.2 per cent have low score, 39.2 per cent have moderate attitudes, and 19.6 per cent have high score on their attitude towards sexual behavior.

There is gender different found in binning as we find more male students leaning towards higher score on attitude towards sexual behavior as compared to female respondents.

**Table 31 Gender Differences across Dimension of Sex and Sexuality**

Sl. No	Dimensions	Gender				Total N=744		t
		Female n=397		Male n=374		Mean	SD	
		Mean	SD	Mean	SD			
1	Knowledge and Awareness	.58	.23	.57	.23	.58	.23	0.56
2	Sexual Behavior	.27	.43	.57	.49	.41	.48	<b>-9.06</b>
3	Attitude towards Sexual Behaviour	1.30	.63	1.57	.67	1.42	.66	<b>-5.71</b>
4	Attitude towards LGBT community	1.69	1.12	1.53	1.13	1.62	1.13	<b>1.93</b>

Source: Computed

Table 31 shows t-test scores of gender differences across the dimensions of sex and sexuality which includes knowledge and awareness, sexual behavior, and attitude towards sexual behavior and attitude towards LGBT community which are scored on the following scales. Knowledge and Awareness is scored on a two point scale of 0 No and 1 Yes, Sexual Behavior is scored on a five point scale of 0 Never, 1 Seldom, 2 Sometimes, 3 Often, and 4 Always, Attitude towards sexual Behavior and LGBT community is scores on a five point scale viz. 0 Strongly Disagree, 1 Disagree, 2 Neutral, 3 Agree, and 4 Strongly Agree.

The mean score of the respondents on knowledge and awareness about sex and sexuality indicated that students have moderate (0.56) knowledge. Findings reveal that female have moderate (0.58) awareness on the topic and male students also have moderate (0.57) knowledge. The t-test score reveal that there is no significant difference (0.56) between there genders.

The mean score for students on sexual behavior shows that majority of the students seldom (0.41) engage in sexual behavior. Results further indicate that female students seldom (0.27) indulged in sexual behavior and male students also fall in the same score of seldom (0.57). The t-test score reveals that there is gender difference in sexual behavior (-9.06) as male students score relatively higher than female students.

The mean score for attitude towards Sexual Behavior indicates that respondents have negative attitude (1.42) towards sexual behavior. Findings also reveal that females have negative attitude (1.30) towards sexual behavior while male students remain neutral (1.57). The t-test score reveal significant difference between male and female respondents (-5.71) as male students score higher compared to female students in their attitude towards sexual behavior.

The mean score for attitude towards LGBT community shows that students are accepting towards sexual minorities. Female score shows acceptance (1.69) for LGBT community and male score indicates acceptance (1.53) as well. The t-test score reveal gender difference (1.93) as female shows more acceptance towards LBGT community as compared to male students. Case vignettes and focus group discussion also show similar findings that respondents are accepting towards LGBT community where females show more acceptance compared to male students.

Janmaat and Keating (2017) also found that younger generations are more accepting towards sexual minority people and Lim (2002) reveal that women, in general, were comfortable being in the midst of male homosexuals while the reverse holds true for male respondents.

#### **4.4 Relationship among various dimensions**

This section will discuss the relationship between various dimensions of understanding sex and sexuality. It will also discuss the relationship between parent child communication, peer group relationship, mass media exposure, religiosity, and substance use and various dimensions of understand sex and sexuality which in include knowledge and awareness on sex and sexuality, sexual behavior, attitude towards sexual behavior, and attitude towards LGBT community.

**Table 32 Correlation of various dimensions of sex and sexuality**

Sl.No	Dimension	Knowledge and Awareness	Sexual Behavior	Attitude towards Sexual Behavior	Attitude towards LGBT Community
1	Knowledge and Awareness	1	.007	.007	.007
2	Sexual Behavior	.007	1	<b>.503**</b>	<b>.134**</b>
3	Attitude towards Sexual Behavior	.007	<b>.503**</b>	1	<b>.325**</b>
4	Attitude towards LGBT community	.007	<b>.134**</b>	<b>.325**</b>	1

Source: Calculated

\*\* Correlation is significant at the 0.01 level (2-tailed).

\*Correlation is significant at the 0.05 level (2-tailed).

Table 32 shows correlation of various dimensions of sex and sexuality. The *p* values are 0.01 and 0.05 which is tested in two directions (2-tailed). Different dimensions of sex and sexuality include knowledge and awareness, sexual behavior, attitude towards sexual behavior, and attitude towards LGBT community.

Results indicate knowledge and awareness have no significant correlation with all forms of sexual behavior (.007), attitude towards sexual behavior (.007), and attitude towards LGBT community (.007). This shows that knowledge and awareness about sex and sexuality has no significant effect on respondent's sexual behavior, their attitude towards sexual behavior and LGBT community at 0.01 and 0.05 significance levels.

Secondly, findings highlight that there is no correlation between all forms of sexual behavior and knowledge and awareness (.007), but we find correlation between sexual behavior and attitude towards sexual behavior (.503\*\*) and attitude towards LGBT community (.134\*\*) at 0.01 significant level.

This reveals that all forms of sexual behavior of students do not affect their knowledge and awareness on sex and sexuality but effects student's attitude towards sexual behavior and LGBT community. When sexual behavior is high it affects attitude

towards sexual behavior as well as attitude towards LGBT community. The correlation between sexual behavior and attitude towards sexual behavior is found to be highly significant at 0.01 level of significant while correlation between sexual behavior and attitude towards LGBT community is low at 0.01 level of significant.

Thirdly, we find that there is no correlation between attitude towards sexual behavior and knowledge and awareness (.007), but find a strong correlation with all forms of sexual behavior (.503<sup>\*\*</sup>) and also a correlation with attitude towards LGBT community (.325<sup>\*\*</sup>) at 0.01 significant level.

This indicates that attitude towards all forms of sexual behavior does not affect knowledge and awareness about sex and sexuality of the respondents, whereas it effects their attitude towards sexual behavior and attitude towards LGBT community. When attitude sexual behavior is high it affects attitude towards sexual behavior and LGBT community. The correlation between all forms of sexual behavior and attitude towards sexual behavior is found to be highly significant at 0.01 level of significant and correlation between sexual behavior and attitude towards LGBT community is moderate at 0.01 level of significant.

Data also reveal that there is no correlation between attitude towards LGBT community and knowledge and awareness (.007), but we find a correlation with sexual behavior (.134<sup>\*\*</sup>) and attitude towards sexual behavior (.325<sup>\*\*</sup>).

This indicates that attitude towards LGBT community does not affect student's knowledge and awareness on sex and sexuality, but it does have an effect on their sexual behavior and attitude towards sexual behavior. When attitude towards LBGT is high it affects sexual behavior and attitude towards sexual behavior. The correlation between attitude towards LGBT community and all forms of sexual behavior is low at 0.01 level of significant while the correlation between attitude towards LGBT community and attitude towards sexual behavior is moderate at 0.01 level of significant.

From this table we find that respondent's knowledge and awareness does not have relationship with other variables viz. all forms of sexual behavior, attitude towards sexual behavior and LGBT community which shows that students form their own attitudes

towards sexual behavior and LGBT community and their knowledge and awareness about sex and sexuality do not affect how they engage in different forms of sexual behavior.

We also find that engaging in all forms of sexual behavior has a relationship with attitude towards sexual behavior and LGBT community where studies including Askun and Ataca (2007) have found that students who engage in different forms of sexual behavior were found to have a more positive attitude towards various forms of sexual behavior while Oswalt, Cameron and Koob (2005) found that students who engage in pre-marital sex show sexual regret and have negative attitude towards indulging in sexual behaviors.

**Table 33 Correlation between dependent and independent variables**

Sl.No	Variables	Knowledge and Awareness	Sexual Behavior	Attitude towards Sexual Behavior	Attitude towards LGBT Community
1	Parent Child Communication	.171**	-.161**	-.205**	-.027
2	Peer Group Relationship	.108**	.096**	.088*	.067
3	Mass Media Exposure	.074*	.136**	.168**	.072*
4	Religiosity	.040	-.183**	-.230**	-.156**
5	Substance Use	-.036	.483**	.448**	.139**

Source: Calculated

\*\*Correlation is significant at the 0.01 level (2-tailed).

\* Correlation is significant at the 0.05 level (2-tailed).

Table 33 shows correlation between dependent and independent variables. Dependent variables include knowledge and awareness, sexual behavior, attitude towards sexual behavior, and attitude towards LGBT community, whereas the independent variables include parent child communication, peer group relationship, mass media exposure, religiosity, and substance use.

Findings reveal that parent child communication has a correlation with knowledge and awareness (.171\*\*), sexual behavior (-.161\*\*), and attitude towards sexual behavior (-.205\*\*), but correlation was not found with attitude towards LGBT community (-.027).

This indicates that correlation between parent child communication and knowledge and awareness, sexual behavior, and attitude towards sexual behavior is significant at 0.01 level of significance. Also we find that there is no significance between parent child communication and attitude towards LGBT community at 0.01 and 0.05 level of significance. When parent child communication is high it affects knowledge and awareness about sex and sexuality, and when it is low, it affects respondent's sexual behavior, and their attitude towards sexual behavior. The correlation between parent child communication and all forms of sexual behavior, attitude towards sexual behavior and LGBT community is low at 0.01 level of significance.

Findings also show that there is correlation between peer group relationship and knowledge and awareness (.108\*\*), sexual behavior (.096\*\*), attitude towards sexual behavior (.088\*), but no correlation was found with attitude towards LGBT community (.067).

This indicates that peer group relationship and knowledge and awareness, sexual behavior, and attitude towards sexual behavior is significant at 0.01 level of significance. When there is an increase in peer group relationship it affects respondent's knowledge and awareness, sexual behavior, and their attitude towards sexual behavior.

Lefkowitz, Boone, and Shearer (2004), Cohan (2009), and Tome (2012) also found that peer plays a significant role in respondent's sexual activities where it increases the likelihood of them engaging in various sexual behaviors and also increases their knowledge about sex and sexuality. The correlation between peer group relationship and knowledge and awareness on sex and sexuality was low at 0.01 level of significance. Further, correlation between knowledge and awareness on sex and sexuality and all forms of sexual behavior and attitude towards sexual behavior was also low at 0.01 level of significance.

We can also see that there is a correlation between mass media exposure and knowledge and awareness (.074\*), sexual behavior (.136\*\*), attitude towards sexual behavior (.168\*\*), and attitude towards LGBT community (.072\*).

This indicates that mass media exposure and knowledge and awareness, and attitude towards LGBT community is significant at 0.01 level of significance. There also correlation between mass media exposure and sexual behavior and attitude towards sexual behavior at 0.05 level of significance. When there is an increase in mass media exposure it affects respondent's knowledge and awareness on sex and sexuality, their sexual behavior, attitude towards sexual behavior, and also their attitude towards LGBT community.

Olarinmoye et al. (2012) find similar conclusion where mass media affects sexual behavior and knowledge of sexual practices among respondents. Correlation between mass media exposure and knowledge and awareness, and with sexual behavior, attitude towards sexual behavior and LGBT community is also low.

Findings reveal that there no correlation between religiosity and knowledge and aware (.040), but we find correlation with all forms of sexual behavior (-.183\*\*), attitude towards sexual behavior (-.230\*\*), and attitude towards LGBT community (-.156\*\*).

This indicates that respondent's religiosity and their sexual behavior, attitude towards sexual behavior, and towards LGBT community is significant at 0.01 level of significance. When religiosity decreases it affects the sexual behavior of respondents, their attitude towards sexual behavior, and towards LGBT community.

Luquis, Brelsford and Guyler (2011), and Puzek, Stulhofer and Bozicevic (2012) found that religiosity of young adults affects their sexual behavior and attitudes. The correlation between religiosity and engaging in all forms of sexual behavior, attitude towards sexual behavior and LGBT community is low at 0.01 level of significant.

Findings show that there is no correlation between substance use and knowledge and awareness (-.036), but we find correlation with sexual behavior (.483\*\*), attitude towards sexual behavior (.448\*\*), and attitude towards LGBT community (.139\*\*).

This indicates that substance use and sexual behavior, attitude towards sexual behavior, and attitude towards LGBT community is significant at 0.01 level of

significance. When substance use increases it affects respondent's sexual behavior, their attitude towards sexual behavior, as well as attitude towards LGBT community.

We see similar findings in Kaljee et.al.(2011), Livingston et al. (2012), and Staton (1999) where consumption of various forms of substances affects sexual behaviors and promotes risky sexual behaviors. Correlation between substance use and all forms of sexual behavior and attitude towards sexual behavior is moderate at 0.01 level of significant while correlation between substance use and attitude towards LGBT community is low at 0.01 level of significant.

#### 4.5 Consequences of Sexual Behavior and Suggestions

This section will include the consequences of sexual behavior and suggestions given by the respondents to improve the understanding of sex and sexuality.

**Table 34 Consequences of Sexual Behavior**

Sl. No	Items	Sex		Total N=744
		Female n=397	Male n=374	
1	Mental Health Problems	79 (19.89)	67 (17.91)	146 (19.62)
2	Physical Health Problems	77 (19.39)	51 (13.64)	128 (17.20)
3	Year Gap during Education	27 (6.80)	35 (9.36)	62 (8.33)
4	Abortion	23 (5.79)	14 (3.74)	37 (4.87)
5	STIs	14 (3.53)	10 (2.67)	24 (3.22)
6	STDs	16 (4.03)	3 (0.80)	19 (2.55)
7	HIV/AIDS	8 (2.01)	2 (0.53)	10 (1.34)

*Source: Computed*

*Figures in parenthesis indicates percentages*

Table 34 shows the impact and challenges of college students as a result of their sexual behavior and sexuality.

Findings reveal that less than a fifth of the students face mental health problems because of their sexual behavior and sexuality and almost one-fifth of them have physical

health problems. We also find that almost one tenth of them took a year gap because of their sexual behavior which clearly indicates that their education has been compromised. Further, we find that almost 5 in every hundred students have gone through abortion by the time they started their college education.

This is also supported by Ghulle, Balaiah and Joshi (2007) where they find college students going through abortions. Findings reveal that few of them have contracted sexually transmitted infections and diseases. Lastly we see that 1.34 per cent of them have been diagnosed with HIV/AIDS which is very high as the number for adult sero-positive patients in the country stands at 0.22% (NACO, 2017).

We also find gender difference in this dimension where female students score higher as compared to male students in all the items except on ‘year gap’. This clearly shows the female students are more vulnerable to various challenges as a result of sex and sexuality.

**Table 35 Suggestions**

Sl. No	Items	Sex		Total N=744
		Female n=397	Male n=374	
1	Sex education in schools and colleges	28 (7.05)	19 (5.47)	47 (6.31)
2	Sex Education in parent child communication	25 (6.29)	19 (5.47)	44 (5.91)
3	Sex education among youth in locality and church	21 (5.28)	21 (6.05)	42 (5.65)
4	Awareness on LGBT Rights	14 (3.52)	12 (3.46)	26 (3.49)
5	More research on sex and sexuality	7 (1.76)	8 (2.30)	15 (2.01)
6	Abstinence from pre-marital sex	4 (1.00)	5 (1.44)	9 (1.20)
7	Restriction of easy access to cell phone	4 (1.00)	2 (0.58)	6 (0.80)

*Source: Computed*

*Figures in parenthesis indicates percentages*

Table 35 shows suggestions and comments made by respondents on the study. This dimension has seven items consisting of statements made by the students.

We find that less than a tenth (6.31%) made a suggestion to implement sex education for lower levels of education, some suggested that parents should give accurate sex-related information at home (5.91%), Mizo youth need adequate sex education from the society and the church (5.65%), LGBT community should not be discriminated (3.49%). A few of them commented that they find the study interesting (2.01%), promise to maintain their virginity till marriage (1.20%), and that easy access to cell phone promotes risky sexual behaviors (0.80%).

#### ***4.6 Case Vignettes***

Case vignettes were taken to understand the sex and sexuality of college going students. Prior consent was sought and each student was well informed about the interview and its purpose. Names and other details of the participating students have been concealed to ensure anonymity as per information given to them. A total of six case vignettes were taken including 3 females and 3 male students. Names used for case vignettes are fictitious.

##### *Case 1*

Sanga is 19 years old and currently in his first semester of college. He has two sisters and lives with his parents. He likes sports and is a good basketball and football player which made him very popular in school and in college as well. He enjoys this popularity because it gives him a sense of acceptance and belongingness among his peers and made him very popular with the girls. After he finishes his college education he would like to pursue a profession in sports. He mentioned that he usually spends his leisure time with his friends with whom he smokes cigarettes, marijuana and occasionally drinks alcohol. He related that sex and sexuality is an important subject especially among the youth because engaging in sexual behavior is an activity that everyone will eventually go through as a human being. His understanding of sex is engaging in penetrative sex only and do not involve other sexual activities. He is not aware about certain legislations pertaining to sex and sexuality except for prevention of pre-natal determination of sex.

According to him engaging in non-penetrative sexual behavior like kissing or licking someone is normal and if someone wants to engage in other sexual behaviors he/she should use preventive methods like condoms and other contraceptives. He related that he has no reservations toward homosexuals but is not accepting towards bisexuals and other forms of sexual orientations. He mentioned that his parents talked to him about the importance of education, how to adopt socially and religiously acceptable behavior, but do not communicate about sex and sexuality. He learned about the topic mostly from friends and the media and stated that media is the main source of information because there are certain issues he felt uncomfortable discussing it with his peers. Sanga stated that though he is a Christian by faith he is not a religious person and feel that his religion does not teach about sex and sexuality except on topics like abstinence and faithfulness to one's partner within marriage. He also related his desires for improvement of sexual communication with his parents and mentioned that sex education should be promoted in schools starting from middle school education.

#### *Case 2*

Helen is a 21 year old first semester student. She is the eldest among her siblings and has three younger brothers, her father is a church elder in their congregation and her mother is also a religious person. At age 17 she met a young man with whom she had a relationship and they were very happy. After two wonderful years she found out that she was pregnant. She was asked to have an abortion by her boyfriend for fear of not being able to pursue his dream of becoming a pastor. She became depressed, anger and withdraw and was not able to understand why this person would chose his career and reputation over his child. She was given an ultimatum but she decided to lose her boyfriend over her unborn child stating that since she had already deflect from the values of Christianity by having premarital sex, she could not sin further going through an abortion. At the time, she was in her first year of college and had to take a year gap. According to her, although she has her parents to help her take care of her child she has emotionally scars. She also sometimes felt sad and angry at the same time because while her friends are out having fun, going for outings and staying out late, she has to balance our life between being a student and a mother which very often leaves her emotionally and physically exhausted. She mentioned that although her parents discuss about God and

religiosity they never communicate about sexual behaviors other than her mother minimal teachings on menstrual cycle. She related that she wished she had someone at the time to advise her about safe sex or give her proper counseling on becoming a young mother and how to adjust to the role. She wanted to do right by her child and vow that she will continue to study and enable herself to provide for her baby. She has information about various legislations pertaining to sex and sexuality which she gained from peers and media. She is accepting towards LGBT community and stated that, *“everybody deserves love irrespective of their sexual orientation.”* She suggested that adolescents should be given proper education on sex and sexuality, but the topic has remain a taboo for generations in the Mizo society and opening discussions within the family will not be something we can achieve immediately. Since it is an urgent need of the youth today, immediate intervention would be implementing sex education as part of the curriculum in schools, making it mandatory for all students to learn about sex and sexuality.

### *Case 3*

Kate is an only child and lives with her parents and grandparents. They raised her to be a religious and God fearing young adult and she spend a good deal of time engaging in church activities. She would like to become a missionary teacher and help children in remote areas, educating them and talking to them about God. Although boys send her romantic notes and messages, she had never reciprocated to their actions and lightly mentioned that when she finally did decide to have a boyfriend it would be to someone she would like to spend the rest of her life with. She said that Mizo youth today are engaging in sexual activities at an early age and she knew a few of her peers, in schools and in her neighborhood, who have indulged in sexual intercourse and mentioned that being born and brought up in a Christian family do not necessarily mean people will abide by Christian values especially within the context of sex and sexuality. And with Mizoram being the number one State in the country in HIV/AIDS she feels that it is important for parents to communicate about the importance of safe sex since many youth are anyway engaged in this behavior under the vigilance of their parents. She expressed her opinion on LGBT community stating that she do accept that there are people who are ‘born gay’ but also believe that many LGBTs are identifying to the sexual orientations for experimentations. For such people, she believes that it is just a phase and if given proper

guidance they would eventually conform to heterosexuality. Lastly, she mentioned that Mizo community especially the youth are heavily influenced by Western and Korean culture, we absorb their views, values and even fashion to an extent that we are losing ourselves as a Mizo community.

#### *Case 4*

Sawma is 21 year old student who was very popular, excel in studies and a star player of his school basketball team. His popularity and good looks have attracted numerous girls which very often led him to initiate a relationship with two or three of them at the same time. He was also surrounded with many friends and would stay out late 'having fun' and partying. These opportunities and lifestyle resulted in excessive drinking and abusing other substances like pills and smoking marijuana. In the beginning of his college education he met a classmate with whom he had a deep connection and they soon became romantically involved. But because of his drinking and partying habits they were unable to continue with their relationship and soon went their separate ways and began dating other people as well. A few months after they broke off their relationship his partner found that she was five months pregnant. This caused him to fall into deep despair and resulted in many behavioral changes. He became detached by missing classes, cutting connection with his friends and staying at home for days without interacting with any of his family members and even resulted in taking a leave from his education. He wanted to marry his partner because he feels that it is his responsibility to make sure his child have both parents in the same house but despite his proposition he was rejected by his partner's families. He is now a father to a 3 months old baby. His understanding of sex includes both penetrative and non-penetrative sex and he is aware not aware about legislations pertaining to sex and sexuality. He said that his parents never communicate to him about sex and sexuality and whatever knowledge he had he received it from peers and media. He stated that substance use leads to poor judgment especially in safe sex. According to him LGBT community are normal part of the society and he do not look at them any differently, in fact, he has a few gay friends with whom he has maintain years for friendship. He mentioned that youth today face many challenges in sex and sexuality because they are subjected to various influencing factors and they do not have adequate and accurate information, and suggested that these gaps should be address

by parents, teachers, the church, and the Government in order to have healthy sexual development.

#### *Case 5*

Puii is a vibrant 18 year old student who is bubbly and outspoken. She lives with her parents and two siblings. She is a lesbian cross dresser and said that since she could remember she had always known she was different from other girls. Puii stated that would choose guns and car toys over barbies and dolls and always envied boys because they were born a boy. She said that she would cry as a small child to her parents asking them to buy her a penis and make her a boy. At the time, her parents thought that she was just a confused young child and would eventually adapt herself to the gender she was born with. But as the years passed nothing changed, and by the time she reached puberty she was sexually and emotionally attracted to the same sex and in her words quote, *“I was finally able to put a name to my identity...which is a lesbian woman.”* In the beginning she was angry at God for making her a lesbian because of all the social stigma and discriminations that LGBT community face in the Mizo society but her parent’s acceptance had made her feel confident and gives her the motivation to take each day at a time. Her understanding of sex and sexuality is penetrative and non-penetrative sex including oral sex, sexting, phone sex, etc. and she is also aware of various legislations inclusive of sex and sexuality. She said that sexual intercourse is an expression of love to a partner and we should not condone casual sex. She stated that her parents often communicate to her about sex and sexuality, she also discuss about the topic with her friends and also use the media to gain access sexually explicit materials. She said that young adults in Mizo society face numerous challenges because the topic of sex and sexuality is such a taboo. Parents do not communicate about the subject to their children, the church, which is the largest platform do not give adequate education, and the Government is not addressing the issue besides its campaign against HIV/AIDS. She suggested that sex education should become as part of the curriculum in school and that parents should also be given awareness on how to communicate the issue with their children especially those living with an LGBT child.

#### Case 6\*

Lawma is a 20 year old student who was shy and soft spoken. He has four siblings and lives with his parents and grandparents. He is good in his studies and wanted to become a writer who writes about social inequalities and injustice. His understanding of sex and sexuality is limited to penetrative sex only and do not consider other forms of sex a part of sexual behavior. He is aware of various legislations pertaining to sex and sexuality which learned from media. His parents seldom discuss about sex and sexuality at home except for his mother's small talks about menstrual cycles to his sisters, and he rarely communicate about the topic with his peers. He said that, *"I think both children and parents are afraid to open the discussion and we cannot just put the blame on parents for not communicating about the topic because we ourselves do not ask them what we do not know."* His attitude towards LGBT is neutral and stated that if somebody wants to engage in any form of sexual behaviors, whether penetrative or non-penetrative, at any stage of their lives, it is a personal choice. Mr. S said that Mizo youth today have become less religious and being born in a Christian family is an assurance that children will follow Christian values and teachings. Because of this reason it is necessary that the society as a whole become more open about sex education so that budding adults can have a comfortable physical and psychological sexual development.

*\*Case 6 was identified as a gay man by his peer group but since he did not open about his 'peers perceived sexual orientation' during the interview, he is not illustrated as a gay person.*

#### **4.6.1 Analysis of the Cases**

From the case vignettes we can draw the following findings:

- In Mizoram, majority of the students start their college education generally by the time they reach 18 years of age.
- There is moderate awareness and knowledge on sex and sexuality where sex is limited to the understanding of penetrative sex only and sexuality as sexual orientation. They are also aware about various legislations pertaining to sex and sexuality where females have a slight better understanding of the concept of sex and sexuality as well as legislations relating to the topic.

- Mizo college students engage in various sexual behaviors by the time they entered college education including both penetrative and non-penetrative sex, and they suffer from various mental health issues as a result of sexual behaviors.
- Their attitude towards sex and sexuality varies where male students are found to be more permissive towards sexual activities.
- Parent child communication about sex and sexuality is inadequate. Mothers are found to be more open about the topic as compared to fathers. Also, college students are influenced by media as well as peer groups on sex and sexuality, and substance use is moderate.
- Religion is found to be an influencing agent because it regulates their behaviors in a number of ways including the decision not to have an abortion.
- Attitude towards LGBT is rather positive, where female students are found to be more accepting as compared to male students.
- It was suggested that sex education is implemented in schools as part of the curriculum.

#### ***4.7 Focus Group Discussion (FGD)***

FGD was conducted with first semester students in the two selected colleges. Students were asked for their consent to participate in the discussion because of the topic's sensitivity and only those that show their willingness participated in the discussion. A total of three FGDs were conducted to meet the objectives of the study which include a group of male students only, female students only and a mixed group. Venue, names and other details of participants have been concealed as informed to protect confidentiality.

Students were asked basic questions like their hobbies, their plans for the future, about transitioning into a college life and other topics, to make them feel comfortable.

### *Group 1*

The first FGD was held with male students only. The group consists of 11 members within the age group of 18 to 20 years. Participants discussed about their understanding of sex and sexuality which was limited to just penetrative sex and various sexual orientations. They do not categorize non-penetrative sex as 'sex' and said that in order for a person to identify himself as someone to had engaged in sex then he has to indulge in penetrative sexual intercourse. Few of the participants were aware about LGBT rights and prevention of pre natal determination of sex and mentioned that they have never received discussions about various sexual rights. Communication about sex and sexuality with parents was low and one participant commented, "*why wouldn't they just talk about it so we will receive accurate information.*" It was mentioned that they get their information mostly form peers and media, and religion do not really teach them about the topic except on abstinence before marriage and faithfulness to a life partner. According to the participants substance use is common among Mizo young adults and it is their opinion that consumption on substances before sexual activity can cloud their judgments. Most participants do agree that premarital sex is a normal behavior whether it is casual and with emotional attachments. On LGBTs community, it was agreed upon that they are not accepted as normal part of the society but at the same time they do not discriminate or stigmatized them as long as they stay within their community and nit try to push their boundaries. There were various challenges that 'the Mizo millennials' are facing in terms of sex and sexuality because there are certain things they would like to know but have no one who would talk to them because the subject is such a taboo. So they resort to media which make them vulnerable to misinformation. In order to bridge this generation gap it was suggested that sex education is introduced in the school curriculum and parents are also sensitized to talk about the issue with their young adults.

### *Group 2*

The second FGD was conducted among female youth where the group comprises of 9 females between the ages of 18 to 21.

Participants see sex as a behaviour that involves sexual penetration and nothing less and their understanding to sexuality is that it is an expression of sexual orientation. They perceives that sexual activity is common among their peers and although emotional

attachment like love should be the main reason there are also many youth who have sexual intercourse solely for the purpose of physical satisfaction. For them casual sex is not acceptable unless you are a commercial sex worker. It was also highlighted that parents and children do not talk frequently about sex and sexuality which have cause a lot of stress to the youth because they have to learn about the topic from friends, or through books, magazines and internet, and resulted in a lot of anxiety as it is difficult for them to differentiate between what is true and false. It was also revealed during the discussion they would very much appreciate if the Mizo as a community is more open towards the topic, and teaches them about safe and responsible sex, it could prevent unplanned pregnancies and abortions. Participants also talked about peers within their close circle who have had abortions because from fear of becoming a single parent, fear of parent's anger as well as negative judgement by the society. They talked about discussing sexual matters with their friends and highlighted that they sometimes feel pressured by their peers to have sexual relationships which very often cause them discomfort and anguish. One participant related that, *"during high school there was a group of female friends in our class who made a pact to lose their virginity before they start their college education."* It was also mentioned that religion plays an important role in shaping a person and though premarital sex is very common among the youth religiosity instils sexual guilt which can regulate the sex lives of many unmarried youth. On LGBT topic it was conveyed that they feel that is what every society encounters as it develops and they do not judgment or criticise their actions because they believe that there are indeed people who are born the way that are.

### *Group 3*

The third group discussion was a mixed group of male and female students between the ages of 17 to 21 years. Male participant constitute of 9 students and females students constitute of 7 in numbers.

Participant understands sex and sexuality as penetrative sex and sexuality means expression of individual's sexual orientation. It was related that sexual intercourse should be used only between married couples. It was agreed that engaging in sexual behavior specifically pre-marital sex is very common among Mizo youth and majority of the students express their non-approval towards LGBT community while some females do

not share the same view. It was communicated that religion no longer has the strongest influence on indulgence in sexual behavior and they also express their opinion that people who indulge in pre-marital sex or young adults who have children out of wedlock should not be condemn because sexual activity is an intimate, normal and personal choice, hence no one should be judged by it. They do attend religious activities and programmes but religion does not influence their behavior in society at large. They also related that media and peer group influence many youth in their behavior, attitude and understanding of sex and sexuality. While male students agreed that peer group is the strongest influencing factor, female students agreed on media for the same. All participants agreed that substance use before or during sexual activities often result in unsafe sex which is one of the main reasons why youth in their age group are infected with sexually transmitted infections and diseases. It was suggested that to address the various issues related to sexual behavior, parents need to improve their communication about the topic by giving them adequate and accurate information. It was also suggested that the Government can implement an intervention by making sex education a part of the curriculum from high school level education.

#### ***4.7.1 Analysis of the Discussions***

From the focus group discussions we can draw the following findings:

- College students are eager to learn more about sex and sexuality.
- Premarital sex is seen as a normal behavior and they do not have negative attitude towards people who engage in it.
- There was gender difference in acceptance of LGBT community where female students were found to be more accepting than male students.
- Although participation in church activities was high, religiosity was moderate among the youth group and religion still play a role in young people's attitude towards sex because it impart sexual guilt in them.
- College students are found to be highly influenced by peer group and may lead to early initiation of sexual intercourse.

- It was suggested that parents open discussion about sex and that introducing sex education in schools is proposed

#### ***4.8 Key Informant Interview with health care professionals***

Two key informant interviews were conducted with health care professionals to meet the objectives of the study.

##### *Interview – 1*

An interview was conducted with a renowned psychiatrist in the State who has contributed immensely for the welfare of youth mental health. The interviewee related that communication about sex and sexuality between parents and children in one of the most important role as parents and from his clinical experience he convey that while mothers are doing their part by talking about menstrual cycle and other related issues to their daughters, fathers have failed tremendously in educating their sons about sexual development like opening discussion on erectile dysfunction, nocturnal emissions, etc. which are vital subjects to youth development. He also mention that there is deep relation between sexual and mental health especially in cases of abuse because firstly it takes a lot of courage for victims to admit that their mental well-being has been compromised due to the trauma and then to actually look for support is the next hardest step while the road to recovery seems never ending. Besides this he also related that although there are people who are biologically homosexual majority of sexual minority people are not exclusive and there are many youth who are experimenting with their sexuality. He said that Mizo youth today are influenced by many factors in their sexual decision where peer pressure is the most significant, followed by media and substance use.

##### *Interview – 2*

Another interview was conducted with a doctor who specialized in Public Health and is also a very well-known HIV/AIDS activist in the State. He related that his patients includes different people from all age group out of which there are many youth who have were infected with HIV because they were not responsible while having sex. He said that he had witness great deal of mental stress among youth who are living with HIV/AIDS especially from the ones who contracted from their spouse. He had seen many pregnant young women who first learned about their HIV status while going through a routine

blood test at Prevention of Parent to Child Transmission Centre (PPTCTC). These women are burdened with huge mental distress because many of them have the disease due to unfaithful husbands. He further added that there are many myths regarding sex like using two condoms gives better protection while in reality it is a very dangerous practice because when there is friction between two rubbers it causes breakage hence will not give protection from unplanned pregnancy or sexually transmitted infections/diseases. He suggested that the society need to address the issue as a community and come up with intervention plans that will be accepted by young adults so that they will follow through.

#### ***4.8.1 Analysis of the Interviews***

From the in depth interviews we can draw the following findings:

- Mental stress is the highest impact of sexual behavior on young adults.
- Mothers are found to be more open to talking about sex related developments.
- Most LGBTs are going through a phase where they are not exclusive to their sexual orientation but are just experimenting with it.
- HIV/AIDS is common among Mizo youth which is resulted from unsafe sex.
- There are many sexual myths that youth are exposed to in terms of sexual behaviors.
- Young adults need interventions that is acceptable to them and that a practice that they will follow.

Human sex and sexuality plays a major role in everyone's life regardless of whether we are young or old, man or woman because it is an integral part of what we do and who we are. Throughout time, sex and sexuality has always been a vital part of the human existence for all civilizations and it has affect people's perceptions, attitudes, and behaviors in various ways. Sex and Sexuality has always been a sensitive subject throughout the ages and its understanding has also gone through tremendous changes as seen in its historical perspective. These changes in the perception and attitudes towards sex and sexuality are evident because what was once considered obscene and abnormal is now accepted by many societies. People have become more expressive in terms of their sexual activities and other related behaviors with public display of affection found everywhere with the turn of a head. It is also a known fact that same-sex relationship is gaining acceptance as compared to years ago where they would be forced to go through intensive psycho-therapy like electric shock etc., torture and even put into prison. Today, many countries have legalized same-sex marriage with Netherlands being the first in 2000.

Over half of the world's population is under 25 years old and for building a more just and unbiased world, we need to invest in these young people by involving and engaging them as partners in the process of development. It is a reality that the taboo on youth sexuality is one of the key forces driving the AIDS epidemic as well as a contributor to high rates of teenage pregnancy and maternal mortality (IPPF, 2009).

The term 'Sex' can refer to two things. Firstly, it refers to the biological characteristics distinguishing male and female in terms of their differences in chromosomes, anatomy, hormones, reproductive systems, and other physiological components (Lindsey, 2011) and the term also refers to lovemaking or genital contact between two people, as in "having sex."

WHO (2015) defined sexuality as, "Sexuality is a central aspect of being human throughout life; it encompasses sex, gender identities and roles, sexual orientation, eroticism, pleasure, intimacy and reproduction. Sexuality is experienced and expressed in thoughts, fantasies, desires, beliefs, attitudes, values, behaviors, practices, roles and relationships. While sexuality can include all of these dimensions, not all of them are

always experienced or expressed. Sexuality is influenced by the interaction of biological, psychological, social, economic, political, cultural, legal, historical, religious and spiritual factors.”

The present study is exploratory in design and cross-sectional in nature. Both qualitative and quantitative methods were utilized for the study. Data was collected from both primary as well as secondary sources where primary sources include data collected through a semi-structured questionnaire, case vignettes and focus group discussion with college students and secondary sources include key informant interviews and data and information collected from published reports, books, etc. from government and non-government sources.

The unit of study is college going student and all college students in Mizoram constitute the population of the study. A Multi-stage sampling procedure was utilized for the study where two colleges representing north and south of Mizoram was selected based on the highest number of enrollment at the time of data collection. Only first semester students were selected for data collection. The sample size of the study is 744 students including 397 females and 374 male students.

Both quantitative and qualitative data were collected to meet the objectives of the study. The tool for collection of quantitative data was a semi-structured questionnaire and different scales were constructed to gather socio economic profile of the respondents and to measure knowledge and awareness on sex and sexuality, sexual behavior, attitude towards sexual behavior and people’s sexual orientation, parent child communication, peer group relationship, exposure to mass media, religiosity, and substance use among college students in Mizoram. These scales for various dimensions of sex and sexuality were constructed based upon various literatures. Qualitative data was collected through case vignettes, focus group discussion, and key informant interviews.

Pre-testing was conducted to check the reliability of the tool and alterations and changes were made accordingly to maintain ethical standards of research. Microsoft excel and SPSS were used for data analysis. The subject of sex and sexuality is a sensitive issue and personal topic, and therefore, consent was sought from all participants and names of

the respondents and other details have been concealed to maintain confidentiality and the same is applied for the colleges.

### **5.1 Major Findings**

Socio-demographic profile of the respondents indicated that students are young adults particularly within the age group of 18 to 25 years, and childless unmarried youth. These findings are also similar with case vignettes and focus group discussions where college students are found to be young unmarried adults. Most respondents are Presbyterian Christians studying Bachelor of Arts who lives in a stable and nuclear family. Their primary source of income is Government Service and most respondents do not have secondary source of income. Respondents have monthly family income of Rs. 10,000 to Rs. 30,000, and fall in the socio economic status of 'Above Poverty Line'. It should be noted that there are many students who do not know their socio economic status. Majority of the students is heterosexuals, but we also find bisexuals, homosexuals, pansexuals and asexuals.

Parent child communication is found to be high especially on topics of health, response to needs, discussion about career, making sense about the world, coping with challenges, and respect for beliefs and opinions. But parent child communication is poor on sex and sexuality. We see similar findings in case vignettes and focus group discussions where parent's communication on sex related topic is limited to mother's minimal education on menstrual cycle and communication about sex and sexuality in very low.

Peer group relationship is moderate and relationship is high on items relating to sharing experiences, feelings, challenges and academics while discussion on sex and sexuality. Qualitative findings reveal that peer group relationship is high and influence among peers is very strong especially in the context of sexual behavior.

Mass media exposure was moderate where exposure was high on mobile phone use, internet related TV programmes, and internet use while mass media exposure to sex and sexuality was found to be moderate among the respondents. Qualitative findings also

supported this result where respondents reveal that mass media is the most significant source of information related to sexual materials.

Overall religiosity among the respondents is moderate. It is high on items like praying to God, attending religious programmes, talking about God, and participating in church activities, while teachings on sex and sexuality is low. Sexual permissiveness and acceptance towards LGBT community as found in case vignettes and focus group discussion highlighted that although students identify with Christian religion they do not necessarily abide with Christian values.

Substance use among respondents was low but we find that college students in Mizoram do indulge in various substances like tobacco, marijuana, alcohol, pills, heroin, and adhesives which is also supported by findings from qualitative data where students reveal that they indulge in various substances.

The t-test score shows that there is significant gender difference in parent child communication as the score of female respondent is significantly higher than male. Gender difference is not found in peer group relationship, while mass media exposure shows significant gender difference where male students have higher exposure than female respondents. Gender difference is also not found in religiosity but is found in substance use as male respondents score significantly higher than female students indicating that males use substances more frequently than females.

Level of knowledge and awareness on sex and sexuality is moderate. It was high on items like sex refers to penetrative sex, moderate on other items which include knowledge on as biological and gender differences, awareness of laws against gender discrimination and inequality, sexuality as an expression of sexual orientation and sexual attitudes, laws protecting the rights of LGBT community, and knowledge on laws related to abortion. Students understanding of sex and sexuality as low on items like sexuality as an integral part of our personalities, sexuality referring to body image and overt expression of sexual sensation, knowledge on laws against pre-natal sex determination, sex referring to pornographic elements, and is very low on items which include sex refers to phone/ internet sex, and sex refers to non-penetrative sex. This indicate that the

understanding of sex is limited to having penetrative sex which is also found in case vignettes and focus group discussion as students reveal that they consider only sexual penetration, both penile and vaginal, as 'sex'.

Respondent's frequency on sexual indulgence is seldom while students participate in various forms of sexual behavior such as kissing, masturbation, hand job, frottage, sexting, phone sex, oral sex, penetrative sexual intercourse, and they also watch pornography. They also indulge in anal sex, have multiple sex partners, participate in group sex, paid sex, have sex with their partners forcefully and practice unsafe sex as well. We see that indulgence in watching porn and sex-ting involves using mass media which shows high mass media exposure to sex and sexuality. We also find that almost 20 out of every 100 students have already engaged in penetrative sex in their first semester of college out of which more than a tenth of them stated that they indulge in unsafe sex making them vulnerable to sexually transmitted infections, diseases, unplanned pregnancy and abortions. Further, student's involvement in multiple sex partners, group sex and paid sex shows risky sexual behaviors exposing them to higher risk of various impacts as a result of sexual behavior.

Among the female students, findings indicate that respondents have a neutral attitude towards gay men, lesbian women, bisexuals, and transsexuals, and male. Qualitative findings also reveal that students are accepting towards LGBT community and they consider them as normal part of the society.

Gender difference is found in this dimension as females score higher compared to male students. This finding is also conclusive in a study conducted by Lim (2002) where it was found that women were accepting towards LGBT community as compared to male and were more comfortable in interacting with homosexuals while the reverse holds true for male respondents. Further, we see from qualitative findings that females compared to male students are more accepting towards sexual minority groups.

The overall level of acceptance to measure the attitude towards various forms of sexual behaviour is low. There are respondents who have accepting attitude towards various sexual behavior which include non-penetrative sexual behavior, condom and

contraceptive use, watching pornography, masturbation, post marital sexual affair, and giving/receiving hand job, and we also find some students who agree to others items including pre-marital sex, penetrative sexual intercourse, and oral sex. Students have low score on attitude towards certain items including attitude towards frottage, phone sex, sexting, using objects to pleasure oneself, having anal sex, and multiple sex partners. Attitude was also low towards paid sex, unsafe sex, group sex, and force sex. Although the mean scores for various items of attitude towards sexual behavior is low, we do find students who have high scores and state their agreement with the statements.

The t-test score reveal that there is no significant difference between male and female on knowledge and awareness, gender difference is found in sexual behavior as male students score relatively higher than female students. Gender difference is also found in attitude towards sexual behaviors as male students score higher compared to female students. Score also reveal gender difference in attitude towards LGBT community as female shows more acceptance towards LBGTs as compared to male students.

Knowledge and awareness have no significant correlation with sexual behavior, attitude towards sexual behavior, and attitude towards LGBT community. Correlation was not found between sexual behavior and knowledge and awareness, but we find significant correlation between sexual behavior and attitude towards sexual behavior and LGBT community. Further, no correlation was found between attitude towards sexual behavior and knowledge and awareness, but there is a strong correlation with sexual behavior and also a correlation with attitude towards LGBT community. Correlation was not found between attitude towards LGBT community and knowledge and awareness, but we find a correlation with sexual behavior and attitude towards sexual behavior.

Parent child communication has correlation with knowledge and awareness, sexual behavior, and attitude towards sexual behavior, but correlation was not found with attitude towards LGBT community. Peer group relationship also has correlation with knowledge and awareness, sexual behavior, attitude towards sexual behavior, but no correlation was found with attitude towards LGBT community. Mass media exposure has correlation with knowledge and awareness, sexual behavior, attitude towards sexual

behavior, and attitude towards LGBT community. Religiosity has no correlation with knowledge and aware, but we find correlation with sexual behavior, attitude towards sexual behavior, and attitude towards LGBT community. Substance use has no correlation with knowledge and awareness, but we find correlation with sexual behavior, attitude towards sexual behavior, and attitude towards LGBT community.

Issues and challenges faced because of sexual behavior include mental health problems, physical health problems, year gap during education, abortion, sexually transmitted infections, sexually transmitted diseases and HIV/AIDS.

The subject of sex and sexuality has always remained a taboo in Mizo society but sexual health is a part of human development and therefore we need to address the issue at different level of intervention and bring about positive changes for proper growth and development of youth.

## **5.2 Suggestions**

From the findings of the study the following suggestions are highlighted for policy implication and social work intervention.

- Awareness and knowledge on sex and sexuality among college students is not adequate, and therefore, education on sex, sexual health, and sexual rights among adolescents and young adults in Mizoram may be implemented to improve their understanding of sex and sexuality.
- Acceptance of LGBT community is lower among male respondents as compared to female students. Awareness on LGBT rights is needed especially among male population.
- Sensitization on the various developmental stages related to sex and sexuality for the promotion of their sexual health and to ensure that they make proper adjustments in each stage.

- Students do not consider pornographic elements, phone and internet sex, and non-penetrative sex as a form of sexual behavior. Therefore, awareness in this regard is needed.
- We find that there are students who engage in risky sexual behaviors which may have various consequences, therefore, sex education on the practices of safe sex is important not only for prevention from STIs or STDs and HIV/AIDS but for protection from unplanned pregnancies which may result in abortions or students becoming young parents before they are ready to take on the role.
- We find that relationship of parent child communication and understanding of sex and sexuality is significant. Therefore, parents can be educated on the importance of communicating about sex and sexuality to their children, and how to initiate discussions and improve communication on various dimensions of sexual behavior.
- Peer group relationship and understanding of sex and sexuality is found to be very significant; hence, peer group relationship among college students need to be enhanced so that youth will have a positive understanding of sex and sexuality. This can be done through family, educational institutions, church and other social institutions like the YMA and MHIP.
- There is a very significant relationship between mass media exposure and understanding of sex and sexuality among college students. Healthy programmes related to sex and sexuality and sex education may be promoted through mass media so that youth in Mizoram may have a positive understanding of sex and sexuality. Moreover, restrictions on exposure to media that portrays overt accounts of sex and sexuality may be promoted. Policies regarding age appropriate programmes may be implemented to help reduce exposure of children and young adults to negative sexual behavior and attitude.
- Substance use is evident among the respondents especially in male students. We also find that substance use is correlated to the understanding of sex and sexuality

among college students in Mizoram. Therefore, awareness on substance use and abuse through various agents such as family, educational institutions, church, and other local social institutions is needed to improve the understanding of sex and sexuality among youth in Mizoram .

- Religion plays a vital role in shaping respondent's sexual values, and we also find a correlation between religiosity and sexual behavior, attitude towards sexual behavior and LGBT community. It was further found that sex and sexuality is not an open subject in religious teachings, therefore, the church should be more open about discussions on sex and sexuality. Activities and programmes of the churches in Mizoram may include topics that will influence the youth to have a positive understanding of sex and sexuality. This will reduce the involvement or indulgence and attitude of Mizo youth in risky sexual behavior.
- College students indulge in various forms of sexual behavior including overt sexual behavior such as pre marital sex, anal sex, group sex and paid sex. Therefore, sensitization on healthy sexual practices among youth may be implemented. Further, primary intervention on sex education as a part of the curriculum in schools may ensure that adolescents will have adequate and accurate information on sex and sexuality thus promoting their sexual health and enabling them to make decisions that will reduce risks brought about by sexual behavior and attitudes towards sexual behavior.
- The Government may frame policies and programmes that will make use of parents, peers, mass media, and social institutions to promote a better understanding of sex and sexuality in Mizoram.
- We find that respondents are not aware about various items regarding sex and sexuality; hence, youth counseling centers should be open with adequate and qualified personnel for easy access to information regarding sexual health.
- The impact of sexual behaviors and attitudes towards various forms of sexual behaviors and sexuality as well as the knowledge and awareness is found to have

a serious effect on college students. Mental health and physical health are being affected, their education is being hampered, and they suffer from various forms of sexual diseases which has a lasting effect on the community as a whole. Institutional centres may be strengthened to cater to the victims that have been impacted due to sexual behaviors and attitudes. Non institutional services in the form of counseling and therapeutic centres may be promoted and strengthened to enhance physical and mental health.

- There has to be a concerted effort for convergence among various social institutions within society and Government settings in Mizoram to promote healthy knowledge and understanding of sex and sexuality. All agents of socializations particularly parents within the family, peers in schools and communities, mass media private or public and religious institutions may work together with the Government to develop contextual based strategies that will attract youth in Mizoram towards a better understanding of sex and sexualit

## Understanding of Sex and Sexuality among College Students in Mizoram

### QUESTIONNAIRE

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Schedule No:

Date :

*Dear friends,*

I am a PhD Research Scholar from the Department of Social Work, Mizoram University conducting a research on the topic '*Understanding of Sex and Sexuality among College Students in Mizoram*'. I kindly request you to render me your participation in this study by answering the following questions. Confidentiality and anonymity will be strictly maintained.

<b>Personal Characteristics (Please tick the appropriate answer)</b>	
1. Age	17 years and below/ 18 to 25 years/ 26 years and above
2. Sex	Male/ Female
3. Marital Status	Unmarried / Married/ Divorced/ Remarried / Widow/ Widower
4. Do you have children	Yes / No
5. Religion	Christianity / Hindu/ Muslims / Bhuddist / Sikh / Others (Specify):_____
6. Denomination	Presbyterian / Baptist / Seventh Day Adventist/ United Pentecostal Church/ Catholic/Salvation Army / Others (Specify)_____
7. College	Pachhunga University College / Government Lunglei College
8. Course	BA / BCom / BSc / Others (Specify)_____
9. Type of family	Nuclear / Joint
10. Form of family	Stable / Broken / Reconstituted
11. Primary occupation of family	Government Service / Agriculture/ Large Business / Petty Business / Self Employed / Others (Specify)_____
12. Secondary occupation of family	No secondary occupation/ Government Service / Agriculture/ Large Business / Petty Business / Self Employed / Others (Specify)_____

13	Monthly Income of family	Less than Rs.10000 / Rs.10000 to Rs. 30000 / Rs.30000 to Rs.50000 / Rs. 50000 to Rs. 1 lakh / Rs. 1 lakh and above
14.	Socio- economic Status	AAY / BPL / APL / No category / Don't Know

**15. Parent-child communication (Please tick the appropriate answer)**

Sl. No.	Statement	Response				
		Never (0)	Seldom (1)	Sometimes (2)	Often (3)	Always (4)
i	My parents teach me about gender.					
ii	My parents talk about career and work to me.					
iii	My parents helped me understand about the importance of health.					
iv	My parents are responsive to my needs.					
v	My parents teach me in making sense about the world around me.					
vi	My parents teach me in coping with the challenges of life.					
vii	My parents teach me the importance of privacy.					
viii	My parents respect my beliefs and opinions.					
ix	My parents encourage me to participate freely in all family interactions.					
x	I learn about sex and sexuality from my parents.					

**16. Peer group (Please tick the appropriate answer)**

Sl.No.	Statement	Response				
		Never (0)	Seldom (1)	Sometimes (2)	Often (3)	Always (4)
i	My friends help me to share my experiences.					
ii	My friends help me to share my feelings.					
iii	My friends help me to solve my challenges.					
iv	My friends help me in my academic performance.					
v	My friends promote my confidence and self -esteem.					
vi	My friends teach me to conform with the norms of society.					
vii	I have a sense of belonging in my community because of my friends.					
viii	I learn about sex and sexuality from my friends.					

**17. Mass Media Exposure (Please tick the appropriate answer)**

Sl.No.	Statement	Response				
		Never (0)	Seldom (1)	Sometimes (2)	Often (3)	Always (4)
i	I read newspapers.					
ii	I read magazines.					
iii	I read books.					
iv	I listen to radio.					
v	I watch television.					
vi	I use my mobile phone.					
vii	I use the computer.					
viii	I watch internet related TV programmes eg. YouTube, Netflix, etc.					
ix	I browse the internet.					
x	I learn about sex and sexuality from the media.					

<b>18. Religion and sex and sexuality(Please tick the appropriate answer)</b>						
Sl.No.	Statement	Response				
		Never (0)	Seldom (1)	Sometimes (2)	Often (3)	Always (4)
i	I pray to God.					
ii	I talk about God.					
iii	I read religious scriptures					
iv	I read religious books and stories.					
v	I go to religious programmes.					
vi	I participate in church activities.					
vii	I listen to religious songs.					
viii	I listen to sermons disseminated through media.					
ix	I watch religious movies/films/documentaries					
x	My religion teaches me about sex and sexuality					
<b>19. Substance abuse and sex and sexuality (Please tick the appropriate answer)</b>						
Sl.No.	Statement	Response				
		Never (0)	Seldom (1)	Sometimes (2)	Often (3)	Always (4)
i	I take tobacco related products.					
ii	I drink alcohol related beverages.					
iii	I smoke marijuana.					
iv	I take heroin					
v	I take adhesives.					
vi	I take pills					
vii	I take cough syrup					
viii	Others (Specify)					
ix	Others (Specify)					
x	Others (Specify)					
<b>20 Sexual Orientation (Please tick the appropriate answer)</b>						
Sl.No	Sexual Orientation	Response				
		Yes (1)	No (0)			
i	Heterosexual					
ii	Homosexual					
iii	Bisexual					
iv	Transsexual					
v	Pansexual					
vi	Asexual					
vii	Others (Specify)					
<b>21 Attitudes towards LGBT community (Please tick the appropriate answer)</b>						
Sl.No	Statements	Response				
		Strongly Disagree (0)	Disagree (1)	Neural (2)	Agree (3)	Strongly Agree (4)
i	Gay men are normal members of society.					
ii	Lesbian women are normal members of society.					
iii	Bisexuals are normal members of society.					
iv	Transsexuals are normal members of society.					
<b>22 Knowledge and Awareness on Sex and Sexuality(Please tick the appropriate answer)</b>						
Sl.No	Statements	Response				
		Yes (1)	No (0)			
i	Sex refers to biological difference					

ii	Sex refers to gender differences					
iii	Sex refers to non-penetrative sex					
iv	Sex refers to penetrative sex					
v	Sex refers to phone/ internet sex					
vi	Sex refers to pornographic elements					
vii	Sexuality refers to body image					
viii	Sexuality refers to expression of sexual orientation					
ix	Sexuality refers to sexual attitudes					
x	Sexuality refers to an integral part of our personalities					
xi	Sexuality refers to the overt expression of sexual sensation					
xii	There are laws to protect the rights of LGBT community					
xiii	There are laws against gender discrimination and inequality.					
xiv	There are laws related to abortion.					
xv	There are laws against pre-natal sex determination.					
<b>23</b>	<b>Sexual Behavior (Please tick the appropriate answer)</b>					
Sl.No	Statements	Response				
		Never (0)	Seldom (1)	Sometimes (2)	Often (3)	Always (4)
i	I indulge in non-penetrative oral sexual stimulation ( Kissing, Licking someone)					
ii	I watch pornography					
iii	I masturbate					
iv	I give/ receive hand job					
v	I indulge in frottage ( rubbing any part of the body against sexual organ of another person)					
vi	I indulge in sex-ting (sending / receiving / forwarding sexually explicit messages / images of oneself to others and vice versa through mobile phones)					
vii	I indulge in phone sex (conversation between two or more people on the phone where one or more of the individual is describing an act of sex)					
viii	I have oral sex ( using mouth and tongue to stimulate partners genitals or anal area)					
ix	I have penile / vaginal penetrative sexual intercourse					
x	I use objects (Sex toys, etc.) to pleasure myself or others sexually.					
xi	I have anal sex					
xii	I have multiple sex partners					
xiii	I participate in group sex					
xiv	I perform paid sex					
xv	I forcefully have sex with my partner					
xvi	I have unsafe sex					
<b>24</b>	<b>Attitude towards sex and sexuality(Please tick the appropriate answer)</b>					
Sl.No	Statements	Response				
		Strongly Disagree (0)	Disagree (1)	Neural (2)	Agree (3)	Strongly Agree (4)
i	Pre marital sex is a normal sexual behaviour					
ii	Post marital sexual affair is natural					
iii	Condom and contraceptive usages during and after sex is normal					
iv	Non-penetrative oral sexual stimulation ( Kissing, Licking someone) is normal					
v	Watching pornography is normal					

vi	Masturbation is normal					
vii	Giving / receiving hand job is normal					
viii	Indulging in frottage ( rubbing any part of the body against sexual organ of another person) is normal					
ix	Indulging in sex-ting (sending / receiving / forwarding sexually explicit messages / images of oneself to others and vice versa through mobile phones is normal					
x	Indulging in phone sex (conversation between two or more people on the phone where one or more of the individual is describing an act of sex is normal					
xi	Having oral sex ( using mouth and tongue to stimulate partners genitals or anal area)is normal					
xii	Having penile / vaginal penetrative sexual intercourse is normal					
xii	Using objects (Sex toys, etc. ) to pleasure oneself or others sexually is normal					
xiv	Having anal sex is normal					
xv	Having multiple sex partners is normal					
xvi	Participating in group sex is normal					
xvii	Performing paid sex is normal					
xviii	Forcefully having sex with someone is normal					
xix	Having unsafe sex is normal					
<b>25.</b>	<b>Impact of sexual behaviour(Please tick the appropriate answer)</b>					
<b>Sl.No</b>	<b>Impact</b>	<b>Response</b>				
		<b>Yes (1)</b>	<b>No (0)</b>			
i	Year gap during education					
ii	Mental Health Problems					
iii	Physical Health Problems					
iv	Abortion					
v	STI					
vi	STD					
vii	HIV/AIDs					
viii	Others (Specify)					
ix	Others (Specify)					
x	Others (Specify)					
<b>26.</b>	<b>Suggestions to improve understanding of sex and sexuality</b>					

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3	2018	Sex and Sexuality in Mizo Culture: Truth Beyond Tales	Journal of Literature and Cultural Studies (A Referred Journal)	Department of English, Mizoram University ISSN: 2348-1188

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**ABSTRACT**

**UNDERSTANDING OF SEX AND SEXUALITY AMONG COLLEGE  
STUDENTS IN MIZORAM**

**Zothankimi Ralte**  
**Department of Social Work**

*Submitted in partial fulfillment of the requirement of the Degree of Doctor of  
Philosophy in Social Work of Mizoram, Aizawl*

## INTRODUCTION

Human sex and sexuality plays a major role in everyone's life regardless of whether we are young or old, man or woman because it is an integral part of what we do and who we are. Throughout time, it has always been a vital part of the human existence for all civilizations and societies. Sex and sexuality has always been a sensitive subject throughout the ages. We can see tremendous changes in the perception and attitudes towards sex and sexuality through the decades because what was once considered obscene and abnormal is now accepted by the general population worldwide. People have become more expressive in terms of their sexual activities and other related behaviors with public display of affection found everywhere with the turn of a head. It is also a known fact that same-sex relationship is gaining acceptance as compared to years ago where they would be forced to go through intensive psycho-therapy like electric shock etc., torture and even put into prison. In fact, many countries have legalized same-sex marriage with Netherlands being the first in 2001.

Over half of the world's population is under 25 years old and for building a more just and unbiased world, we need to invest in these young people by involving and engaging them as partners in the process of development. It is a reality that the taboo on youth sexuality is one of the key forces driving the AIDS epidemic as well as a contributor to high rates of teenage pregnancy and maternal mortality (IPPF, 2009). Among other inequalities, lesbian, gay and transgender people are significantly more likely than the general population to be targeted for violence and harassment, to contract HIV, and to be at risk for mental health concerns such as depression and suicide (WHO, 2015). Today's adolescents and youth, which accounts for 1.8 billion strong of the world's total population, consisting a quarter of the global population are growing up in a world with political, social, economic and environmental transformation. They have high concerns and expectations for themselves as well as the societies that they live in, challenging the governments and the global community to meet their needs. In the midst of all these pressures which transcend all borders, young people today are shaping social, political and economic development, challenging norms which are biased, discriminatory

and prejudiced, while laying and building a foundation for a better future (United Nations Fund of Population Activities, 2019).

World Health Organization (2015) states that “sexual health today is widely understood as a state of physical, emotional, mental and social wellbeing in relation to sexuality. It encompasses not only certain aspects of reproductive but also, the possibility of having pleasurable and safe sexual experiences, free of coercion, discrimination and violence.” Indeed, it has become clear that human sexuality includes many different forms of behaviour and expression, and that the recognition of the diversity of sexual behaviour and expression contributes to people’s overall sense of well-being and health. Within this context, it is important to understand sexual health as multi-dimensional which not only accommodates physical wellbeing of an individual but can significantly contribute or reduce the overall development of a person especially among the youth.

Although we have seen various interventions undertaken by both Government and Non-Governmental Organizations (NGOs) to cater to the need of improving adolescents’ and young adults’ sexual health, we still see the need for encouragement, awareness and promotion of their sexual health, even just from a physical perspective, as youth are still among the most vulnerable group who are contracting and transmitting Sexually Transmitted Infections (STIs), Sexually Transmitted Diseases (STDs) including Human Immunodeficiency Virus (HIV), becoming pregnant, going through abortion and engaging in sexual risk behaviors. It is important that we have intervention plans in place which will be well received by the youth population so that it can address these issues effectively. The United Nations have in fact taken into account that every young person will one day have to make life-changing decisions about their sexual health but yet researches have shown that majority of them lack essential knowledge to make responsible decisions which leaves them vulnerable to various sexually transmitted infections, unplanned pregnancy and also to coercion (United Nations Population Fund, 2014).

According to WHO (2011), there is evidence about the importance of sexuality education in terms of preventing unintended pregnancy and pregnancy at an early age.

The Organization assembled an international consultation on this topic that concluded that Comprehensive Sex Education should be expanded in order to provide accurate information and education about safe sex to adolescents. Sexuality education offers protection against unintended pregnancy and prevents Sexually Transmitted Infections (STIs), including HIV and AIDS and can also help young people to develop communication skills, as well as enhancing their self-esteem and capacities in making decisions in maintaining positive and reasonable relationships.

### **1.1 Definitions and Concepts**

The term ‘Sex’ can refer to two things. Firstly, it refers to the biological characteristics distinguishing male and female in terms of their differences in chromosomes, anatomy, hormones, reproductive systems, and other physiological components (Lindsey, 2011). Secondly, the term also refers to lovemaking or genital contact between two people, as in “having sex.” For centuries, societies all over the world agree to the understanding that sex means just one thing: sexual intercourse within the context of marriage for the purpose of procreation. Pursuing any other form of genital pleasure was not only viewed as sinful, but it could get you thrown in jail or, in some cases, puts you to death. In contrast to this view, the concept of sex in modern times has been significantly expanded, and sexual activity has become quite complex. For instance, “sex” now refers to a wide range of behaviors and sexual activity today is no longer legally or morally restricted to traditional heterosexual marriage either; sex occurs between unmarried romantic partners, “friends with benefits,” and people of varying sexual orientations. Furthermore, sexual acts can serve a wide range of purposes, with procreation being just one possibility. People now see sex as a form of recreation, a way to express love or get closer to a partner, a way to celebrate special occasions, and (for some) a way to make money (Lehmiller, 2014).

Sexuality most importantly involves the subjective desire to experience sexual arousal and possibly to engage in overt expression of that desire. In many instances the sexual desire involves the motivation to engage in sexual contact with another human being (Hill, 2008). According to King (1999) Sexuality is defined as, “all the sexual attitudes, feelings, and behaviors associated with being human. The term does not refer specifically for erotic response or to sexual acts, but rather to a dimension of one’s

personality.” WHO (2015) also defined sexuality as, “Sexuality is a central aspect of being human throughout life; it encompasses sex, gender identities and roles, sexual orientation, eroticism, pleasure, intimacy and reproduction. Sexuality is experienced and expressed in thoughts, fantasies, desires, beliefs, attitudes, values, behaviors, practices, roles and relationships. While sexuality can include all of these dimensions, not all of them are always experienced or expressed. Sexuality is influenced by the interaction of biological, psychological, social, economic, political, cultural, legal, historical, religious and spiritual factors.” We can also say that human sexuality is how people experience and express themselves as sexual beings and the choices they made for expressing their sexual preferences may be termed as sexual orientation. This orientation can be categorized into different types; (i) heterosexuality, which is the sexual attraction to another person of the opposite sex (ii) homosexuality, is the sexual attraction to the same sex (iii) bisexuality, sexual attraction to both sexes, (iv) transsexuality, which is the desire to live and be accepted as a member of the sex that they are not born with, (v) pansexuality, which is romantic or emotional attraction towards people regardless of their sex or gender identity, and (vi) asexuality, which is attraction to no sexes in a sexual way.

## **1.2 Statement of the Problem**

The study of sex and sexuality especially among youth is an integral part in social work practice. The significance of the study of youth in social work research is such that, it can bring about essential understanding about the highest populated group in India and provide an understanding on how interventions can be made to sustain society and enhance human functioning.

With the various developments taking place in society, youth in Mizoram have been submerged with cultures other than their own, making way for a ‘state of anomie’ a sense of normlessness among the youth. There exists a cultural lag among the youth as a result of this transition brought about by various agents of change taking place in the society. This has loosened traditions and norms that curtailed to sustain the erstwhile youth in Mizoram. Today, the generation gap is increasing and the understanding of sex and sexuality among the Mizo youth have become distorted in such a way that it has given rise to other social problems. Pre-marital sex is on the rise, suicide among youth is

increasing and metro-sexuality has become the trend in understanding themselves as social beings. There is also a rise in homosexuals and bisexuals who have revealed their sexual orientation openly to the public. Further these practices have increased vulnerability in terms of other health issues such as tuberculosis, HIV/AIDS and other venereal diseases.

According to a study conducted by Synod (2010), premarital sex is very common among young adults in Mizoram, and similarly other sexual related practices were also found to be highly common according to Ralte (2010) who found that gay men in Mizoram were married to the opposite sex and had sex with both men and women which confirms the existence of extra-marital affairs and bisexuality in Mizoram. Chhakchhuak (2010) in her study among students of higher secondary schools in Mizoram also found that children had parents who had extra-marital affairs/Marital discord. Further, she also found students watched pornography, read sex related magazines, masturbated, watched adults having sex, have had Cyber-sex and phone sex, have had sexual intercourse and were involved in paid sex. It is not known as to why such sexual practices and behavior takes place.

According to Lalkima (1997), the rise in alcoholism following the seventies resulted in the increase of divorce rates and in such cases of separation both spouse remarries other persons. He further states that the increase in the number of children in need of care and protection was because of misuse of sex and loose customary laws of marriage in the Mizo society.

Lalrinawma (2005) wrote that there is little communication within a Mizo family and the best time for it was during mealtime. Many families do not communicate much with their children nor do they give them adequate importance and children therefore grow up without proper care and concern. Children spent little time with their family and peer group was the main agent of socialization for them. It is not known as to whether these findings have an implication to the understanding of sex and sexuality among youth in Mizoram. However, it is indicative of the fact that Mizos' understanding of sex and sexuality is a product of primary and secondary institutions and other social problems faced by youth in Mizoram.

In the light of the above, this study will try to find what influences youth in their understanding of sex and sexuality and will give a comparative analysis of this understanding across gender. It will also delve upon the knowledge and awareness of college students on sex and sexuality, their sexual behavior, their attitudes towards all forms of sexual behaviour and their attitude towards LGBT communities. It will also attempt to suggest measures for social work intervention and policy making.

### **1.3 Objectives of the Study**

- 1) To explore the nature and the relationship of and among parent-child communication, peer group relationship, mass media exposure, religiosity and substance use and abuse among college students in Mizoram across gender.
- 2) To find out the knowledge and awareness on sex and sexuality among college students in Mizoram across gender.
- 3) To understand all forms of sexual behavior among college students in Mizoram across gender.
- 4) To find out the attitude towards all forms of sexual behavior among college students in Mizoram across gender.
- 5) To find out the sexual orientations and attitude towards LGBT communities among college students in Mizoram across gender.
- 6) To determine the relationship between knowledge and awareness on sex and sexuality, sexual behavior, attitude towards sexual behavior and LGBT communities among college students in Mizoram across gender.
- 7) To determine the relationship between parent-child communication, peer group relationship, mass media exposure, religiosity and substance use and abuse and knowledge and awareness on sex and sexuality, sexual behavior, attitude towards sexual behavior and LGBT community among college students in Mizoram across gender.

## REVIEW OF LITERATURE

Maria (2007) conducted a study among 4878 single youth in Ethiopia to examine their sexual awareness. Although the awareness of HIV/AIDS is relatively high, respondents are not aware about other STIs. The majority of the respondents stated that they were aware of AIDS and they know how to avoid the disease. They mentioned that being faithful to a single partner, using condom and abstinence are ways of avoiding HIV infection and knowledge of other ways of avoiding HIV infection like PrEP was generally low. There are also various beliefs where respondents stated that avoiding injections will prevent them from contracting AIDS, avoiding a partner who has many sexual partners was a way of prevention from AIDS, and avoiding sex with commercial sex workers will also protect them from HIV infection. Awareness of STIs other than AIDS was very minimal for both genders and girls were more aware about symptoms of various STIs as compared to boys.

Joshi (2010) administered a questionnaire to 182 adolescents from Mumbai between the age group of 17–21 years. The questionnaire was to examine their knowledge about important aspects of sexuality and how they gain access to the information. Results showed that respondents scored low on sexual knowledge which includes items like conceptions and symptoms of pregnancy and scored higher on knowledge about masturbation, orgasms and contraceptions. Further, there was no gender difference found in these items. Participants also reported that the source of most of their sex information was peers and books while parents and siblings do not play a significant role in providing knowledge and awareness about sex related information to the respondents. The study concluded that Indian youth lack sex education and suggested that since many Indian adolescents are sexually active and it is necessary that they are given the opportunity to access accurate information in order to maintain their sexual health and have adequate knowledge on sexuality.

Agarwal (2015) stated that 87 per cent new HIV infections in India is because of unsafe sex which placed young people in the centre of the epidemic. For the study structured interview method was used to gather qualitative and quantitative data among 250 unmarried girls in Jaipur pursuing undergraduate and post graduate education.

Results showed that respondents are aware about the prevalence of HIV/AIDS were aware about the mode of transmission through sex, but were not highly aware about other sources such as sharing of syringes, blood transfusion and mother to child. Also, they lack of correct information about 'safe sex' and believe that HIV can be spread through excessive sex, insect bites, living with HIV/AIDS patients and sharing utensils with them, using a urinal which is used by a sero-positive person and some even stated that HIV can be spread by environmental pollution. Besides this, majority of them stated that HIV testing can be done only in hospitals and further commented that "AIDS can't happen to me" which clearly showed their lack of awareness and put them at risk.

Kanwetuu, Mokulogo and Azumah (2018) conducted a study among 340 students to highlight their sexual behavior. Results implicated that students were sexually active where majority of them have had sexual intercourse with friends or peers and some admitted to having sex with teachers and family members. The reasons for their initiation of sexual behavior varied which include wanting to show love to a partner, forced to have sex by a partner, peer influence, curiosity and personal sex drive. Although students used contraception like condoms and oral contraceptive pills, their usage was low and majority of them do not take these precautions. There were also reports of using the withdrawal method to prevent pregnancy. There was gender difference on number of sexual partners within the last 12 months where males were more likely to have more partners as compared to females, and some even reported keeping multiple sex partners at a time.

Tang, Lai and Chung (1997) examined Chinese students to understand their sexual behavior. Findings revealed that male students became interested in sexual activities at an early age as compared to female students. Results also showed that many students engaged in kissing and petting with their partners, and majority of male students reported having sexual fantasies every week while it was relatively low for females and only half of them reported fantasizing the same once in every month. The percentages of students reporting experience in various sexual activities like oral sex, anal sex, and male dominant position sexual intercourse were similar across gender, except for masturbation, where the number of males who reported indulging in masturbation was twice as many as those with females.

Askun and Ataca (2007) examined gender differences in sexual attitudes and behaviors of 563 Turkish university students through distal and proximal variables. It was found that men as compared to women were more permissible towards expression of sexuality, however it was also found that this gender difference on permissiveness disappear when relationships are more serious. The finding was attributed to the fact that women who find themselves in committed and long term relationships feel that being in a relationship which encompasses love and commitment, even though they may not be legally married, is sufficient to have sexual intercourse with their partners. Among the respondents, number of virgin male participants hugely exceed female. Also gender difference was found on the kind of relationship participants were involved in at the time of first sexual encounter where they were more females engaging in long term relationship at the time of their first sexual encounter. The study was conclusive in terms of men being more permissive at the time of first sexual encounter as compared to their female counterparts and students who engage in sexual behavior have a more positive attitude to sexual activities.

Ghule, Balaiah and Joshi (2007) studied premarital sex attitude among rural college youth in Maharashtra. Respondents consist a total of 1500 rural college students within the age group of 15-24 who answered questionnaires to determine the attitudes towards sex before marriage. Findings showed that majority of the students were conservative towards sexual behaviors where they did not only disregard the behavior but view it as an immoral sexual activity. These attitudes include pre-marital sex, masturbation, pornography, extra marital affairs, birth control and the like. Besides this, there was gender bias in sexual behavior where it was found that respondents were more permissive to pre-marital sex for males as compared for females. There was also gender difference in attitudes towards sex and sexuality where males were found to be more liberal than females, and that the older students were they were found to be less conservative as well. Further, a positive association was also found between attitudes and peer interaction, exposure to pornography, substance abuse and knowledge about reproductive health.

According to Taris and Semin (1997), it was found that positive parent-child relationship do not necessarily delays sexual initiation of their children. A total number of 255 pair of mother-adolescent completed the study. It was found that there is greater conflict between mother and adolescent if mother suspects their children of being sexually active and this conflict shows lower score if both the parties try to understand the situation and develop a sense of closeness with each other. It was seen that adolescent's and mother's sexual permissiveness is positively correlated where it was found that the more permissive mothers are it leads to an early initiation of their children's sexual debut. When mothers are open to discussion about sex-related issues it comes across their adolescent's mind as a permission to engage in sexual behavior. The study thus reveal that when there is less intra-family conflict resulting in closeness between mothers and their adolescents, mothers tend to be more open about communicating sex-related issues thus facilitating their children's sexual permissiveness and engaging sexual initiation.

The extent of parent-child communication about sex-related issues in rural India was studied by Ramos et.al (2012). The study includes 40 participants consisting of 10 mothers, 10 fathers, 10 boys and 10 girls from 20 households. Both genders reveal that the topic is rarely discussed with their parents and they mostly get their information from TV programs and people who come to discuss about it in their schools. It was also reported by the adolescents that parents should take the initiative in opening discussion about sex-related matter which should be consistent, direct, timely and accurate because they fell that it will prevent them from unwanted pregnancy, sexually transmitted diseases and enable them to make informed and healthy sexual choices while parents do not recognize the same need. The study concluded that rural Indian parents lack communication on sexual information to their children and there is the need for adolescent's family-based HIV/AIDS awareness and prevention.

According to Jain and Singhal (2017) although parents and adolescents in urban India acknowledge the importance of having open discussion about sexual and reproductive health, they found that communication about the topic between both parties is relatively low. Interviews with adolescents revealed that only some parents talked

about sex related issues which was confined to information like appropriate age and the dangers of having sexual intercourse before the right age while discussions about sexual and emotional changes during puberty or safe sex were not opened. Adolescents reported that they find it more comfortable discussing the issue with their mother as compared to their fathers. Adolescents also reported that if their parents disapprove their romantic relationships they might commit suicide while some reported that they were not allowed to have friends of the opposite sex. Barriers to communication that were identified by adolescents include conservative mindset of parents and lack of quality time. Interviews with parents reveal that although some do discuss the matter with their adolescents other feel that they have not done so because they believe that their children are already informed about it. Further, the study revealed that both adolescents and parents would like to have sex education as part of the curriculum and that parents who have sexual discussions with their adolescents reported delay in sexual initiation.

Cohan (2009) tried to understand the influence of peer pressure among male groups. Many boys reported that they are a part and aware of a male peer group where membership credential includes losing one's virginity. But being a virgin male does not exclude them from joining the peer group but are seen as somebody who has not accomplished his manhood and placed him in a lower status than the rest, when he loses his virginity he then gains full membership in the peer group. Engaging in sexual intercourse is also means great achievement for male peer groups because they draw on higher sexual achievement for higher position like 'jockey' within the fraternity. It was also found that some respondents have been made to watch pornography through peer pressure to prevent them from engaging in homosexual behavior which highlights the fact that there is still a certain level of homophobia among male peer groups.

Berten and Rossem (2011) conducted a study to assess the relationship friend's influence and adolescent's sexual behavior. The study includes 11872 secondary school adolescents from 160 schools in Europe. Results indicated that best friends influence adolescents' sexual behavior as well as their school deviancy. They found that there was gender difference initiation in lower education which tends to disappear as classes get higher. They also found that peer influence or best friend's influence is more significant

in higher education and students who have sexually active friends are more likely to engage in the same.

Ortega et al. (2015) stated that there is the availability of sexual information on the internet is very prevalent and it is likely that adolescents are using the media to learn about sex and its related behavior through online. To study this proposition, they conducted a study to examine the amount of information that adolescents gathers from the internet and its effects on their sexual behavior. Respondents consist of 3809 Spanish adolescents from higher secondary education who completed a self-administered questionnaire. Findings revealed that boys gathered more information of sexual content as compared to female students. This frequency also positive associated with sexual activities like masturbation, and engaging in non penetrative and penetrative sexual behavior as well. However, viewing of sexual content through internet does not have any relationship with the use of condoms at first sexual intercourse among respondents.

A study was conducted by to understand media and sexual behavior among Hongkong adolescents. It was found that the magazines, videos, comics, and movies were the most significant sources of sexual media and gender difference was identified where male adolescents view more sexual content as compared to female adolescents. Results revealed that there was also a strong association between sexual media use and age, number of sexual partners, masturbation, family problem, low attendance in school and Christianity as a religion. Further, it was also found that adolescents purchased and rented sexually explicit materials and gender difference was again identified where male adolescents engaged more in this practice as compared to females and the study showed that the use of media does not increase knowledge and awareness about sexual behavior among adolescents (Janghorbani, Lam and TYSSSTF, 2003).

A study was conducted among 408 undergraduate students in a University to test if frequency of religious attendance and perceived degree of religiosity could distinguish between those students who have and have not participated in selected sexual behaviors. Results indicate that religious conviction plays a major role for many individuals with regards to sexuality. Participants with more frequent worship attendance and stronger religious feelings tend to be more conservative and for students who have had non-

traditional sexual experiences like pre-marital sex or infidelities decrease their religious involvement. It was also found that rather than religiosity or perceptions on God's view of sex, frequency in attendance of religious services seem to have higher affect on limiting sexual behaviors of the respondents (Penhollow, Young & Denny, 2005).

According to Elifson, Klein, and Sterk (2003) found that religiosity plays a significant role in women's HIV risk behaviors. The study examine 250 women along with their daughters categorized into 4 dyads; women and daughter using drugs, mother only using drugs, daughter only using drugs, and last both women and daughter who are not using drugs. Results indicate that religious attendance and self perceived impact of religion on behavior correlated with HIV risk behavior where respondents who score higher in both variables are less likely to indulge in HIV risk behavior, also, younger women score higher in HIV risk behaviors. The study found that when other variables like childhood mistreatment experiences, psychosocial measures, experiences and relationships with other persons, exposure to substance abusers, and condom-related beliefs and attitudes were also considered, religiosity is found to be a strong predictor of women's involvement in HIV related risky behaviors. It concluded that when women increased their frequency of attendance in religious and worship services there is an increased perceived influence on their behaviors which resulted in less involvement of HIV risk behavior.

DeSimone (2010) found a relationship between binge drinking and risky sexual behaviors. He conducted a study to examine the relationship between the two variables and he used cluster sampling among 4,814 college students between the age group of 18-24. Findings revealed that there was a strong relationship between promiscuity and binge drinking in multiple occasions and that when alcohol use in the form of binge drinking is executed prior to sexual intercourse it directly leads to risky sexual behaviors including multiple sex partners and sex failure to use condoms. Also binge drinking-induced promiscuity is found among students who were involved in long-term and serious relationships, especially among male students.

A study was conducted to examine the relationship between risky sexual behavior and alcohol use among 221 sexually active, heavy drinking college students. Using

structured interview schedule participants reported their sexual behavior as well as alcohol and drug use over a three-month period. It was found that students were extremely sexually active and there was high number of vaginal and anal sexual intercourse reported. However there was no association found between condom use and drinking, in both cases when students when heavily drinking or there was no alcohol consumption prior to sexual intercourse. Gender difference was found in condom use, where females report less condom use when they are involved in a steady relationship but it was also found that failure to use condom during sexual intercourse is significantly correlated to consumption of alcohol prior to sexual activity both with casual and steady partners (Lori, et al. 2010).

## **2.1 Analysis of review of literature**

The review of literature helps in drawing the following conclusions:

1. The most frequently tool for data collection used was questionnaire and importance was given to respondent's anonymity.
2. Youth population lack accurate knowledge and awareness in sex and sexuality, and are exposed to misinformation because of myths and sexual traditional practices.
3. Young adults are sexually active and do not necessarily have sexual guilt especially those that are in a committed and long term relationships.
4. It was also found that there is gender difference towards LGBT community where females are more accepting as compared to males.
5. There is lack of parental communication about sex and sexuality which can pose a threat to proper sexual development of youth population because they do discuss it with their peers and gather information from unsanctioned media sources.
6. Peer group influence is found to be very strong among the youth which pressurize them to indulge in sexual behaviors before they are ready.
7. Media is used as source of sexual contacts, purchasing sexual products, and to access sexually stimulating materials.

8. Religion and religiosity plays an important role in delaying sexual initiation among youth and reduces their sexual permissiveness.
9. There was a strong association found between consumption of substances and engaging in risky sexual behaviors.
10. Sex education as part of the curriculum from lower education is highly recommended.

## **2.2 Research Gaps**

From the above review of literature the following research gaps were identified.

1. Majority of the studies include knowledge on sexually transmitted infections and diseases and did not include knowledge and awareness of youth on sex and sexuality itself.
2. Literature was not found on youth's knowledge about legislations pertaining to sexual health and sexual rights in particular.
3. There were only few studies that consist of youth attitudes toward risky sexual behaviors like multiple sex partners and participating in group sex as well as their attitudes towards sexual contacts through media.
4. Studies on parent-child communication concentrate only on communication about sexual health and did not involve other aspects of sex and sexuality.
5. There was limited study conducted on sex and sexuality among Indian youth as well as youth in Mizoram.

## METHODOLOGY

Mizoram is a one of States in North East India with Aizawl as its capital. As per census 2011, the total population of the State is 10.97 lakhs with a literacy rate of 91.33 which ranks third in the country. Mizoram has 11 districts, including the newly created three districts in 2019. There are multiple and diverse sub tribes and the State shares an international border with Myanmar and Bangladesh.

It is a hilly area with beautiful flora and fauna and the Mizo people are known for their love for music and sports. The main occupation of the people is agriculture and majority of the people are Christians and according to 2011 census, there are 87.16% Christians in the State. Mizo people are hospitable and honest and their moral code of ethics is based on rendering help and assistance to people with no exceptions. This traditional value is enforced through the concept of '*tlawmngaihna*' in Mizo which translates to a sense of altruism.

The Mizo society has seen tremendous changes, from the practice of animism and headhunting, to being the largest Christian state and one of the most peaceful states in the country. As part the various developments in the society, Mizo youth has been a victim of cultural lag resulting in generation gap and social problems. Pre-marital sex, teenage pregnancy, abortion, suicide among the youth is increasing. Youth identify themselves to various sexual orientations, and metro-sexuality has become the trend in understanding themselves as social beings. These practices have increased their vulnerability in terms of health issues such as tuberculosis, HIV/AIDS and other venereal diseases.

### **3.1 Research Design**

The study is exploratory in design and cross-sectional in nature. Both qualitative and quantitative methods were utilized for the study.

### **3.2 Sources of Data Collection**

Data was collected from both primary as well as secondary sources. The primary sources include data collected from the respondents which includes the college students and key-informants and secondary sources include data and information collected through published reports, books, etc. from government and non-government sources.

### 3.3 Sampling Procedure

A Multi-stage sampling procedure was utilized for the study. In the first stage, two (2) districts namely Aizawl and Lunglei, the highest populated districts, representing North and South Mizoram was purposively selected. In the second stage, a list of all colleges within the two selected districts was obtained from Mizoram University. In the third stage, the number of seats available in all the colleges from the selected districts was collected from the authorities of the colleges and the numbers were listed out. In the fourth stage, one (1) college each representing the selected districts with the highest number of student's enrollment was selected. The college representing Aizawl District had students enrollment of 2505 and the college representing Lunglei District had student enrollment of 471. In the fifth stage, out of the total enrollment of both colleges from Aizawl and Lunglei, only 1<sup>st</sup> year students across departments from the two selected colleges formed the final sample. All students who were present during data collection from 1<sup>st</sup> year across the departments of the two selected colleges were distributed the questionnaires. Sample of 546 students was collected from College-I in Aizawl and 198 students from College-II in Lunglei. The total sample size of the study was 744 students including 397 females and 347 male students. Gender representativeness could not be taken because the tool of data collection was a questionnaire.

347 male students.

**Figure 1: Map of Mizoram**



### **3.4 Tools of Data Collection**

A semi-structured questionnaire formed the tool for data collection. Information regarding the socio-demographic profile of the college students was included in the tool to understand the profile and sexual orientations of college students in Mizoram. Different scales were constructed to measure the knowledge and awareness on sex and sexuality, frequency of indulgence of all forms (normal and overt) of sexual behavior, acceptance level of attitude towards all forms (normal and overt) of sexual behavior, acceptance level of attitudes towards LGBT community, frequency of parent child communication, peer group relationship, exposure to mass media, religiosity, and substance use among college students in Mizoram.

The various dimensions and items to measure the parent child communication was based on the literature Horstman, Hays and Maliski (2016), peer group pressure was based on Tome (2012), mass media exposure was based on Janghorbani, Lam, and The Youth Sexuality Study Task Force (2013), religiosity was based on Luquis, Brelsford and Guyler (2011), and Puzek, Stulhofer and Bozicevic (2012), and substance use was based on Kaljee et.al.(2011), Livingston et al. (2012), and Staton (1999).

The different items to measure knowledge and awareness on sexuality, sexual behavior, attitude towards sexual behavior and attitude towards LGBT community were based on Renaud et al. (2010) and Jerome, B., Leda, C., & John, T. (1992), The Protection of Children from Sexual Offences (POCSO) Act 2012, Tang, Lai and Chung (1997), and Kanwetuu, Mokulogo and Azumah (2018)

Qualitative methods such as 6 case vignettes, 3 focus group discussion and 2 in-depth interviews with health care practitioners were also conducted to meet the objectives of the study. After preparation of the tool, pre-testing was conducted to check the reliability of the tool and alterations and changes were made accordingly to maintain ethical standards of research.

**Table 1 Reliability of Scales Constructed**

Sl.No	Scale	Sample Size	Number of Items	Scales	Alpha	Parallel
1	Knowledge and Awareness	744	15	1 point scale; 0 =No; 1 = Yes	0.78	0.78
2	Sexual Behavior	744	16	5 point scale; 0 = Never; 1 = Seldom; 2 = Sometimes; 3 =Often ; 4 =Always	0.90	0.90
3	Attitude towards Sexual Behavior	744	19	5 point scale; 0 =Strongly Disagree; 1=Disagree; 2 =Neutral; 3 =Agree; 4 =Strongly Agree	0.91	0.91
4	Attitude towards LGBT community	744	4	5 point scale; 0 =Strongly Disagree; 1=Disagree; 2 =Neutral; 3 =Agree; 4 =Strongly Agree	1.00	1.00
5	Parent Child Communication	744	10	5 point scale; 0 =Never; 1=Seldom; 2 =Sometimes; 3 =Often ; 4 =Always	0.92	0.92
6	Peer Group Relationship	744	8	5 point scale; 0 =Never; 1=Seldom; 2 =Sometimes; 3 =Often ; 4 =Always	0.90	0.90
7	Mass Media Exposure	744	10	5 point scale; 0 =Never; 1=Seldom; 2 =Sometimes; 3 =Often ; 4 =Always	0.76	0.76
8	Religiosity	744	10	5 point scale; 0 =Never; 1=Seldom; 2 =Sometimes; 3 =Often ; 4 =Always	0.90	0.90
9	Substance Use	744	7	5 point scale; 0 =Never; 1=Seldom; 2 =Sometimes; 3 =Often ; 4 =Always	0.76	0.76

*Source: Computed*

The tool was administered by getting prior permission from the college Principals and respective Heads of each department. The researcher was given a time slot according to the convenience of the department and detailed instructions were given to the students before administering the questionnaire. Students were seated in a manner to ensure their responses are independent and not influence by their peers.

### **3.5 Data Analysis**

The quantitative data were analyzed using Microsoft Excel and SPSS package. Descriptive statistics, simple frequency and means were presented to find out the understanding of sex and sexuality among college students in Mizoram. Pearson's correlation co-efficient was used to find out the relationship among and between parent-child communication, peer group, media, religion and substance use and the understanding of sex and sexuality among college students in Mizoram. T test was also used to compare means on awareness on sex and sexuality, sexual behavior, attitude towards sexual behavior and attitude towards LGBT community across gender. Case vignettes, focus group discussion and in-depth interview are presented accordingly to get an in-depth knowledge about the objectives of the study.

### **3.6 Ethical Consideration**

The subject of sex and sexuality is a sensitive issue and a personal topic. Keeping this in mind, consent was sought from the concerned authorities to conduct the study in the colleges. Similarly, informed consent was also sought from the college students and only those students who give consent were included in the sample. All names of the respondents are concealed to maintain confidentiality and the same is applied for the colleges.

## MAJOR FINDINGS

Socio-demographic profile of the respondents indicated that students are young adults particularly within the age group of 18 to 25 years, and childless unmarried youth. These findings are also similar with case vignettes and focus group discussions where college students are found to be young unmarried adults. Most respondents are Presbyterian Christians studying Bachelor of Arts who lives in a stable and nuclear family. Their primary source of income is Government Service and most respondents do not have secondary source of income. Respondents have monthly family income of Rs. 10,000 to Rs. 30,000, and fall in the socio economic status of 'Above Poverty Line'. It should be noted that there are many students who do not know their socio economic status. Majority of the students is heterosexuals, but we also find bisexuals, homosexuals, pansexuals and asexuals.

Parent child communication is found to be high especially on topics of health, response to needs, discussion about career, making sense about the world, coping with challenges, and respect for beliefs and opinions. But parent child communication is poor on sex and sexuality. We see similar findings in case vignettes and focus group discussions where parent's communication on sex related topic is limited to mother's minimal education on menstrual cycle and communication about sex and sexuality in very low.

Peer group relationship is moderate and relationship is high on items relating to sharing experiences, feelings, challenges and academics while discussion on sex and sexuality. Qualitative findings reveal that peer group relationship is high and influence among peers is very strong especially in the context of sexual behavior.

Mass media exposure was moderate where exposure was high on mobile phone use, internet related TV programmes, and internet use while mass media exposure to sex and sexuality was found to be moderate among the respondents. Qualitative findings also supported this result where respondents reveal that mass media is the most significant source of information related to sexual materials.

Overall religiosity among the respondents is moderate. It is high on items like praying to God, attending religious programmes, talking about God, and participating in church activities, while teachings on sex and sexuality is low. Sexual permissiveness and acceptance towards LGBT community as found in case vignettes and focus group discussion highlighted that although students identify with Christian religion they do not necessarily abide with Christian values.

Substance use among respondents was low but we find that college students in Mizoram do indulge in various substances like tobacco, marijuana, alcohol, pills, heroin, and adhesives which is also supported by findings from qualitative data where students reveal that they indulge in various substances.

The t-test score shows that there is significant gender difference in parent child communication as the score of female respondent is significantly higher than male. Gender difference is not found in peer group relationship, while mass media exposure shows significant gender difference where male students have higher exposure than female respondents. Gender difference is also not found in religiosity but is found in substance use as male respondents score significantly higher than female students indicating that males use substances more frequently than females.

Level of knowledge and awareness on sex and sexuality is moderate. It was high on items like sex refers to penetrative sex, moderate on other items which include knowledge on as biological and gender differences, awareness of laws against gender discrimination and inequality, sexuality as an expression of sexual orientation and sexual attitudes, laws protecting the rights of LGBT community, and knowledge on laws related to abortion. Students understanding of sex and sexuality as low on items like sexuality as an integral part of our personalities, sexuality referring to body image and overt expression of sexual sensation, knowledge on laws against pre-natal sex determination, sex referring to pornographic elements, and is very low on items which include sex refers to phone/ internet sex, and sex refers to non-penetrative sex. This indicate that the understanding of sex is limited to having penetrative sex which is also found in case vignettes and focus group discussion as students reveal that they consider only sexual penetration, both penile and virginal, as 'sex'.

Respondent's frequency on sexual indulgence is seldom while students participate in various forms of sexual behavior such as kissing, masturbation, hand job, frottage, sexting, phone sex, oral sex, penetrative sexual intercourse, and they also watch pornography. They also indulge in anal sex, have multiple sex partners, participate in group sex, paid sex, have sex with their partners forcefully and practice unsafe sex as well. We see that indulgence in watching porn and sex-ting involves using mass media which shows high mass media exposure to sex and sexuality. We also find that almost 20 out of every 100 students have already engaged in penetrative sex in their first semester of college which is alarming because more than a tenth of them stated that they indulge in unsafe sex making them vulnerable to sexually transmitted infections, diseases, unplanned pregnancy and abortions. Further, student's involvement in multiple sex partners, group sex and paid sex shows risky sexual behaviors exposing them to higher risk of various impacts as a result of sexual behavior.

Among the female students, findings indicate that respondents have a neutral attitude towards gay men, lesbian women, bisexuals, and transsexuals, and male. Qualitative findings also reveal that students are accepting towards LGBT community and they consider them as normal part of the society.

Gender difference is found in this dimension as females score higher compared to male students. This finding is also conclusive in a study conducted by Lim (2002) where it was found that women were accepting towards LGBT community as compared to male and were more comfortable in interacting with homosexuals while the reverse holds true for male respondents. Further, we see from qualitative findings that females compared to male students are more accepting towards sexual minority groups.

The overall level of acceptance to measure the attitude towards forms of sexual behaviour is low. There are respondents who have accepting attitude towards various sexual behavior which include non-penetrative sexual behavior, condom and contraceptive use, watching pornography, masturbation, post marital sexual affair, and giving/receiving hand job, and we also find some students who agree to others items including pre-marital sex, penetrative sexual intercourse, and oral sex. Students have low score on attitude towards certain items including attitude towards frottage, phone sex,

sexting, using objects to pleasure oneself, having anal sex, and multiple sex partners. Attitude was also low towards paid sex, unsafe sex, group sex, and force sex. Although the mean scores for various items of attitude towards sexual behavior is low, we do find students who have high scores and state their agreement with the statements.

The t-test score reveal that there is no significant difference between male and female on knowledge and awareness, gender difference is found in sexual behavior as male students score relatively higher than female students. Gender difference is also found in attitude towards sexual behaviors as male students score higher compared to female students. Score also reveal gender difference in attitude towards LGBT community as female shows more acceptance towards LBGTs as compared to male students.

Knowledge and awareness have no significant correlation with sexual behavior, attitude towards sexual behavior, and attitude towards LGBT community. Correlation was not found between sexual behavior and knowledge and awareness, but we find significant correlation between sexual behavior and attitude towards sexual behavior and LGBT community. Further, no correlation was found between attitude towards sexual behavior and knowledge and awareness, but there is a strong correlation with sexual behavior and also a correlation with attitude towards LGBT community. Correlation was not found between attitude towards LGBT community and knowledge and awareness, but we find a correlation with sexual behavior and attitude towards sexual behavior.

Parent child communication has correlation with knowledge and awareness, sexual behavior, and attitude towards sexual behavior, but correlation was not found with attitude towards LGBT community. Peer group relationship also has correlation with knowledge and awareness, sexual behavior, attitude towards sexual behavior, but no correlation was found with attitude towards LGBT community. Mass media exposure has correlation with knowledge and awareness, sexual behavior, attitude towards sexual behavior, and attitude towards LGBT community. Religiosity has no correlation with knowledge and aware, but we find correlation with sexual behavior, attitude towards sexual behavior, and attitude towards LGBT community. Substance use has no

correlation with knowledge and awareness, but we find correlation with sexual behavior, attitude towards sexual behavior, and attitude towards LGBT community.

Issues and challenges faced because of sexual behavior include mental health problems, physical health problems, year gap during education, abortion, sexually transmitted infections, sexually transmitted diseases and HIV/AIDS.

The subject of sex and sexuality has always remained a taboo in Mizo society but sexual health is a part of human development and therefore we need to address the issue at different level of interventions and bring about positive changes for proper growth and development of youth.

### **Suggestions**

From the findings of the study the following suggestions are highlighted for policy implication and social work intervention.

- Awareness and knowledge on sex and sexuality among college students is not adequate, and therefore, education on sex, sexual health, and sexual rights among adolescents and young adults in Mizoram may be implemented to improve their understanding of sex and sexuality.
- Acceptance of LGBT community is lower among male respondents as compared to female students. Awareness on LGBT rights is needed especially among male population.
- Sensitization on the various developmental stages related to sex and sexuality for the promotion of their sexual health and to ensure that they make proper adjustments in each stage.
- Students do not consider pornographic elements, phone and internet sex, and non-penetrative sex as a form of sexual behavior. Therefore, awareness in this regard is needed.

- We find that there are students who engage in risky sexual behaviors which may have various consequences, therefore, sex education on the practices of safe sex is important not only for prevention from STIs or STDs and HIV/AIDS but for protection from unplanned pregnancies which may result in abortions or students becoming young parents before they are ready to take on the role.
- We find that relationship of parent child communication and understanding of sex and sexuality is significant. Therefore, parents can be educated on the importance of communicating about sex and sexuality to their children, and how to initiate discussions and improve communication on various dimensions of sexual behavior.
- Peer group relationship and understanding of sex and sexuality is found to be very significant; hence, peer group relationship among college students need to be enhanced so that youth will have a positive understanding of sex and sexuality. This can be done through family, educational institutions, church and other social institutions like the YMA.
- There is a very significant relationship between mass media exposure and understanding of sex and sexuality among college students. Healthy programmes related to sex and sexuality and sex education may be promoted through mass media so that youth in Mizoram may have a positive understanding of sex and sexuality. Moreover, restrictions on exposure to media that portrays overt accounts of sex and sexuality may be promoted. Policies regarding age appropriate programmes may be implemented to help reduce exposure of children and young adults to negative sexual behavior and attitude.
- Substance use is evident among the respondents especially in male students. We also find that substance use is correlated to the understanding of sex and sexuality among college students in Mizoram. Therefore, awareness on substance use and abuse through various agents such as family, educational institutions, church, and other local social institutions is needed to improve the understanding of sex and sexuality among youth in Mizoram.

- Religion plays a vital role in shaping respondent's sexual values, and we also find a correlation between religiosity and sexual behavior, attitude towards sexual behavior and LGBT community. It was further found that sex and sexuality is not an open subject in religious teachings, therefore, the church should be more open about discussions on sex and sexuality. Activities and programmes of the churches in Mizoram may include topics that will influence the youth to have a positive understanding of sex and sexuality. This will reduce the involvement or indulgence and attitude of Mizo youth in risky sexual behavior.
- College students indulge in various forms of sexual behavior including overt sexual behavior such as pre marital sex, anal sex, group sex and paid sex. Therefore, sensitization on healthy sexual practices among youth may be implemented. Further, primary intervention on sex education as a part of the curriculum in schools may ensure that adolescents will have adequate and accurate information on sex and sexuality thus promoting their sexual health and enabling them to make decisions that will reduce risks brought about by sexual behavior and attitudes towards sexual behavior.
- The Government may frame policies and programmes that will make use of parents, peers, mass media, and social institutions to promote a better understanding of sex and sexuality in Mizoram.
- We find that respondents are not aware about various items regarding sex and sexuality; hence, youth counseling centers should be open with adequate and qualified personnel for easy access to information regarding sexual health.
- The impact of sexual behaviors and attitudes towards various forms of sexual behaviors and sexuality as well as the knowledge and awareness is found to have a serious effect on college students. Mental health and physical health are being affected, their education is being hampered, and they suffer from various forms of sexual diseases which has a lasting effect on the community as a whole. Institutional centres may be strengthened to cater to the victims that have been impacted due to sexual behaviors and attitudes. Non institutional services in the

form of counseling and therapeutic centres may be promoted and strengthened to enhance physical and mental health.

- There has to be a concerted effort for convergence among various social institutions within society and Government settings in Mizoram to promote healthy knowledge and understanding of sex and sexuality. All agents of socializations particularly parents within the family, peers in schools and communities, mass media private or public and religious institutions may work together with the Government to develop contextual based strategies that will attract youth in Mizoram towards a better understanding of sex and sexuality.

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