Indian Journal of Clinical Psychology
Vol. 50, No. 2, 10-14
Original Research Article

Role of Gender and family type in Drug Knowledge Attitude and Belief, Risk taking behaviour and Spiritual wellbeing: Indian study among Young Adults

Lalit Kumar Singh[1], Kiran Srivastava[2], Manoj Kumar Bajaj[3], Kuljit Singh[4], Komila Parthi[5] and Lelremruati[6]

ABSTRACT

Background: currently the role of gender and family type in drug knowledge attitude and belief, risk-taking behaviour and spiritual well-being in the young adult population is poorly understood. We examined the role of gender and family type on drug knowledge attitude and belief, risk-taking behaviour and spiritual well-being. Methods: Online cross-sectional data (n = 548) covered 6 provinces of India. The assessment included Drug knowledge attitude and belief, spiritual well-being, and Risk-taking behaviour. Results: t-test, Mean and Standard deviation revealed females have better knowledge about drugs and better attitudes toward drugs. Males have a high mean value for attitude toward drugs, and spiritual well-being, and females have a high mean value for risk-taking behaviour. There was a significant difference between males and females in the context of risk-taking behaviour on the t-test. Participants living in joint families had high mean value for drug knowledge attitude and belief, and those staying in nuclear had high risk-taking behaviour and spiritual well-being. There was a significant difference between family type in the case of drug knowledge attitude and belief, attitude toward drug use, risk-taking behaviour, and spiritual well-being.Conclusion: Drug knowledge attitude and belief, attitude toward drug use, risk-taking behaviour, and spiritual well-being had significant differences in the case of family type and risk-taking behaviour of the participant had significant differences in case gender.

Keywords: *Young Adults, Drug Knowledge Attitude and Belief, Attitude toward Drug Use, Risk-Taking Behaviour, Spiritual Wellbeing*

INTRODUCTION

Male high school students used drugs more frequently in the last year (5%) than females (2.3%), (National Narcotics Agency of the Republic of Indonesia. 2018). Male and female students have been observed to use different types of psychoactive substances despite having a high knowledge of their various effects like changes in mood effect, poor concentration, negative social effects and poor effects on educational careers. In a study, 32.4% of the male participants and 17.6% of the female participants from a university set up in South Africa were found to use different types of psychoactive substances (Ajao, 2014). Fifty-two (52) students from India out of 416 (12.5%) used or abused any one of the substances irrespective of time and frequency in their lifetime (Tsering, Dasgupta 2010). Having a high knowledge of drugs and substances may not be sufficient enough to protect students from drug use/abuse.

Almost one-third of full-time college students aged 18 to 22 used alcohol and were engaged in binge drinking, about 1 in 5 students used an illicit drug in the one-month observation (United States Census Bureau, 2014). Over 60% of full-time college students were found engaged in alcohol, and a staggering 39% had binge drinking issues (Lipari, 2016). Age-matched cohorts were found less in number in case of use of alcohol consumption when compared with college-going students (Schulenberg, 2017).

According to the Canadian Addictions Survey 2005, almost 62.3% of youth aged between 15-17 accepted early use of alcohol and 29.2% told about early cannabis use in the 12 months before the survey (National Crime Prevention Centre (Canada, 2009). Indian study by Narain suggested that boys start any substance usually from the age of 11 and male student from government intermediate college starts any substance at the age of 12-13 years (Narain, 2020).

Spirituality seems to protect against the abusive use of psychoactive substances (Oliviera, 2017). In a recent study done by (Hatala, 2021) research suggested that Saskatchewan adolescents (11-15 years) who scored high on various components of spiritual health had reduced likelihood of cigarette smoking, consumption of alcohol and marijuana use and sexual intercourse. Substance abuse is captivating and compelling which makes it difficult to treat (Galanter, Dermatitis, Bunt, Williams, Trujillo, et al. (2007). Spirituality is found to be associated with the psychological adjustment and well-being of students (King and Benson, 2006; Johnson, 2008; Saroglou et al., 2008). Studies by Alyssa showed that marked gender differences in spiritual qualities, and gendered patterns of spiritual development are expressed by both genders (Bryant, 2007). A study done in the year 2012 by Alvin Rich found no difference in spirituality between males and

[1] Assistant Professor, Department of Psychiatry, Post Graduate Institute of Medical Education & Research, Chandigarh
[2] Associate Professor, Psychology Department, Chandigarh University, Chandigarh
[3] Associate Professor, Department of Psychiatry, Government Medical College & Hospital, Sector 32, Chandigarh
[4] Assistant Professor, Department of Sociology, Bhaderwah University Campus, Sungli, Bhaderwah, J&K
[5] Associate Professor, PG Department of Psychology, DAV College, Sector 10, Chandigarh,
[6] Associate Professor, Department of Psychology, Govt Aizawl West College, Dawrpui Vengthar, Aizawl, Mizoram

females but their expression of that was different (Rich II, 2012). Spirituality is not only important for patients with substance abuse disorder but it is also helpful in the larger aspect of recovery, the rebuilding of those under treatment (DiReda, & Gonsalvez, 2016).

AIM

The purpose of the original research was to determine the effect of gender and family type on drug knowledge, attitude, beliefs, risk-taking behaviour and spiritual index of well-being about attitude and awareness of drugs in young Indian adults.

MATERIALS AND METHODS

Study design and population

We did a cross-sectional study and primary data was collected using convenience sampling from various universities and colleges by distributing an online survey through a Google Form link via WhatsApp, Instagram, and Facebook, which are the most popular and accessible social media platforms in India. Facebook, Instagram, and apps are more popular among students. We utilized different approaches to reach as many respondents across the region with the help of teachers working in various universities during the 23 January- 28 May 2023 that is data collection period. Research relied on fellow researcher's technical and personal links and networks. The survey was shared through social media influencers and other community support. The inclusion criteria to fill in the Google form were as: Indian civilian, young adult 17~25 years, able to speak English and Hindi and willing to fill out the informed consent form. We reached 548 total participants/respondents through Google Forms.

Study variables

Independent variable: Gender and family type

Dependent variables: Drug knowledge, attitude, Belief, Risk-taking behaviour and spiritual index of wellbeing.

Tools for data collection

An online survey designed to measure students' knowledge and attitudes about Drugs along with risk-taking behaviour, and spiritual wellbeing was used as a tool for data collection. The online survey consisted of fifty-one (51). Among these nineteen (19) questions were related to knowledge, attitude and belief of various drugs, twenty (20) questions to test students' risk-taking behaviour in daily life, and twelve questions (12) were to assess the participant's spiritual index of wellbeing.

Drug Knowledge Attitude& Belief (Bryan, Moran, Farrell & O'Brien, 2000).

It is a 7 7-item Likert scale where item numbers 2, 6, and 7 are reversed scores. Items 3, 4 and 5 should be scored '5' for answers like strongly agree and '1' if the answer is 'strongly disagree'. However, remaining items 1, 2, 6, and 7 should be scored oppositely ('1' for 'strongly agree' and '5' for 'strongly disagree'). To obtain scores for attitude, items should be added together. A score of 35 will indicate a positive attitude toward drug use, while a score of 5 will indicate a negative attitude toward drug use.

Attitudes to Drug Use (Harmon, 1993)

This scale consists of 12 items with a Likert scale. In case of scoring, items 2, 3, 6, 7, 8, 10, 12 should be scored '1' for 'strongly agree' to '5' for 'strongly disagree'. The rest of items 1, 4, 5, 9, and 11 are scored oppositely ('5' for 'strongly agree' to '1' for 'strongly disagree'). Items of the present scale are added and then divided by the number of questions in the questionnaire (12) to obtain attitude scores for each individual. A score of 5 will indicate a favourable attitude towards drug use while a score of 1 will indicate an unfavourable attitude towards drug use. The author suggests that if any respondent is not able to answer all 12 questions should be excluded from the analysis as total scores are accumulated by dividing the score by 12.

Risk-taking questionnaire (Gullone, E., Moore, S., Moss, S., & Boyd, C. 2000).

It is a 20-item scale which has items related to physical and psychological risks in daily life. Risk-taking Questionnaire (RQ) was developed to comprehensively assess risk-taking beliefs and behaviours. It is a reliable instrument with strong construct validity. Responses are to be given on a Likert scale (1-5).

The Spiritual Index of Well-Being (Daaleman, T. P. & Frey, B. B. (2004)

This test attempts to define spirituality as a sense of meaning in daily life or purpose from a transcendent source. It is a 12-item instrument that measures one's perceptions of their spiritual quality of life. The scale is divided into two subscales: (1) the self-efficacy subscale and (2) the life-scheme subscale. Each item is answered on a 5-point scale ranging from 1 (Strongly Agree) to 5 (Strongly Disagree).

Statistical methods

Data is collected, encoded as per the norms given in the manual, and then fed to a compatible computer using SPSS version 24 for Windows. Mean and standard deviation were calculated for each independent variable like Gender and Family type in the context of Drug knowledge, attitude, Belief, Risk-taking behaviour and spiritual index of well-being.

RESULT AND DISCUSSION

The present study consists of only students as a sample from various colleges and universities assisted by

volunteers and co-authors. Age, Gender and family types, education were included as part of the socio-demographic details.

Table 1: Demographic details

Female	**442, 80.7%**
Male	106, 19.3%
Mean age & S.D.	21.98, (3.41)
Mean age & S.D. (male)	23.38, (3.09)
Mean age & S.D. (Female)	21.64, (4.26)
Family type	
Nuclear	349, 63.7%
Joint	199, 36.3%

The survey participants consisted of 548 young adults. Their mean age was Mean age (21.98 SD 3.41), who were between the ages of 21 (females) and 23 (males). All the participants are students. The majority of the participants were females and single (Table 1). Females consist 80% of all the participants outnumber males (19%) have more risk talking behaviour whereas males have a high spiritual index of well-being. 63% of total participants are in a nuclear family setup with high risk-taking behaviour and spiritual index of wellbeing but those in the joint family had high scores on drug knowledge attitude and belief along with high attitude toward drug use.

Table 2: Mean (Drug Knowledge attitude and belief, Attitude to Drug Use, Risk-taking behaviour, Spiritual well-being) in the context of Gender

	Gender	N	Mean	Std. Deviation
DKAB	1 (Female)	442	15.99	3.89
	2 (Male)	106	15.54	4.41
ADU	1 (Female)	442	26.29	6.55
	2 (Male)	106	26.92	6.68
RTQ	1 (Female)	442	70.36	17.94
	2 (Male)	106	63.81	17.40
SIW	1 (Female)	442	39.94	10.18
	2 (Male)	106	41.18	9.20

Drug Knowledge attitude and belief (DKAB), Attitude for Drug Use (ADU), Risk-taking behaviour (RSQ), Spiritual well-being (SIW)

The mean value of females (70) was found to be higher than males (63) for category risk-taking behaviours. Drug knowledge attitude and belief, attitude toward drug use and spiritual well-being did not have much mean difference among males and females. There was not much difference found in the mean values for the categories of DKAB, ADU and SIW. Men use all types of drugs more than the females, so this is shown even in the present study findings (ORWH, 2015). Risk-taking behaviour is high for women in the current study that has already been promoted by NIDA, (2002) which stated that females may have to put in harder efforts to quit smoking. The rate of risk-taking behaviours in female students was lower than in males (Bahramnejad, 2020) which is the opposite of the result of the current study.

Table 3: t-test for Equality of Means (Gender)

	Mean Difference	t	Sig. (2-tailed)
DKAB	.45057	1.041	.298
ADU	-.62815	-.882	.378
RTQ	6.55293	3.397	.001
SIW	-1.24072	-1.147	.252

Drug Knowledge attitude and belief= (DKAB), Attitude for Drug Use= (ADU), Risk taking behaviour= (RSQ), Spiritual wellbeing= (SIW)

Independent sample t-test showed significant differences (.001 significance level) among males and females for risk-taking behaviour. Other categories like Drug knowledge attitude and beliefs, attitude toward drug use and spiritual well-being did not have significant differences on the test which is also clear based on mean difference. It was also found that nicotine pouch and gum work better in men which again support the current findings in term of the high risk-taking behaviour of females. The Centre for Behavioural Health and Statistics (2017) found opposite results that male members in the research were found to use in comparison to women to use almost all types of illicit drugs (Centre for Behavioural Health and Statistics, 2017). The reason for males having poor scores in risk-taking behaviour which is opposite to existing findings (Azanova, 2021) may be the poor number of male participants in the current study.

Neuro-chemical-based explanations of the high risk among males and poor among females may help better understand the risk-taking behaviour of the female participants (Azanova, 2021).

Table 4: Mean (Drug Knowledge attitude and belief, Attitude for Drug Use, Risk-taking behaviour, Spiritual well-being) in the context of family type

	Family Type	N	Mean	Std. Deviation
DKAB	1 (Joint)	199	16.63	3.78
	2 (Nuclear)	349	15.49	4.07
ADU	1 (Joint)	199	27.23	6.25
	2 (Nuclear)	349	25.95	6.72
RSQ	1 (Joint)	199	65.92	18.46
	2(Nuclear)	349	70.90	17.51
SIW	1 (Joint)	199	39.04	9.50
	2(Nuclear)	349	40.83	10.23

Drug Knowledge attitude and belief (DKAB), Attitude for Drug Use (ADU), Risk-taking behaviour (RSQ), Spiritual well-being (SIW)

The mean value of those living in joint family had a higher mean score for the category of drug knowledge attitude and belief (16) and attitude for drug use (27) but risk-taking behaviour (65) and spiritual will being (39) had lower mean value for the participants living in joint family.

Table 5: t-test for Equality of Means (Types of the Family)

	Mean Difference	t-test	Sig. (2-tailed)
DKAB	1.14	3.24	.001
ADU	1.27	2.19	.029
RSQ	-4.98	-3.13	.002
SIW	-1.79	-2.02	.043

Independent sample t-test was found to have a significant level for all categories that is drug knowledge attitude and leave attitude for a drug used risk-taking behaviour and spiritual well-being. The level of significance for drug knowledge attitude and belief (DKAB) was .001, for Attitude for Drug Use (ADU) was .029, for Risk-taking behaviour (RTQ) was .002, and for Spiritual well-being (SIW) was .043.

Our study had a higher mean value supported by a significant t-test for drug knowledge, attitude and belief which means that participants living in a joint family had positive drug knowledge and attitude in comparison to those participants living in a nuclear family set-up. Drug knowledge was found to be poor for those daughters living with a father than those living with a single mother (harmonic and Crano, 2009). Another study found that drug use is found more on those living with one parent are prone to drug use both, 2001). A possible reason for poor drug knowledge and attitude for those living in nuclear families may be that these children may be more resource-deprived (Amato and Keith, 1991), they are prone to get a less protected environment and less consistent monitoring and supervision through which seems to be more in joint family setup. These conditions are thought to be associated with adolescent drug use (McLanahan and Sandefur, 1994). The current study suggests that the mean value for attitude toward drug use is high for those living in the joint family. Those who live in nuclear families are more prone to substance use and have poor attitudes toward drug use. In a study done by Roy and Miah (2017), Rather, Bashir, Sheikh, Amin, & Zahgeer, (2013), authors found in Kashmir and Bangladesh that most of the patients seeking treatment for substance use are from nuclear families which may be due to urbanization and availability of hospital at nearby place.

CONCLUSION

This study confirms that risk-taking behaviour may be gender specific where females may show high risk-taking behaviour when compared with males but gender may not cast any significant impact on attitude, knowledge and spiritual wellbeing. The concept of spirituality did not emerge as having a significant association in the context of gender.

The study suggests that family type has a significant relationship with attitude, knowledge, belief, risk-taking behaviour and spirituality. This is important as a clear understanding can be generated to understand the relationship between drugs and other psycho-social variables influencing the thinking and behaviour related to drug use currently or its possibility shortly. The study emphasizes the nuclear family as a risk factor over risk-taking behaviour and this is so even when participants scored high on the spiritual wellbeing index. The joint family emerged as a protective factor against risk-taking behaviour.

Limitations

Although this research expands the current knowledge on Drug knowledge, belief, attitude risk-taking behaviour and spirituality, it presents certain limitations.

The sampling procedure limits the external validity of findings. Convenience sampling could have been substituted with other robust techniques. Does not allow the generalization of the results. Participants were from a limited area of the nation so the result may not be applied to individuals of the rest of the part of the countries and regions.

Implications

The findings of the study emphasized that joint family may act as a protective factor. There is a need to educate emerging adults about the relevancy of joint family and staying close to each other. This study signifies the negative aspect of staying in a nuclear family and results discourage the growing tendency to follow individualist and ego-centric thinking, behaviour, belief systems, values and lifestyle.

Ethics Approval and Consent to Participate

Human and animal rights

In our study, no animals were used that are the basis of this research. The nature of the study does not demand any use of an animal to achieve the objective of the study. In the case of humans, none of the humans were used as part of any experiment/ medical trial by the ethical standards of the committee responsible for human experimentation (institutional and national), and with the Helsinki Declaration of 1975, as revised in 2013 (http://ethics.iit.edu/ecodes/ node/3931).

Consent for publication

Informed consent has been taken from all authors/ respondents involved in the study.

Availability of Data and Material

The data of the study supporting the conclusions of the article will be made available by the authors without undue reservation whenever asked or needed.

Conflict of interest

The authors declare that there is no conflict of interests

Funding

No funding was received or involved in the context of this paper.

REFERENCES

Ajao, B., Anyanwu, F. C., Akinsola, H. A., &Tshitangano, T. G. (2014). Knowledge, attitude and practices of substance use among university students. *African Journal for Physical, Health Education, Recreation and Dance*, *20*(1), 214-224.

Azanova, M., Herrojo Ruiz, M., Belianin, A. V., Klucharev, V., &Nikulin, V. V. (2021). Resting-state theta oscillations and reward sensitivity in risk-taking. *Frontiers in neuroscience*, *15*, 608699.

Bahramnejad, A., Iranpour, A., &Nakhaee, N. (2020). Gender-based differences in risk-taking behaviours among high school students in Southeast Iran. *International journal of adolescent medicine and health*, *33*(6), 437-443.

Booth, A., & Amato, P. R. (2001). Parental pre-divorce relations and offspring post-divorce well-being. *Journal of marriage and family*, *63*(1), 197-212.

Bryan, A., Moran, R., Farrell, E., & O'Brien, M. (2000). Drug-related Knowledge, Attitudes and Beliefs in Ireland: Report of a Nation-wide Survey. Drug Misuse Research Division, Health Research Board.

Bryant, A. N. (2007). Gender differences in spiritual development during the college years. *Sex roles*, *56*(11-12), 835-846.

Centre for Behavioral Health Statistics and Quality. Results from the 2016 National Survey on Drug Use and Health: Detailed Tables. Rockville, MD: Substance Abuse and Mental Health Services Administration; 2017. https://www.samhsa.gov/data/sites/default/files/NSDUH-DetTabs-2016/NSDUH-DetTabs-2016.pdf. Accessed November 7, 2017.

Daaleman, T. P. & Frey, B. B. (2004). The Spirituality Index of Well-Being: A new instrument for health-related quality of life research. Annals of Family Medicine, 2, 499-503.

DiReda, J., &Gonsalvez, J. (2016). The role of spirituality in treating substance use disorders. *Journal of Psychology and Clinical Psychiatry*, *6*(4), 00365.

Galanter M, Dermatis H, Bunt G, Williams C, Trujillo M, et al. (2007) Assessment of spirituality and its relevance to addiction treatment. Journal of Substance Abuse Treatment 33(3): 257-264.

Gullone, E., Moore, S., Moss, S., & Boyd, C. (2000). The adolescent risk-taking questionnaire: Development and psychometric evaluation. *Journal of Adolescent Research*, *15*(2), 231-250.

Harmon, M. A. (1993). Reducing the Risk of Drug Involvement Among Early Adolescents. *Evaluation Review*, *17*(2), 221-239. doi: 10.1177/0193841x 9301700206

Hemovich, V., &Crano, W. D. (2009). Family structure and adolescent drug use: An exploration of single-parent families. *Substance use & misuse*, *44*(14), 2099-2113.

Johnson, B. R. (2008). "A tale of two religious effects: evidence for the protective and pro-social impact of organic religion," in *Authoritative Communities*, ed. K. K. Kline (New York, NY: Springer), 187–225. doi: 10.1007/978-0-387-72721-9_9

King, P. E., and Benson, P. L. (2006). "Spiritual development and adolescent well-being and thriving," in *The Handbook of Spiritual Development in Childhood and Adolescence*, eds E. C. Roehlkepartain, P. E. King, P. L. M. Wagener, and P. L. Benson (Thousand Oaks, CA: Sage) 364–398.

Lipari, R. N., & Jean-Francois, B. (2016). A day in the life of college students aged 18 to 22: Substance use facts.

Narain, R., Sardana, S., & Gupta, S. (2020). Prevalence and risk factors associated with substance use in children: A questionnaire-based survey in two cities of Uttar Pradesh, India. *Indian Journal of Psychiatry*, *62*(5), 517.

National Crime Prevention Centre (Canada). (2009). *School-based drug abuse prevention: promising and successful programs*. Her Majesty the Queen in Right of Canada.

National Institute on Drug Abuse. (2012, November). Medical consequences of drug abuse. Retrieved from http://www .drugabuse.gov/related-topics/medical-consequences-drug-abuse.

National Narcotics Agency of the Republic of Indonesia. 2018 Prevalence Survey. National Narcotics Agency; 2019. p. 1-132.

Office of Research on Women's Health (ORWH). How Sex and Gender Influence Health and Disease *[Infographic]*.; n.d. https://orwh.od.nih.gov/resources/pdf/SexGenderInfographic_11x17_508.pdf.

Rather, Y. H., Bashir, W., Sheikh, A. A., Amin, M., &Zahgeer, Y. A. (2013). Socio-demographic and clinical profile of substance abusers attending a regional drug de-addiction centre in a chronic conflict area: Kashmir, India. *The Malaysian journal of medical sciences: MJMS*, *20*(3), 31.

Roy, S., & Miah, M. Z. (2017). Socio-demographic and clinical profile of substance abusers attending a Regional Psychiatric Hospital in Sylhet. *Bangladesh. J Addict Res Ther*, *8*(342), 2.

Saroglou, V., Buxant, C., and Tilquin, J. (2008). Positive emotions lead to religion and spirituality. *J. Posit. Psychol.* 3, 165–173. doi: 10.1080/174397 60801998737

Schulenberg, J. E., Johnston, L. D., O'Malley, P. M., Bachman, J. G., Miech, R. A., & Patrick, M. E. (2017). Monitoring the Future National Survey results on drug use, 1975-2016: Volume II, college students and adults ages 19-55.

Substance Abuse and Mental Health Services Administration. (2006, January). A comprehensive plan for preventing and reducing underage drinking. Retrieved from http://www .stopalcoholabuse.gov/ media/pdf/underagerpttocongress.pdf.

Tsering, D., Pal, R., &Dasgupta, A. (2010). Substance use among adolescent high school students in India: A survey of knowledge, attitude, and opinion. *Journal of Pharmacy and Bioallied Sciences*, *2*(2), 137.

United States Census Bureau. (2014). Table 5. Type of college and year enrolled for college students 15 years old and over, by age, sex, race, attendance status, control of school, and enrollment status: October 2014. In *Current Population Survey October 2014—Detailed tables.* Retrieved from http://www.census.gov /hhes/school/data/cps/2014/tables.html.