

Personality Traits, Religiosity and Sensation Seeking Behavior among Homosexual Males

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Abstract

The present study aimed to investigate the personality traits (extroversion, agreeableness, conscientiousness, openness & neuroticism), religiosity and sensation seeking behavior among homosexual males of Lahore. Through snowball sampling 100 male homosexuals, with an age range between 19-59 years (M.A=27.01; S.D=7.23) were included in the study. Majority of participants were middle born (39%), last born (34%), first born (12%) and only child (15%). Moreover, 3% had done Matric, 20% had done intermediate, 43% had completed their bachelors, 21% had done masters whereas, 13% had other education. Participants were administered The Sensation Seeking (SSS), Big Five Inventory (BFI), Salience in Religious Commitment Scale (SRCS) and Demographic Questionnaire. Ex-post Facto research design was used. Data was analyzed using Pearson's Product Moment Coefficient of Correlation. Results showed a significant negative relationship between sensation seeking behavior and agreeableness and neuroticism personality traits of homosexual males. Results showed that homosexual men are warm, friendly, helpful and they find it important to get along with people, further they are also willing to put aside their interests for other people. Moreover, non-significant relationship was

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found between sensation seeking behavior and extroversion, conscientiousness, openness personality traits and religiosity among homosexual males.

Keywords: Personality traits; Sensation Seeking Behavior, Religiosity, Homosexual Males.

In Pakistan being open about one's sexual orientation, such as lesbian, gay, bisexual person is considered a taboo. Gays and lesbians have to be highly discreet of their sexual orientation even in large cities. A growing number of individuals especially those born to educated parents in developed world, are usually university graduates and have some sort of understanding about evolution, sexuality, or both and these are the individuals who are coming out to their friends and introducing themselves to their same-sex partner. This is the era in which same sex marriages and gay relationships are being hotly debated and especially the promiscuous nature of gay or homosexual men are becoming widely recognized worldwide (Kugle, 2010). LGBT lifestyle is also disapproved because of religious and patriarchal beliefs. Sex between homosexual partners is something of an extreme but with it comes acts like walking holding hands, walking with having arms around the waist, kissing on the face, and to cuddle with the same gender and these things are considered as normal and social norm. Steady relationships are considered difficult for the LGBT community because of factors like social stigma, disapproval, and discrimination. They are able to socialize, date and even live together as couples, but usually unnoticeably (Anderson & Paul, 2004).

Gay and bisexual Pakistanis, mostly from the urban, middle and upper classes, are more open about their sexual orientation as compared to lesbians and they are seen attending or hosting social functions. The Internet has played a large role in social networking and fighting isolation with websites present like Facebook, Orkut and various blogs. Blogs now highlight stories and issues specific to this marginalized community. Public discussion issues being opened up with respect to LGBT rights concern the spread of AIDS-HIV among men who have sex with other men, but who do not identify as being gay or bisexual in orientation (Adams, 2014).

Kinsey observed in 1948 that the homosexual relationships are not long term and if they exist they are very few but now-a-days

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homosexual relations have taken a shift and are probably seen to be long term but their relation being monogamous is a fact that still prevails in society (Symon, 1979). Homosexuality is considered as one of the most controversial social and religious problem in most countries including Pakistan. In countries like Pakistan it is considered as a taboo and so objective and well-controlled research is very rare partly due to issues like easy access to such population and difficulties in assessment and measurement (Remafedi G, 2007). The widespread prevalence of homosexuality has provoked concerns regarding their personality, religiousness, sensation seeking behaviors, coping styles and other aspects among educationists, sociologists and psychiatrists. There can be extremely harsh consequences if the sexual identity of any Muslim lesbian, gay, and bisexual is found out and as a result of this these young people often struggle to bring together their sexual orientation with their cultural and religious identities. Dealing with homosexuality or transgender issues for any Muslim can be a subject of crime, sin, and deviation instead of difference and diversity (Mustanski, 2003).

Homosexuality is clearly a person's behavior and sexual orientation which is primarily aimed at people of the same sex. Social ridicule, discrimination and prejudice have always been the fate of homosexual individuals (Bancroft, 1989). The American Psychiatric Association eliminated the term homosexuality which was used as a diagnostic category at first; it was also removed from the DSM-II (Sadock&Sadock, 2003). No consensus has been found among scientists as to confirm the exact reasons why an individual develops sexual orientation of heterosexual, homosexual, lesbian or bisexual but it is believed to be a complex mixture or collection of certain factors like personality, developmental experiences and ones biological inheritance (Bancroft, 1989).

It is believed that certain personality traits influence risk-taking behaviors in individuals including homosexuals and these personality traits are accounted for as sensation seeking (Rosenthal & Moore, 1993). Sensation seeking is synonymous with people who engage themselves in risk taking behaviors and are repeatedly connected with risky sexual behaviors. Boredom susceptibility, adventure seeking, disinhibition along with thrill are considered as the four dimensions of sensation seeking. Sensation seekers tend to evaluate risk differently depending upon the intensity of their sensation seeking behavior. High scoring individuals are

thought to be more sensitive to reward than punishment clues (Glasser, 1977).

Sensation seekers who score high on the scale are likely to take on in risky behaviors to seek out or add to pleasure as compared to low sensation seekers who might take part in risky behaviors but only for reasons involving acceptance of others or of their peers. High sensation seekers are inclined by the short-term profits of a risky behavioral option and less influenced by the potential long term costs. Greater arousal providing activities are sought out by high sensation seekers and they are of the view that risky situations might result in lessening their anxiety (Zuckerman, 1979).

Sensation seeking being a personality trait provides strong evidence for the presence of other personality traits which might prove to be significant among homosexual individuals. Personality has always been a much discussed topic in psychology. Personality is a part of a homosexual's identity in the same way as it is for heterosexuals (Krauskopf & Saunders, 1994). A homosexual personality is considered neither as the result of a bad environment or undue mother attachment and the true homosexual processes firm identifying certain consistent traits which clearly differentiate the homosexual personalities from other personalities with which they have been classified.

To understand this concept it is important to understand the term personality itself. Personality is defined as the unique psycho-physiological traits one possesses. A consistently exhibited particular or similar pattern of feelings, social adjustments, thoughts, and behaviors over time are also referred to as personality and that these patterns strongly influence values, self-perceptions, expectations, and attitudes and these personalities also tend to predict some of the human reactions to other stress, people, and problems (Winnie & Gittinger, 1973). Personality traits are considered to be associated with homosexuality, sensation seeking and religion. Personality traits have a direct link with religiosity and suicide (O'Donohue & Plaud, 1994).

Religion in traditional societies explained what life meant and how it was to be lived but with the passage of time world views regarding religion have become conflicting and troublesome. Religions like Christianity, Hinduism and Islam express negative views towards homosexuals and homosexuality. A few religious groups have a neutral opinion regarding homosexuality and homosexuals whereas some groups support it (LePeau, 2007). Religion is a dogma and principle while

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spirituality is the seeking of realism, validity, and unity. An individual's spiritual life is holistic it cannot be based on denial and rejection of the body and its feelings. It is assumed that a person who is religious attends religious services frequently (LePeau, 2007).

Religion provides individuals with comfort, guidance, and security. There is a strong relationship of religion with physical and emotional health benefits and has strength concerning coping (Yarhouse, 2005). However, religion can also be a source of strain and discomfort for some individuals. Some shame-based biblical interpretations are resulting in dissatisfaction with religious teachings and congregational prejudice develops guilt and shame concerning a person's sexual orientation. Such factors can lead to severe depression, self-loathing, and suicidal ideation. Homonegativity is greatly affected by an increase in religiosity (Schuck & Liddle, 2001).

The aim of the present study is to investigate the relationship of sensation seeking behavior with personality traits (openness, agreeableness, extraversion, neuroticism and conscientiousness) and religiosity among homosexual males of Lahore. In our religion, Islam homosexuality is considered a great sin and is prohibited yet we come across stories related to such individuals of and on. These incidences and stories raise questions in the mind of people regarding the personalities and religiousness of homosexuals and especially male homosexuals of our society as female cases with reference to Lesbianism aren't brought about in light much as male cases and also because lesbianism is not reported as freely as homosexuality (Mustanski, 2003). The findings of the study may provide insight and awareness about homosexuals in our society and as to what personality factors constitute to their being homosexual. The findings of the study may also prove to be a guideline for further researches in this regard and would be beneficial for future researchers.

Hypotheses

- There is a significant relationship in sensation seeking behavior and personality traits (5 traits on Big Five Personality Inventory) among male homosexuals.
- There is a significant relationship in religiosity scores and sensation seeking behavior among male homosexuals.

Methods

Research Design

The present study was done using correlation research design.

Participants

The present study included a snowball sample of 100 homosexuals males whose ages ranged between 19-59 years (MA=27.01; SD= 7.23) were taken using snowball sampling technique. Majority of the participants were middle born (39%), last born (34%), first born (12%) and only child (15%). Moreover, 3% had done Matric, 20% had done intermediate, 43% had completed their bachelors, 21% had done masters whereas, 13% had other education. Additionally, 42% were students, 50% professionals and 6% were business men.

Measures

The following measures were used in order to investigate personality traits, religiosity and sensation seeking behavior among homosexual males. These measures were used as the population under study consisted of educated males mostly students so as to avoid problems related to validity and cultural issues.

Salience in Religious Commitment Scale. Roof and Perkins (1975) developed a short scale with only 3 items. The first two items are in a multiple choice format whereas the third item measures the degree of agreement with a general statement which is on a 4-point Likert scale. The scale attempts to measure an orientation towards religious commitment and the importance an individual gives to being religious. It also attempts to measure the concept of intrinsic religiosity which has effects on an individual's everyday life and decisions. The scale reports to have an alpha reliability of .72 and validity .81.

Big Five Personality Inventory. Goldberg (1993) developed a 44-item inventory that measures an individual on five dimensions of personality which are: Extraversion, Agreeableness, Conscientiousness, Neuroticism and Openness to experience. These five dimensions of personality are further divided into personality facets. Personality descriptions based on commonalities are captured using this inventory and it also provides an integrative descriptive model for personality. The reliability of this inventory is reported to be .79 whereas its validity is .73. The scoring is done using a 5-point Likert scale and some of the items are reversely scored.

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Sensation Seeking Scale. Zukerman (1994) developed a scale for measuring sensation seeking behavior and it consists of four inter-related subscales. The subscales comprise of items related to, disinhibition, thrill and adventure seeking, experience seeking and boredom susceptibility. The scale consists of a total of 40 items with A and B response. The Cronbach's alpha for this scale is $\alpha .78$.

Demographic Form. A self-constructed demographic form was given to the participants in order to collect information regarding their age, sibling number, birth order, marital status, and their income along with their total family income, education along with their parental education, occupation, and presence of any medical or psychiatric illness in family and information regarding their homosexuality.

Procedure

The participants involved in the present study were briefed about the nature and purpose of the study and time involved. Participants were assured of the confidentiality of the provided information and its use for research purposes only. Moreover, they were told about their right to withdraw from the study at any point in time. Written consent was taken from the subjects to participate in the study. Participants were administered using: Demographic Form, Salience in Religious Commitment Scale, Big Five Personality Inventory and Sensation Seeking Scale. The administration took 50 to 60 minutes approximately. One time approach to the participants was used.

Results

Pearson Product Moment Coefficient of Correlation is used to find the relationship of sensation seeking with personality and religiosity among homosexual males. Descriptive statistics included Means, Standard Deviations, Percentages and Frequencies.

Table 1

Relationship of Sensation Seeking Behavior (SSS) with Big Five Personality Traits (Extroversion, Agreeableness, Openness Conscientiousness, Neuroticism), and Religiosity among Homosexual males (N=100).

Subscales	1	2	3	4	5	6	7
SSS	-	.02	-.23	-.02	-.15	-.24	-.11
Extroversion		-	.13	.26**	.23**	-.13	.25
Agreeableness			-	.31**	.15	.25**	.01
Openness				-	.16**	.41**	.00
Conscientiousness					-	.41**	.18**
Neuroticism						-	.23**
Religiosity							.20**

Note: **= $p < 0.01$, *= $p < 0.05$, r = Pearson's Product Moment Coefficient of Correlation

The above table shows that personality traits of agreeableness and neuroticism are both significantly correlated with sensation seeking behavior a non-significant relationship in sensation seeking behavior and extroversion, openness and conscientiousness personality trait. Similarly, a non-significant relationship in religiosity scores and sensation seeking behavior among homosexual males is also found.

Discussion

Based on the results, sensation seeking behavior of homosexual males showed a significant relationship with agreeableness and neuroticism personality traits on Big Five Personality Inventory whereas, a non-significant relationship with religiosity scores. Non-significant relationship in sensation seeking and extroversion, openness and conscientiousness trait was also reported among homosexual males as revealed by Pearson's Product Moment Coefficient of Correlation. Similar results were observed in a comparative study conducted by

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Turner et al. (1974) in which he compared the personality characteristics of male homosexuals who were referred for aversion therapy. Results of the Eysenck Personality Inventory which was used to compare the personality traits revealed that homosexuals who were receiving aversion therapy for treatment of homosexuality were not different in extroversion personality traits from those who were not receiving any therapy. On the other hand, in a research on sexual orientation and personality by Lippa (2005) reported that gay men were higher on conscientiousness, neuroticism, expressiveness, agreeableness, and openness to experience on Big Five Personality Inventory. Grellert (1989) conducted a study on homosexual and heterosexual men, including a pair of discordant identical twins, who contributed their photographs of six months to six years old age for judging on personality trait of extroversion and toughness. The results showed that homosexuals reported less extroversion and toughness traits.

Personality trait differences are thought to be prevailing across sexual orientations and that these differences are relevant to sexual strategizing. One relatively consistent finding involves the personality trait of openness to experience; this work was done by Kurdek (1997) he found that both gay and lesbian couples have higher levels of openness to experience as compared to heterosexual couples. There has been reported other much similar associations between homosexuality and traits related to openness to experience in relatively different studies and yet there are some studies that have found these associations to be modest in size (Harris, 2004). All the studies indicate low extrovert scores for homosexual males. The relationship in sensation seeking behavior and extroversion, openness and conscientiousness trait is not evident in any present research to date to cross validate the result of our present study but through the current researches this thing is evident that extroversion is not a trait of homosexuals rather it is more in heterosexuals. Similarly, homosexuals are thought to be high on openness trait as compared to heterosexuals but no exact work has been done to date in order to find out the relationship in sensation seeking behavior and openness trait of homosexual males. The difference may be explained in the light of difference in sample collection, cultural, ethnic and religious backgrounds. Generally, homosexuals are compared to bisexuals and heterosexuals or transgender in most research works which may also result in a difference in results.

Moreover, significant negative relationship was found in sensation seeking behavior and agreeableness, and neuroticism personality trait. In line with Lippa's (2005) meta-analysis on the relation between sexual orientation and personality, results on Big Five Inventory showed gay men to be higher on expressiveness, agreeableness, conscientiousness, neuroticism, and openness to experience. Further, in accord with our present findings Lijun and Yong (2011) examined masculinity, femininity and Big Five personality dimensions among Chinese. Masculinity was strongly predicted by extraversion, conscientiousness, and to a lesser degree masculinity was predicted for agreeableness trait whereas, femininity was predicted strongly on agreeableness, sexual orientation, and occupation across gender. It was reported that homosexual males showed feminine traits like that of heterosexual females whereas lesbians share masculine traits with heterosexual males. Homosexual men were found to be strong on agreeableness trait on the Big Five Inventory. It postulate that homosexual men are warm, friendly, helpful and they find it important to get along with people they are also willing to put aside their interests for other people. Studies of the West failed to compare the sensation seeking behavior of homosexual males with their agreeableness trait but as our results indicate that sensation seeking behavior has a relationship with agreeableness trait, this is because of the same fact that homosexual males can easily get along with things. Similar results were also reported by Turner et al. (1974), where high scores on Neuroticism Subscale was reported by homosexual males. In contrast to our findings a research by Bozkurt (2006) revealed that transsexual participants have statistically higher mean neuroticism scores than homosexuals. This difference was only seen in comparison to transsexual but in other aspect homosexuals scored more on neuroticism as compared to heterosexual. No work reported the relationship between sensation seeking behavior and neuroticism trait of male homosexuals but this was seen in our study may be because sexual minorities are subject to higher levels of prejudice, disapproval, and life stresses, they may as a result score higher on neuroticism than same-sex heterosexuals and may also have a relation to sensation seeking behavior of homosexual males. On the other hand, cultural and religious differences are also present along with other factors like environment and society.

A non-significant relationship was found between religiosity scores and sensation seeking behavior in the present study. In contrast,

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Love et al. (2005) found undeveloped spirituality, reconciliation, and non-reconciliation as well as issues of acceptance, awareness, and patterns and relationships related to sexual orientation and spirituality in gays and lesbians. Similarly, Kubicek et al. (2009) found religiosity to be associated with better mental health and risk behaviors were also found out to be fewer and he also suggested that young homosexual men may experience higher levels of stress especially in reference to their sexual identity, spiritual and/or religious beliefs. Correspondingly, Wilkerson et al. (2013) believed that religiosity is associated with behaviors that reduce the risk of the Human Immunodeficiency Virus/Sexually Transmitted Infections but results showed that religiosity does not reduce the risk of . Most religions like Islam, condemn homosexuality therefore homosexual tend to struggle a lot to put together their sexual identity alongside with their religious beliefs. This may be one of the reasons why religiosity scores have no relationship with sensation seeking behavior in homosexual males. Majority of homosexuals exhibit feelings of guilt and wrongdoing in their attempt to make sense of their sexual identities while viewing their sexual and other identities mainly through a religious lens. Religion is something with which homosexual individuals are constantly in a conflict with. The homosexuals included in the study belonged to a culture which is strict about sexual identities and people surrounding them are highly unacceptable to individuals of sexual minority. The religiosity scores show no relation to the sensation seeking behavior of homosexuals may be because sensation seeking is in itself a personality trait and does not share a direct link with religion.

Conclusion

The present study concludes that sensation seeking behavior has a significant relationship with agreeableness and neuroticism personality traits of homosexual males. Homosexual male's personalities are considered to be somewhat feminized as compared to that of heterosexual men's personalities. The Big Five traits of homosexual males show higher scores on agreeableness and neuroticism and also on a few facets of openness or aesthetic traits related to personality, but they score lower on extraversion. These shifts in personalities may be stronger for some homosexual males and may prove vice versa in others. Another important result that came out was that an insignificant relationship exists in sensation seeking behavior and religiosity. Homosexual men experience anxiety and depression frequently during their lifetime as they have to face a lot of criticism from their surroundings and also from religious

point of view. In their attempt to make sense of their sexual identities, majority of homosexuals exhibit feelings of guilt and wrongdoing.

Limitations and Suggestions

The findings of this study cannot be generalized as sample size was small. Only bilingual sample was included. Study was conducted only on males and females should also be included in the study. Participants were only taken from Lahore city. A mixed research design should be used in order to study the same variables in depth like religion and personality. A comparison with heterosexual individuals on the same variables should be made in order to relate the results for cross validation from research work of West. A cross-sectional study may be designed including differential cities so the results can be generalized and be more reliable.

References

- Adams, N. (2014). *Homosexuality apparently thriving in Pakistan despite several punishments*. The New York Times.
- Anderson & Paul, (2004). *Madrasas hit by sex abuse claims*. BBC World.
- Bancroft, J. (1989). *Human sexuality and its problems* (2nd ed.). New York: Churchill Livingstone.
- Bozkurt, A. (2006). Body image and personality traits of male- to- female transsexuals and homosexuals. *Social Behavior and Personality*, 34(8), 927-38.
- Glasser, M. (1997). Homosexuality in adolescence. *British Journal of Medical Psychology*, 50, 217-225.
- Goldberg, R. L. (1993). The structure of phenotypic personality traits. *American Psychological Association*, 48(1), 26-34.
- Grellert, E. A. (1989). Childhood photographs of homosexual and heterosexual men. *Psychological Reports*, 65, 331-336.
- Harris, C. M. (2004). Personality and sexual orientation. *College Student Journal*, 38, 207-211.
- Krauskopf, C. J., & Saunders, D. R. (1994). *Personality and ability: The personality assessment system*. University Press of America, Lanham, Maryland.

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- Kubicek et al. (2009). "God made me gay for a reason": Young men who have sex with men's resiliency in resolving internalized homophobia from religious sources. *Journal of Adolescent Research*, 24(5), 601-633.
- Kugle, S. (2010). *Homosexuality in Islam: Critical reflect on gay, lesbian and transgender Muslims*. A One World Publications, England.
- Kurdek, L. A. (1997). Relation between neuroticism and dimensions of relationship commitment: Evidence from gay, lesbian, and heterosexual couples. *Journal of Family Psychology*, 11, 109-124.
- LePeau, L. (2007). Queerying religion and spirituality: Reflections from difficult dialogues exploring religion, spirituality, and homosexuality. *College Student Affairs Journal*, 26(2), 186-192.
- Lijun, Z. & Yong, Z. (2011). The relationship of masculinity and femininity to the big five personality dimensions among a Chinese sample. *Social Behavior and Personality*, 39(4), 445-450.
- Lippa, R.A. (2005). Sexual Orientation and Personality. *Annual Review of Sex Research*, 16, 119-53.
- Love et al. (2005). Identity interaction: Exploring the spiritual experiences of lesbian and gay college students. *Journal of College Student Development*, 46(2), 193-209.
- Mustanski, B. S., & Bailey, M. J. (2003). Genetics of sexual orientation, sexual and relationship therapy. *Journal of Homosexuality*, 18(4), 429-436.
- O'Donohue, W., & Plaud, J. J. (1994). The conditioning of human sexual arousal. *Archives of Sexual Behavior*, 23, 321-344.
- Remafedi G. (2007). *Adolescent homosexuality (18th ed)*. Textbook of Pediatrics. Philadelphia: WB Saunders Company, 68-7.
- Rosenthal, D. & Moore, S. (1993). Venturesomeness, impulsiveness and risky behavior among older adolescents. *Perceptual and Motor Skills*, 76, 98-109.
- Roof, W.C., & Perkins, R. P. (1975). On conceptualizing salience in religion commitment. *Journal for the Scientific Study of Religion*, 14, 111-128.
- Sadock, B. J. & Sadock, V. A. (2003). *Kaplan and Sadock's synopsis of psychiatry: Behavioral sciences, clinical psychiatry (9th ed.)*. Philadelphia: Lippincott Williams & Wilkins.
- Schuck, K. (2001). Religious conflicts experienced by lesbian, gay, and bisexual individuals. *Journal of Gay & Lesbian Psychotherapy*, 5(2), 63-82.

- Symon, D. (1979). *The evolution of human sexuality*. New York, Oxford University Press.
- Turner et al. (1974). Personality characteristics of male homosexuals referred for Aversion therapy: A comparative study. *British Journal of Psychiatry*, 127, 447-9.
- Wilkerson, J.M. et al. (2013). Performance of the Duke Religion Index and the Spiritual Well-being Scale in online samples of men who have sex with men. *Journal of Religious Health*, 52, 610-621.
- Winnie, J. F. (1973). An introduction to the personality assessment system. *Journal of Clinical Psychology*, 38, 1-68.
- Yarhouse, M. (2005). Addressing religious conflicts in adolescents who experience sexual identity confusion. *Professional Psychology: Research and Practice*, 36(5), 530-536.
- Zuckerman, M. (1994). The psychobiological model for impulsive unsocialized sensation seeking: A comparative approach. *Neuropsychobiology*, 34(3), 125-129.
- Zuckerman, M. (1979). Sensation seeking and risk-taking. In C.E. Izard (ed.), *Emotions in Personality and Psychopathology*, 163-197. New-York: Plenum Press.