Chapter 2

LITERATURE REVIEW

The present chapter describes the review of literature in the field of investigation undertaken in the study. Review of literature helps the researcher to comprehend and appreciate the study variables and interlinks and gaps in the field of study with the available literature.

The present study investigated the relationship between personality, sexuality and spirituality among medical and non-medical students. Some of the studies that are related directly or indirectly presented in the following main headings.

- Studies on Personality
- Studies on Sexuality
- Studies on Spirituality
- Studies on Relationship between Personality and Sexuality
- Studies on Relationship between Personality and Spirituality
- Studies on Relationship between Sexuality and Spirituality

Studies on Personality

The personality assessment is usually being done in order to measure some other variables. A very few studies have been found that compared different categories of students for the personality differences. In India there is a dearth of studies on personality differences among different streams of students. However, the available studies from west as well east has been described.

Meit, Borges and Early (2007) conducted a study, which is a 9-year multi-site study of personality traits among incoming medical students. They assessed gender differences by exploring personality traits of incoming male and female medical students to illuminate personality factors associated with those who choose a career in medicine and in addition the study compared with the general population. Study revealed significant personality differences between male and female medical students.
as well as substantial differences in personality functioning between medical students and the general population.

McGrath and Zimet (1977) conducted a study to examine sex differences in specialty choices, specialty beliefs, and personality characteristics of female and male medical students. Results found significant differences between men and women on specialty choice, ratings of status and social attractiveness of the specialties, and personality characteristics.

Shen and Comrey (1995) administered the Comrey Personality Scales on medical school applicants. The study found significant differences in factor score means between medical school applicants and normative groups were found, however, for all personality factors, except for the Masculinity vs. Femininity scale in males.

Clack, Allen, Cooper, and Head (2004) investigated specialty choice and job satisfaction, whether the personality profiles of a sample of doctors differed from those of general population at large. The doctors in this sample differed significantly from adult population norms on most of the dimensions of personality measured, including those which measure an individual’s preferred mode of perception.

An earlier study conducted by Pal (1968) from India using Rorschach inkblot test found engineering, medical and Law students to differ in their personalities compared to each other.

Costa, Terracciano, and Mccrae (2001) did secondary analyses of Revised NEO Personality Inventory from the data from 26 cultures and found that gender differences are small relative to individual variation with in genders; Women reported themselves to be higher in Neuroticism, Agreeableness, Warmth, and Openness to Contrary to Predictions from evolutionary theory, the magnitude of gender differences varied cross cultures. Gender differences were most pronounced in European and American cultures.

Weisberg DeYoung and Hirsh (2011) investigated gender differences in personality traits, both at the level of the Big Five and at the sub-level of two aspects within each Big Five domain. Replicating previous findings, women reported higher Big Five Extraversion, Agreeableness, and Neuroticism scores than men. These
findings clarify the nature of gender differences in personality and highlight the utility of measuring personality at the aspect level.

Studies on Sexuality

Reiss (1960, 1967) a pioneer in the study of young adult premarital sexuality, created a sexual permissiveness scale that was administered to several samples of college students, beginning in the 1950s and 1960s. The scale asked students to indicate the acceptability of sexual behaviour at four levels of emotional involvement: without much affection, moderate affection, strong affection and love relationship. The study found that men had favourable attitude towards premarital sex than women. This scale and related scales (e.g. Sprecher, McKinney, Walsh and Anderson, 1988) assess dating or premarital sexual standards with greater validity, and discriminability than the single items often used in national studies. For example, the General Social Survey (Smith, 1994), has included only one question that asks about premarital sexual attitudes.

Reiss (1960, 1967) distinguished among four types of premarital sex attitudes, 1. Abstinence; sexual activity is considered as wrong prior to marriage, 2. Permissive with affection; sexual activity is permissible if it occurs in the context of affection. 3. Permissiveness without affection; sexual activity is permissible as long as both want it; emotional commitment is necessary. And 4. The double standard; sexual activity is considered more acceptable for men than for women.

Beginning in the 1970s however, in US, wide spread acceptance was found among college students for sex in the context of love and affection to a lesser degree for permissiveness without affection (Sprecher, 1989; Sprecher and Hatfield, 1996; Sprecher, et. al, 1988). These attitudes are also been known as relational orientation and a recreational orientation, respectively (DeLamater, 1989; Laumann et al., 1994). The dramatic changes over time in sexual attitudes have been found for women (Wells, and Twenge, 2005). However, there are no studies in Indian context, and unless more and more scientific studied are conducted it will be challenging to know the widespread attitudes of students for sexuality in India.

Though research in the west has still focused on the issues related to attitudes towards premarital sex (Espinosa-Hernandez and Lefkowitz, 2009), other sexual attitudes are also assessed with college student samples, which include attitudes

In west today, college students are found to have a permissive attitudes towards homosexuality, condom use, and masturbation; and mixed attitudes about casual sex; and have generally negative attitudes about infidelity (Weis et al., 1992; Wells and Twenge, 2005). Oliver and Hyde (1993), in a meta-analysis found that the male college students having permissive and liberal sexual attitudes than females in the beginning of the relationships or in a casual dating.

Hendrick and Hendrick (1995) found Men to be more sexually permissive than women (consistent with previous research), although women and men similarly endorsed other aspects of sexuality, including sex as an emotional experience. Men and women differed on several relationship variables (e.g., women were more oriented to friendship-based love, and men to game-playing love). Oliver and Hyde, (1993) found large gender differences on masturbation and attitudes toward casual premarital sex. Compare to men, women’s sexual attitudes found to be more conservative (Hendrick, Hendrick, Slapion-Foote, and Foote, 1985; Sprecher and McKinney, 1993).

According to a research by Amaro and Gornemann (1992) sexuality discussions are not typically appropriate behaviour in Latin America. Men and women discuss about sex verbally and non-verbally. In a Greek village, male role includes a macho willingness to boast about sex, use asexual swearing words and make sexual jokes (Ernestine Fredl 1986). Hickman and Mueklenhard (1999) research indicates that women use indirect verbal sexual signal.

Sexual preferences of various cultures such as Sweden with respect to premarital sex among both gender is not discouraged and practically no one is virgin at marriage (Posner, 1992). However the younger generations are very interested in knowing about premarital sex, sexual attraction, having multiple partners, love dating and flirting. Research also shows that the predictor of extramarital sex is the premarital sexual permissiveness- people who have many sexual partners before marriage are
likely to be unfaithful than those who have a few sexual partners before marriage (Thompson, 1983; Weiss and Slosnerick, 1981).

Widmer, Treas and Newcomb (1998) compared attitudes toward premarital sex, extramarital sex and homosexuality in 24 countries. As regards premarital sex, Sweden was the most accepting country and the Philippines most restrictive (89% versus 11% said premarital sex was “not wrong at all”). In Norway, 77% accepted premarital sex. Respondents in all countries expressed negative attitudes toward extramarital sex. Together with the Netherlands, the Czech Republic, Canada and Spain, Norway formed a homosexual permissiveness cluster. Our scientific knowledge about attitudes toward various aspects of sexuality in India is limited.

Abraham and Kumar (1999) explored the heterosexual behaviour and its correlates among college students in Mumbai city. It includes a sample 4 colleges of low-income students. The interview and Survey method was used. The findings revealed that 47% of male and 37% of female respondents had any sexual experience with a member of the opposite sex and 26% and 3%, respectively found to have intercourse. The proportion of young men who had any sexual experience increased steadily from 21% among those aged 15 or younger to 68% among those older than 21. Young men in the arts program were more likely to have engaged in sexual activities (53%) than young men studying science or commerce (39-48%). Those who were employed had a higher level of sexual experience (67%) than those who did not work (43%).

A research by Murthy et al (2000) surveyed street children’s knowledge and perception concerning sexuality and sexual behaviour. A Sample of 121 boys by the method of Qualitative methods such as mapping methods like Mapping the environment of children, Free list, Pile sorting, Rating, In-depth interviews and Quantitative methods such as Survey were used. The findings were as Pleasure rating by street boys: 65.6% of boys found anal sex doer (boy doing to a boy) most pleasurable. 11.4% found anal sex--getting done (boy getting done by another boy) most pleasurable, while 49.2% found it pleasurable. 85.2% found sex with a girl more pleasurable while 64% found sex with a prostitute most pleasurable. 65.6% found oral sex (done) from a girl most pleasurable, while 50.8% found oral sex (done) from a boy most pleasurable. 37.7% liked to do masturbation (self) while 65.6% found it most
pleasurable getting done by girl (masturbation), and 62.3% found masturbation (done
by prostitute) most pleasurable. 47.5% liked touching/breast pressing. 57.3% liked
kissing a girl, while 8.1% liked kissing a boy. 36% found it pleasurable when forcing a
boy (younger boys) to do anal sex. 77% found it most pleasurable to rape a girl. 55.7%
liked to have anal sex with a girl. Having sex with different girls (2.52) is dangerous
but pleasurable (2.82).

Murthy et al (2000) also found the frequency of types of sexual behaviours from
74 boys who are sexually active practiced a variety of sex behaviours. Only 8 boys
practiced only vaginal and anal sex. 54 boys practiced mutual masturbation and self
masturbation. Anal sex was the next most common sexual behaviour practiced by 46
boys and this was closely followed by vaginal sex (42 boys, 56.8%).

A research work done by Reddy (1990) examined a Pilot Study on the Attitudes
of Students, Teachers and Parents towards Sex Education. The sample was 387 parents,
162 teachers and 3,720 students used a cyclostyled questionnaire and Informal
discussion. The results indicates a great majority (82.82%) of students and a majority
(67.28%) of teachers thought that sex education is necessary, but parents seemed to be
hesitant in this respect. Only 40.05% of parents thought that sex education is necessary.
For the teacher the 5 most important topics were: (1) anatomy and physiology of sex
organs (76.55%); (2) responsible parenthood (74.48%); (3) family planning (74.48%);
(4) value education (65.52%); and (5) masturbation (62.76%). Rape was considered to
be fairly important by parents (45.81%), whereas the students (29.81%) and teachers
(29.90%) did not think so. While 72.26% of parents voted for value education, 65.52%
of teachers and 57.55% of students opted for it.

Abraham (1998) examined True-love, Time-pass, and Bhai-behen, heterosexual
Relationships among the Youth in a Metropolis to know the nature of boy girl
relationship. It includes Survey questionnaire - 966 students (625 boys and 341 girls of
age group 16-22). Focus group discussion - 75 students in 10 groups (39 sessions of 1.5
hours) In-depth interviews - 87 students. The results revealed that the heterosexual
friendships among the peers consisted of typologies of partnerships called 'Bhai-behen,'
'time-pass' and 'true-love.'
The 'Bhai-behen' relationship is platonic in nature and fluid category that allows boys and girls to initiate a friendship that could remain 'just friends' or it could change into 'true-love' or at times to 'time-pass' types. 'Time-pass' was a transitory relationship with a girl of their age, characterized by sexual intimacy that may lead to sexual intercourse and are common in common among senior boys, fewer girls being involved in such relationships were noted. 'True-love' was characterized by the emotional involvement of the partners. Girls see as 'true-love,' while boys see it as 'time-pass.' And view as 'casual sexual behaviour,' that of girls could not be seen so.

Nag (1996) worked on Pre-marital Sex among male college students in Hyderabad. It includes a sample of 72 male students in the age group 17-23 years. They used Anonymous questionnaire and Focus group discussion. The findings indicates that 28% reported having experienced sexual intercourse, all with women. Among both rural and urban students, first intercourse mostly took place at 16-17 years. The rural students (35%) compared to urban students (11%) were sexually active by 18 years. A significant proportion of both rural and urban college students had experience of pre-marital sex with married women who were older than themselves. 28% reported having experienced pre-marital sex. 36% wanted to have it but "did not get an opportunity yet." 14% said they had the opportunity but were scare.

Joshi (2010) examined Sexual Knowledge, Attitudes, and Behaviors among Urban Youth. 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 knowledge about crucial aspects of sexuality and their source of sex related information. The survey also accessed attitudes regarding sex education, premarital sex and homosexuality, as well as Sexual behaviours engaged in by the youth. Results showed that sexual knowledge about physiology of sexual response, conception, and pregnancy was less than other areas such as masturbation and contraception. Peers, books, and magazines were the most frequently used source of sex information. Boys reported more liberal attitudes and more frequent sexual behaviors than girls. Attitudes about sexuality were considered, men had more liberal attitudes toward premarital sex, but were conservative about homosexuality, as compared to women. Both men and women believed that sex instruction was necessary in school and that parents were unable to provide adequate
sex information. The current study showed that only 1 (1%) girl and 11 (11%) boys reported engaging in sexual intercourse.

Sachdev (1997) examined student attitudes, knowledge and sexual behaviour in India and acceptance of pre-marital sexual relations and masturbation. The Sample used were 887 students (76.8% female and 82.1% unmarried). The results revealed that 58% of women and 79% of men viewed intimate or casual sexual relations as acceptable before marriage. Only 32.1% of women supported the chastity of women. 72.4% agreed that it would be better if women were free to express their sexual desires with as much initiative and aggressiveness as men. 49.5% of males and 36.1% of females had a steady dating partner. 39.3% of males and 20.4% of females had engaged in pre-marital sex. About 50% of males and females approved of parents allowing their daughters as much sexual freedom as their sons. 61.7% of men and 40.6% of women regarded love as the key to satisfying sexual relations. 50.4% of males and 38.6% of females accepted masturbation as healthy. 66.7% of females and 62.4% of males viewed infidelity as unacceptable for both partners. 72.2% of females and 57.6% of males agreed that extra-marital relations were almost always harmful to a marriage.

Anuragini and Sharma (1997) worked on the Adolescent Boys Sexual Behaviour and their Knowledge of AIDS and other STD’s in Kheda district, Gujarat. The sample used for the study was 368 unmarried boys. The result indicates that 9% of college students had previous sexual experience. Out of those who had been sexually active, 44% were illiterate or educated up to 5th grade. Over half (54%) of the sexually active adolescent boys were economically active. The mean age at first coitus was 17.9 years. More than 78% of the boys had their first sexual contact with a prostitute and 80% had never used a condom. 16% of boys reported that their first sexual contact had been a girl friend of almost the same age group.

Nag (1991) studied current practices of homosexuality in India. The sample selected was from 1,424 both married and unmarried men and survey method was used. The findings indicated 424 (37%) reported a homosexual relationship. 12% of unmarried men and 8% of married men reported that their first sexual experience was with another man and most of them (82%) had it before they were 20 years of age. About two-fifths of the respondents, both unmarried and married, had homosexual experience with one or two persons while over a fifth had such experience with more
than 10 persons. Only 21% of respondents reported to have used condoms in their homosexual acts.

Nag (1996) worked on the Sexual Behaviour and AIDS in India. The study includes lesbian sexual relationships. The Sample used was 362 women respondent Questionnaire published in a 1992 issue of Savvy magazine. The Findings were Only 31 (9%) said that they had a sexual relationship with another women. The first lesbian experience of 77% of women who had such experience was gained before they were 20 years of age. Most of the women (81%) who had a lesbian relationship had it with one or two partners. Only 7% had it with more than 7 person

Ramadugu, et al. (2011) aimed at the study of ascertain the attitudes and knowledge about sexuality among school-going adolescents. Students in two urban schools of an Indian city from class IX to XII were administered a self-reporting questionnaire on matters related to sexuality. Statistical analysis includes Statistical package for social sciences. Results revealed that the incidence of having sexual contact was 30.08% for boys and 17.18% for girls. 6.31% boys and 1.31% girls reported having had experienced sexual intercourse. Friends constituted the main sexual partners for both boys and girls. Sexual abuse had been reported by both. Conclusions includes adolescent school students are involved in sexual activity, but lack adequate knowledge in this regard. Students, teachers, and parents need to understand various aspects of sexuality to be able to help adolescents’ healthy sexual development.

Grabovac, et al. (2014) conducted a study the students of medical school to investigate homophobic attitudes and assess their knowledge about homosexuality. The study found low attitude scores for the students. Gender differences in attitudes were observed, indicating less negative attitudes among the female participants. Negative attitudes among medical students toward lesbian, gay, bisexual and transgender community.

McKelvey, et al. (1999) conducted a study and the aim was to assess the relationship between background and socio-demographic variables, attitudes toward controversial aspects of human sexuality and sex knowledge among medical and nursing students. A significant relationship was found between certain background and socio-demographic variables, sexual attitudes and sex knowledge. Lower sex
knowledge was related to negative attitudes toward gay/lesbian/bisexual behaviour, masturbation, premarital sex and contraception. The study concluded that the negative attitudes toward controversial aspects of human sexuality and lower sex knowledge scores among medical and nursing students can be predicted on the basis of background and socio-demographic variables.

Ozan, Aras, Semin, and Orcin (2005) the present study was conducted to determine, compare, and evaluate the sexual attitudes and behaviors of Medicine students. An anonymous questionnaire was used to collect the data. The opinion of males about having sexual intercourse before marriage for males was positive, and females were more tolerant about males having this experience before marriage as compared to females having sexual experience before marriage. Rates of expression of having sexual intercourse and masturbation were found to be higher for male students. All the students declared 'my own will and values' as the most frequent factor affecting their sexual attitudes and behaviors. The study concluded that gender differences exist in the sexual attitudes and behaviors of medical students.

Lal, et al. (2000) study assessed the knowledge of and attitude towards AIDS, sexually transmitted diseases (STDs) and sexuality among college students in Thiruvananthapuram district, Kerala. It was concluded that substantial lacunae in the knowledge of and attitude towards AIDS, STDs and sexuality among college students in Kerala.

Thornton and Camburn (1987) investigated mothers and children to construct and estimate a model of the intergenerational transmission of sexual attitudes and behaviour. The findings demonstrate the importance and relevance of parental and adolescent attitudes in understanding adolescent sexuality. Premarital sexuality is a salient issue to both young people and their parents.

Paudel (2013) conducted a study in Pokhara Valley, India to examine the attitudes towards premarital sex and family type. The study concluded that males were more liberal towards premarital sex, self-arranged marriage, and sex preference than girls.

Prasad, et al. (2014) conducted a study to find the prevalence of premarital sex and age at first sex among young men. Community based cross sectional study was
conducted among men studying in Engineering, Medical, Degree, Diploma and Law courses in the colleges using pre tested semi open ended questionnaire. The results found that the prevalence of premarital sex (PMS) was found to be nearly 31 percent and mean age at first sex (AFS) was observed to be 18.3(+2.8) years. Premarital sex and age at first sex was earlier among subjects aged less than 20 years and Engineering students and sex with dating lovers.

India traditionally supported the concept of polygamy as evident by epic Mahabharat. Sociologists view polygamy as a reproductive strategy by which men increase the number of their offspring while decreasing the level of investment in each child (White, 1988). Indian society was accepting polygamy in rural areas for the agricultural activities, and even urban areas polygamy was prevalent in rich people. In certain societies, polygamy can be economically useful by increasing the labor power available to the family, and it is also likely to increase the power and prestige of the family (Ware, 1979). With the prohibition of polygamy in India through the Hindu Marriage Act, 1955, majority of people India are discouraged for polygamy. There is a lack of studies relating to polygamy.

Studies on Spirituality

The scientific and empirical investigations in religion and spirituality began with the development of reliable and valid measures of assessment (Unterrainer, et al., 2010). Allport and Ross (1967) did research with initial concepts like Intrinsic/Extrinsic Religiosity, and according to them “the extrinsically motivated person uses his religion, whereas the intrinsically motivated lives his religion” (Allport and Ross, 1967). This research gave rise to number of studies in the area of religion and spirituality, which also facilitated the development of standardized tools (Hill and Hood, 1999; Trimble, 1997). During the initial periods of research on religion, the concepts of religion and spirituality were not differentiated.

Donahue (1985) in his review suggests that the “respondents with conservative theological orientations are more likely than others to display a negative correlation between intrinsic and extrinsic religiousness. In general, extrinsic religiousness is positively correlated with negatively evaluated characteristics and uncorrelated with measures of religious belief and commitment. Intrinsic religiousness is uncorrelated
with negatively evaluated characteristics and positively correlated with measures of religiousness. A four-fold typology based on median splits of the 2 scales is of little use when the dependent variable is religious in nature, but with various nonreligious variables, it produces results that may correspond to findings of curvilinearity observed with other measures of religiousness”.

There is some support for the notion that the Indian culture valuing spirituality (Verma, 1997). For example, comparing western and Indian knowledge, Rolland (1960) described western knowledge as the “science of facts” and spirituality as “the science of the soul, a peculiarly Indian science.”

An analysis of Kroeber’s (1944) compilation shows that in the Indian sample 49% of the geniuses were spiritual geniuses compared to 33% for literature, 10% for science, and 8% for philology. If we combine the names in Table 1 to those in Kroeber’s compilation, the percentage of spiritual geniuses jumps to 65% compared to 23% for literature, 7% for science, and 5% for philology. Analyzing the list of thousands of geniuses in China (Simonton, 1988) and Japan (Simonton, 1996), Simonton found that the number of celebrities in each of the categories varied tremendously. For example, of the 2000 plus Japanese geniuses studied, 14% came from politics, 13% from painting, 10% from poetry, 8% from war, 5% from each of economics and religion, 4% from philosophy, and only 2% from each of sculpture, ceramics, and medicine. The category spirituality did not even appear and might have been merged with philosophy and religion. In the Chinese sample there were only 44 recluses, who could be considered spiritual, in the 3000 years of the Chinese history. Differences in the numbers of geniuses found across various fields within a culture support the argument that culture favors certain fields over others; which supports the idea that a culture may indeed “specialize” in a certain domain of human behavior. Also, such differences among India, Japan, and China, which are all collectivist cultures, show how a culture theory like individualism and collectivism is unable to explain cultural variation in creativity.

Simonton (1996) also suggested that one of the limitations of his study was that the findings might not apply to a civilization that has been dominated by a certain configuration throughout its history. It could be argued that the Indian culture has been dominated by spirituality, and, therefore, this domain-specific configuration might
dominate any systemic or cross-domain configurations in that culture. Evidence of such a dominance can be seen in the domain of music and dance where the control of *prana* (i.e., breath) and *dhyana* (i.e., focus) is considered critical to be accomplished in Indian music and dance.

Zainuddin (1993) studied spirituality with 219 subjects (aged 24-60 yrs.) Muslim participants. In this study he found two factors namely, the value dimension and the experiential dimension of spirituality that could incorporate almost nine dimensions of spirituality.

Research in the context of mental health and quality of life has shown that Religious/Spiritual Well-Being is positively correlated with different parameters of psychological and physiological health (Koenig, McCullough and Larson, 2001). With more studies in the above mentioned fields, researchers felt need for studying religion and spirituality as separate concepts rather than a single variable (Zinnbauer and Pargament, 2005).

Ashrafi and Govi (2013) conducted a study to assess secular attitude of undergraduate students belonging to two major communities (Non-Muslims and Muslims) living in India. The findings of the study revealed that there was a significant difference in the secular attitude of undergraduate students belonging Muslim and non-Muslim communities.

**Studies on Relationship between Personality and Sexuality**

According to Schmitt (2004) conducted a descriptive project on 16,362 participants from 52 nations responded to measures of the Big Five and ‘risky’ sexuality. It was expected that low levels of agreeableness and conscientiousness would be universally associated with relationship infidelity. Sexual promiscuity, in contrast, was expected to positively relate to extraversion and neuroticism. Analyses across 10 world regions revealed relationship infidelity was universally associated with low agreeableness and low conscientiousness. Sexual promiscuity was somewhat related to these traits as well, but was more highly related to extraversion across many, but not all, world regions. Both forms of risky sexual behaviour were generally unrelated to neuroticism and openness across cultures.
High levels of extraversion were associated with lower levels of Relationship Exclusivity (especially in men), whereas high levels of agreeableness and conscientiousness were linked to higher Relationship Exclusivity (especially in women). Neuroticism and openness were largely unrelated to Relationship Exclusivity in either gender.

Low agreeableness and low conscientiousness is psychoticism (Eysenck, 1976). Psychoticism has been linked to permissive sexual attitudes and behaviours (Eysenck and Eysenck, 1971)

The personality trait of neuroticism is rooted in negative emotionality, including anxiety, depression, and anger (Costa and Widiger, 1994). Neuroticism has been associated with several features of problematic sexuality, including sexual dissatisfaction and marital distress (Bradbury and Fincham, 1988; Gottman, 1994). Also other studies have found that people who score high in neuroticism tend to have more permissive sexual attitudes (Lameiras and Rodriguez, 2003).

Eysenck (1976) found that extraverts tended to endorse more favourable attitudes than did introverts toward having multiple sex partners and trying out different sexual positions. Extraverts also engaged in sexual intercourse at younger ages than introverts, as well as having sex more frequently and with more partners than introverts did (Eysenck and Eysenck, 1975). Gute and Eshbaugh (2008) showed that high of extraversion and low levels of conscientiousness predicted higher amounts of casual sex among college students.

According to Meston, et al. (2014) study showed the link between personality and sexual knowledge, sexual behaviour and sexual adjustment in a sample of 501 university undergraduate students. They used NEO-PIR, and Derogatis Sexual Functional Inventory (DSFI) and Socio-sexual Orientation Inventory (SOI). Regression analysis revealed that agreeableness was most consistent predictor of sexual behaviour for both males and females. Neuroticism was strong predictor for sexual adjustment. Ethnicity was strong predictor of most dimension of sexuality in females.

Shakerian, Nazari, Masoomi, and Ebrahimi (2014), investigated occurrence of communication and friendship among male and female university students and its relationship with Neuroticism, Extraversion, Agreeableness, Openness, and
Conscientiousness. Regression analysis of the results proves that neuroticism and extraversion personality trait have a meaningful contribution toward the pre-marital affair with the opposite sex. Pre-marital affair with opposite sex among university students is highly affected by their personality traits.

Zoeterman and Wright (2014) conducted a study the relationship between openness to experience, and LGB identity development. The results revealed a full mediation model, where the positive impact of openness to experience on mental health is fully mediated by positive LGB identity development.

Peixoto and Nobre (2014) conducted a study to examine the differences on personality traits between heterosexual and homosexual men and women, with and without sexual problems. Results indicated that gay men scored higher on Neuroticism and lesbian women scored higher on Conscientiousness compared to the heterosexual groups. Current findings emphasize the central role of Neuroticism on sexual problems in both men and women regardless of sexual orientation.

Saha (2014) conducted a study in India on personality correlates amongst homosexuals. The study began with the null hypothesis, and results retained the null hypothesis, however, study reported higher scores of psychoticism.

Studies on Relationship between Personality and Spirituality

Spirituality has been thought to relate to personality as sixth factor. Piedmont (1999) proposed an extension of the Big Five dimensions of personality by considering a sixth factor named “Spiritual Transcendence”. Saroglou (2002) reports positive correlations between different parameters of religiosity and the Big Five dimensions Extraversion, Agreeableness and Conscientiousness. Extrinsic Religiosity was found to be associated with higher scores on the Neuroticism dimension.

Kosek (2000) studied relationship between personality traits and beliefs in the God of Roman Catholic seminarians. Agreeableness and conscientiousness found to relate positively with desire for God. The study explained 11% variance of Subjects desiring to abide with God by their personality dimensions.
Maltby and Day (2001) investigated relationship between spirituality and personality using Eysenck’s Personality Inventory, and found that extraversion is related to spirituality; in addition the study also found that psychoticism underpins religiosity and extraversion underpins spirituality. Kaldor, Francis and Fisher (2002) found that the psychoticism and spirituality was related to each other with negative relationship between psychoticism and prayer, while meditation was related to high psychoticism scores.

Lucia and Michael (2002) found spirituality was related positively with extraversion, openness to experience and agreeableness. Jahoda (2005) found positive relationship between personality and spirituality, Wilkinson (2008) also found similar results. Warr (2009) found that there openness, conscientiousness and spirituality were related positively, whereas, neuroticism, extraversion and agreeableness and spirituality were not related to each other.

Choudhery (1989) investigated relationship between religiosity and spirituality on a sample of 90 college students and the results did not find any relationship between religiosity and neuroticism.

**Studies on Relationship between Sexuality and Spirituality**

Some studies have found more permissive sexual attitudes associated with lower religiosity, being black or Latin in comparison to being White, having friends who are sexually permissive and coming from a divorced family (Wells and Twenge, 2005).

Ahrold, Farmer, Trapnell and Meston (2011) in their study found differences between religious groups in conservative sexual attitudes, however the difference was small even though the results were statistically significant and spirituality mediated these effects. Gross and Yip (2010), focused in their research on the influence of spirituality on the attitudes and behaviours in sexuality.

Anderson and Morgan (1994) discussed the relationship between the spiritual and sexual dimensions of our health. They opine that both sexuality and spirituality are connected with each other, and the essential ingredient of connectedness is at the core of each of these two dimensions.
Farmer, Trapnell and Meston (2008) investigated into the relationship between religiosity and sexuality. Results indicated few affiliation differences in sexual behaviour in men or women and sexual behaviours were statistically predicted by spirituality.

Ahrold, Farmer, Trapnell and Meston (2011) studied the role of spirituality, intrinsic religiosity, paranormal beliefs, and fundamentalism. The results found that spirituality mediated attitudes towards sexuality. In addition, intrinsic religiosity predicted sexual attitude and also spirituality predicted attitudinal liberalism. Further, the results indicated individual differences in religiosity domains were better predictors of sexual attitudes and fantasy than religious group and that these associations are moderated by gender.

Burris, Smith and Carlson (2009) conducted a study to measure spirituality and its effect on young adults' sexual practices. The results found that the spirituality to have unique and strong association with the sexual practices of young adults, particularly women.

Ahrold, Meston, Farmer and Trapnell (2010) investigated the role of religion in an ethnically diverse young adult using religious group as well as several religiosity domains: spirituality, intrinsic religiosity, paranormal beliefs, and fundamentalism. Results indicated that individual differences in religiosity domains were better predictors of sexual attitudes.

Justification for the Study

In the light of the above studies presented, it becomes clear that there studies independently on the variables personality, spirituality, and sexuality in the west, and there is a clear lacuna in the Indian context for the studies. In this background, there is a need to conduct studies to understand the relationship between personality, sexuality and spirituality among students. Especially in Indian context where there is growing need for understanding the attitudes of student population towards sexuality and spirituality as even Government of India is stressing on the need of introducing spirituality in the school curriculum. Spirituality has been believed and to some extent fount to produces in man qualities such as love, honesty, patience, tolerance, compassion, a sense of detachment, faith, and hope (Verghese, 2008). Therefore, the
importance of personality influences on sexuality and spirituality has not been understood sufficiently and there is lack in this direction in the available researches. Moreover, the findings of west could not be generalized to Indian population and taking cognizance of the gaps in the literature, need of such studies in Indian context, the present study is undertaken.