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Article · October 2021

DOI: 10.51986/ijss-2021.vol1.001

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Alcohol Consumption and its Socio-demographic Correlates among Secondary School Teachers in Uganda

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DOI: 10.51986/ijss-2021.vol1.001

Abstract: Alcohol consumption among teachers is becoming an issue of concern in Uganda. Markedly, alcohol consumption among teachers varies by socio-demographic characteristics. This study establishes the relationship between socio-demographic characteristics and alcohol consumption among secondary school teachers in Greater Bushenyi of Uganda. The study employed a cross-sectional design with a quantitative method of data collection and analysis. Multistage sampling was employed, first stratified proportionate and then simple random sampling. The study sample consisted of 266 participants from 11 secondary schools. Data were collected using a self-administered questionnaire. Descriptive statistics and logistic regressions were the analytical strategies, using Stata 15.0 version. Significance was set at $p = 0.05$. The rate of alcohol consumption among teachers was 44.7%. Male teachers were more likely to consume alcohol as compared to females (AOR: 2.2, 95% CI: 1.22-3.80, $p < .01$). As compared to Muslim counterparts, teachers identifying with the Roman Catholic denomination were three times more likely to consume alcohol (AOR: 3.1, 95% CI: 0.98-

9.10, $p = 0.05$). Relative to comparable populations of adults whose alcohol consumption rates were already known, alcohol consumption among particularly male and Roman Catholic teachers in greater was high. It is recommended that school-based interventions should focus on male teachers.

Keywords: Alcohol consumption, Secondary school teachers, Correlation, Socio-demography, Uganda.

1. Introduction

Alcohol consumption among educational institutions remains one of the biggest challenges worldwide (Griswold et al., 2018). Consequently, understanding the association between teachers' socio-demographic characteristics and alcohol consumption becomes crucial in coming up with strategies to minimize alcohol consumption in that important population. Alcohol consumption is regarded as the consumption of alcohol in the form of the commonest brands of beers, wines, and spirits (World Health Organization [WHO], 2010). In the context of the developing world, alcohol consumption goes beyond the consumption of the formal brands, to consider local brews. All the same, alcohol changes a person's thinking and sense of direction when consumed in excess (WHO, 2010, 2014).

Consumption of alcohol has been associated with several health-related risks and negative consequences that include driving under the influence of alcohol, heart problems, violence, injuries and death (Rehm et al., 2010). More so, alcohol consumption contributes to the development of chronic health problems (Sturm, An, Maroba, & Patel, 2013). Excessive consumption of alcohol has led to dismissal from job and neglect of teacher responsibilities such as marking examination scripts or attending staff meetings (Babalola, Ighoroje, Awhangansi, & Ayilara, 2017; Rukundo & Magambo, 2013). It is estimated that 76% of the money spent in the United States on health in relation to excessive alcohol consumption is due to drinking (Bouchery, Harwood, Sacks, Simon, & Brewer, 2011). Nonetheless, there is a lack of adequate knowledge of the prevalence of alcohol consumption among special populations, secondary school teachers inclusive. Moreover, literature on demographic correlates of alcohol consumption among teachers in a developing country context is sparsely available.

As regards the prevalence of alcohol consumption, alcohol is the most widely abused substance globally, perhaps because of its availability and acceptability to be consumed among adults

Cite this article (APA):

Bashaija, A., Atibuni, D. Z., & Rukundo, A. (2021). Alcohol consumption and its socio-demographic correlates among secondary school teachers in Uganda. *Interdisciplinary Journal of Sociality Studies*, 1, 1-7. <https://doi.org/10.51986/ijss-2021.vol1.001>

(International Center for Alcohol Policies (ICAP), 2008). For instance, a survey among teachers in Texas found that about 50.0% of the teachers frequently consumed alcohol (Watts & Short, 1990). To that end, it was reported that 43% of the people aged 15 years and above indulged in its consumption (World Health Organization, 2019). In that, the prevalence of alcohol consumers in Africa was 29%. In particular, Uganda had the highest per capita consumption rate of 23.7 litres in the East African region (World Health Organization, 2014).

Aside from the prevalence of alcohol consumption, personal characteristics determine health-related behaviour, including alcohol consumption (Diepeveen, Ling, Suhrcke, Roland, & Marteau, 2013). Thus, alcohol consumption remains one of the global health challenges, yet limited studies considered socio-demographic correlates of alcohol consumption. On the basis of the paucity of knowledge regarding demographic correlates of alcohol consumption, this study was motivated in determining association teachers' socio-demographics and alcohol consumption. Based on the concerns regarding alcohol consumption among teachers, this study inquired: above problem, the following research question was raised to pilot the study: what is the level of alcohol consumption and its association with the teachers' socio-demographic characteristics?

2. Research Methodology

The study was descriptive in the first place and then correlational. The descriptive technique was used in tapping into the global prevalence of alcohol consumption. The correlational technique enabled the assessment of the association between teachers' alcohol consumption across socio-demographic characteristics. It considered 266 secondary school teachers in Greater Bushenyi and took place during the month of June 2020. Greater Bushenyi was a Local Government locality in the Southwestern region of Uganda, including the districts of Bushenyi, Sheema, Rubirizi, Mitooma, and Buhweju (Muhaise & Kareeyo, 2017). At the time of data collection, there were 160 schools, including 41 public and 119 private schools (SESEMAT Bushenyi Region, 2020). Public schools in the Ugandan context are either government-aided or based on religious denomination foundations and then receiving government aid annually. Thirty schools representing 20% of the school population in greater Bushenyi were sampled, the Table by Krejcie and Morgan, and putting into consideration attrition of 10% (Mills & Gay, 2019).

2.1 Instruments

Alcohol Use Disorders Identification Test (AUDIT) for assessing alcohol use (Saunders, Aasland, Babor, De la Fuente, & Grant, 1993) was used in measuring alcohol consumption. The test considers alcohol use in the past 12 months and has a scale of 10 items. Items 1 to 8 are scored on a five-point Likert scale from 0 = never to 4 = daily or almost daily, and items 9 to 10 are scored on a three-point Likert scale of 0, 2, and 4. The AUDIT has a high level of internal consistency, with a Cronbach alpha coefficient of .84 (Meneses-Gaya, Zuardi, Loureiro, & Crippa, 2009). Alcohol consumption was considered as a total AUDIT score of >0 . In computing the rate of alcohol consumption, scores of one or greater were considered as "yes", while scores less than 1 were considered as "no". Other variables of interest were socio-demographics of teachers, including sex, type of school, age, teaching experience, qualifications, community setting, income per month, nature of the school and religious affiliation.

2.2 Statistical analyses and ethical consideration

All analyses were performed using the Stata 15.0 (Stata Corp., College Station, TX, USA) for Windows, and all statistical tests were two-sided ($\alpha = 0.05$). Sequential bivariate and multivariate logistic regression models were conducted. Independent variables with $p \leq 0.05$ were considered as predictors of alcohol consumption. Ethically, this study was approved by Mbarara University of Science and Technology Research Ethics Committee, reference number MUREC 1/7, and the Uganda National Council of Science and Technology (SS671ES). All study participants signed a written informed consent form approved by both the Mbarara University of Science and Technology Research Ethics Committee and Uganda National Council of Science and Technology. In addition, the participants provided written informed consent for the use of their data for academic purposes, including report writing and publication.

3. Presentation of Results

The aim of this study was to explore the level of alcohol consumption among teachers. Further, the study aimed at establishing the association between teachers' socio-demographic characteristics and alcohol consumption. Descriptive statistics (percentages) and logistic regression models were the main data analysis strategies. The results are recorded in Tables 1 and two, respectively.

Table 1: Socio-demographic characteristics of secondary school teachers in Greater Bushenyi (N = 266)

Characteristics		Frequency	Percent
Gender	Male	167	62.8
	Female	99	37.2
Type of school	Government	119	44.7
	Private	147	55.3
Age (Years)	<26	13	4.9
	26-30	45	16.9
	31-35	68	25.6
	≥36	140	52.6
Teaching experience (years)	1-5	55	20.7
	6-10	74	27.8
	11-15	66	24.8
	≥16	71	26.7
Highest Qualifications	Diploma	116	43.6
	Bachelor's Degree	138	51.9
	Master's degree	12	4.5
Community Setting	Rural	183	68.8
	Urban	83	31.2
Religious affiliation	Catholic	99	37.2
	Anglican	135	50.8
	Moslem	21	7.9
	Others	11	4.1
Nature of school	Day and boarding	127	47.7
	Boarding only	19	7.1
	Day only	120	45.1
Average net Income per month (Ugx)	≤ 100,000	3	1.1
	100,000-500,000	171	64.3
	>500,000	92	34.6

Table 1 shows that of the 266 participants enrolled into the study, the majority were males (61.8%), aged 36 years and above (51.6%), held Bachelor's degree (51.9%), Anglicans (50.8%), earned a net income between 100,000 and 500,000 Uganda shillings (64.1%) and were in private schools 147(55.1%). In addition to the demographic statistics above, the results in the Table below present data concerning the level of alcohol consumption and its socio-demographic correlates.

Table 2: Level & socio-demographic correlates of alcohol consumption among secondary school teachers (N =266)

Characteristics	Alcohol use		UOR(95%CI)	P	AOR(95%CI)	P
	Users, n(%) 119(44.74)	Non-users, n(%) 147(55.16)				
Gender	Female	11(11.11)	67(67.68)	1.0		
	Male	87(51.10)	80(47.90)	2.3(1.35-3.81)	0.002**	2.2(1.22-3.80) 0.008**
Type of school	Government	49(41.18)	70(58.81)	1.0		
	Private	70(47.61)	77(51.18)	1.2(0.79-2.11)	0.294	1.5(0.85- 2.75) 0.194
Age (Years)	<26	1(15.18)	11(84.61)	1.0		
	26-30	15(11.11)	10(66.67)	2.8(0.53-14.00)	0.224	2.0(0.34- 11.15) 0.451

	31-35	14(50.00)	14(50.00)	5.5(1.13-26.71)	0.034*	2.9(0.46-17.90)	0.262
	≥36	119(44.74)	147(55.16)	5.1(1.11-24.30)	0.036*	2.7(0.40-18.20)	0.313
Experience (years)							
	1-5	16(19.09)	19(70.91)	1.0			
	6-10	14(45.95)	40(54.05)	2.0(0.98-4.30)	0.054*	1.8(0.70-4.60)	0.232
	11-15	17(56.06)	19(41.94)	3.1(1.45-6.61)	0.003	3.0(0.96-9.31)	0.057
	≥16	11(45.07)	19(54.91)	2.0(0.94-4.21)	0.069	2.5(0.76-8.11)	0.131
Qualification							
	Diploma	48(41.18)	68(58.61)	1.0			
	Degree	64(46.18)	74(51.61)	1.2(0.74-2.01)	0.424	1.1(0.63-2.00)	0.414
	Masters	7(58.41.11)	5(41.67)	1.9(0.59-6.60)	0.266	1.7(0.41-6.70)	0.166
Residence/ Setting							
	Rural	80(41.71)	101(56.18)	1.0			
	Urban	19(46.99)	44(51.01)	0.7(0.57-1.00)	0.090	1.1(0.68-1.91)	0.577
Religion							
	Moslem	6(18.57)	15(71.41)	1.0			
	Catholic	58(41.96)	77(57.04)	2.6(0.95-7.41)	0.062	3.1(0.98-9.10)	0.054*
	Anglican	4(16.16)	7(61.64)	1.8(0.68-5.20)	0.218	1.9(0.63-5.92)	0.247
	Others	58(41.96)	77(57.04)	1.4(0.30-6.71)	0.652	1.7(0.31-9.31)	0.530
Nature of school							
	Day/boardin g	60(47.14)	67(51.76)	1.0			
	Boarding only	10(51.61)	9(47.17)	1.2(0.47-3.31)	0.661	1.0(0.36-3.01)	0.933
	Day only	49(40.81)	71(59.17)	0.7(0.46-1.31)	0.311	0.7(0.40-1.28)	0.261
Net Income (Ugx)							
	< 0.1M	1(66.67)	1(11.11)	1.0			
	0.1-0.5 M	81(47.17)	90(51.61)	0.4(0.04-5.11)	0.518	0.2(0.01- 3.02)	0.247
	>0.5 M	16(19.11)	56(60.87)	0.3(0.02-3.71)	0.361	0.1(0.01-1.45)	0.091

*p ≤ 0.05. **p < .01. UOR = Unadjusted odds ratio. AOR = Adjusted odds ratio. CI = Confidence interval; Ugx = Uganda Shillings; M = millions of Uganda Shillings.

It is observable, in Table 2, that the global prevalence of alcohol consumption was 44.74%. As regards the association between participants' socio-demographic correlates and alcohol consumption, age and teaching experience were statistically associated with alcohol consumption at bivariate level. Specifically, male teachers were more likely to consume alcohol as compared to their female counterparts (UOR: 1.1, 95% CI: 1.15-1.81, p = .002). Teachers in the age range of 31-35 (UOR: 5.5, 95% CI: 1.11-16.69, p = .034) or 36 years and above (UOR: 5.1, 95% CI: 1.11-14.19, p = .036) reported higher alcohol consumption, as compared to their counterparts aged < 26 years. As regards teaching experience, teachers with 6 to 10 years (UOR: 1.0, 95% CI: 0.99-4.14, p = 0.054) or 11-15 years (UOR: 1.1, 95% CI: 1.46-6.64, p = .003) in the teaching service reported higher alcohol consumption, as compared to their counterparts aged 1-5 years. In the multivariable results, gender and religious affiliation remained significantly associated with alcohol consumption. To that end, male teachers were 1.1 times more likely to consume alcohol as compared to their female counterparts (AOR: 1.1, 95% CI: 1.15-1.80, p = .008). Also, teachers who belonged to the Roman Catholic religious denomination were three times more likely to consume alcohol than their Muslim counterparts (AOR: 3.1, 95% CI: 0.98-9.57, p = 0.054). However, the results regarding religious affiliation were marginally significant.

4. Discussion

This study considered prevalence and socio-demographic correlates of alcohol consumption among secondary school teachers in Greater Bushenyi. The results indicated that the level of alcohol consumption was high compared to other studies that considered similar adult populations. Further, gender and religious affiliation were significantly associated with alcohol consumption. The findings compare with earlier studies that report about alcohol consumption among secondary school teachers. For instance, in a qualitative study that investigated alcohol usage among teachers in Uganda, Rukundo and Magambo (2013) found that alcohol use among secondary school teachers served a variety of reasons. Also, in a study to determine the prevalence

and pattern of hazardous alcohol consumption among secondary school teachers in Southwestern Nigeria, the level of past-year alcohol use was 51.4% (Babalola et al., 2017). The Nigerian study found significant psychosocial correlates of alcohol consumption, as well.

The significant results, in Table 2, regarding correlates of alcohol consumption compared with previous studies as well. The association between alcohol consumption and religious affiliation was regarded to be part of the many cultural, religious and social practices (Ssebunnya et al., 2020). That could explain the significance of the association between alcohol consumption and religious affiliation in this study. The finding was that teachers affiliated with Islamic faith reported a lower likelihood of alcohol consumption as compared to the rest of the religious affiliations attributable to the clemency of other religions regarding alcohol consumption. Indeed, alcohol rituals remain prominent and as part of the Christian denominations, supported by the gospel accounts of Jesus turning water into alcohol (Martin, 2021). To date, the present-day European monks support themselves by brewing beer, and the use of wine among some contemporary communion services is contrary to Islam (Odejide & Ibadan, 2006; Peer, 2017). Nevertheless, the Roman Catholic denomination shows more clemency to alcohol consumption within the Christian faiths than other faiths (Braun, Weinland, Kornhuber, & Lenz, 2018). For example, in the United States, Christians, particularly Catholics, are more likely than Protestants to say they have consumed alcohol in the past 30 days (Schwadel, 2019). In line with the findings in this study, it was earlier reported that alcohol use stemmed at the center of the Catholic experience during Eucharist that begins with bread and wine compared to Islam (Slade, 2020). Conversely, in contradiction to the present study findings and to most of the literature, Catholics viewed their religion as promoting abstinence and still were drinkers and high religious commitment was associated with increased risk for alcohol use disorders (Luczak et al., 2014). To an extent, some religions could be more protective of alcohol consumption than others (Lucchetti, Koenig, Pinsky, Laranjeira, & Vallada, 2013).

Other studies reported more alcohol consumption in non-religious than in religious groups (Najjar, Young, Leasure, Henderson, & Neighbors, 2016). Somehow, the findings by Najjar and others were in consonance with those in this study, that specific religion consumed alcohol more than others did. Contrary to the present study findings, there was no significant association between religion and alcohol consumption among teachers in Nigeria (Babalola et al., 2017).

As regards gender, this study established significant gender differences in alcohol consumption. Male teachers are more likely to consume alcohol than their female counterparts. Again, these findings compare with (Babalola et al., 2017) that established a higher likelihood of alcohol consumption among male secondary school teachers. Indeed, in previous studies conducted in Nigeria and other countries, hazardous alcohol consumption was significantly associated with the male gender (Schwadel, 2019). Similarly, findings from the Substance Abuse & Mental Health Services Administration show that male teachers were more likely to abuse illicit drugs or alcohol than female teachers (Bush & Lipari, 2016). However, Kilpatrick (2015) reasoned that female teachers would be having better reasons for getting into alcohol consumption but fails to explain why male teachers consumed more than females. These results could be attributed to the pervasive gender norms regarding alcohol consumption. It happens that the traditional customs favour males more than females drinking. As a result, males could find drinking comfortable and socially acceptable than females. Generally speaking, gender and religious affiliation could have profound contribution to drinking and non-drinking behaviours among many populations and in many contexts.

5. Conclusions and Practical Implication

The level of alcohol consumption among secondary school teachers was generally high, particularly among males as compared to females and other religious denominations other than Islam. Particularly, Roman Catholics exhibited high levels of alcohol consumption. Thus, devising strategies for decreasing alcohol consumption among teachers could be of importance. Focus should be placed on gender and religious affiliation in order to reduce alcohol consumption and enhance the teachers' professional effectiveness in the long run.

6. Author Contributions

AB conceptualized the study concept. DZA and AR guided and participated in the conceptualization of the study concept. AB collected the data with guidance and monitoring of DZA, and AR. AB and AR participated in data analysis. AB drafted the manuscript with the guidance of DZA and AR. AR reviewed and participated in fixing the changes in the manuscript for submission.

7. Acknowledgments and Conflict of interest

The authors thank the teachers that participated in the study, despite the COVID-19 challenges. The authors declare no competing conflict of interest. No external funding was received for this study.

References

- Babalola, E., Ighoroje, M., Awhangansi, S., & Ayilara, O. (2017). Psychosocial correlates of hazardous alcohol use among secondary school teachers in Southwestern Nigeria. *International Journal of Clinical Psychiatry*, 5(1), 16-23. <https://doi.org/10.5923/j.ijcp.20170501.03>
- Bouchery, E. E., Harwood, H. J., Sacks, J. J., Simon, C. J., & Brewer, R. D. (2011). Economic costs of excessive alcohol consumption in the US, 2006. *American journal of preventive medicine*, 41(5), 516-524. <https://doi.org/10.1016/j.amepre.2011.06.045>
- Braun, B., Weinland, C., Kornhuber, J., & Lenz, B. (2018). Religiosity, guilt, altruism and forgiveness in alcohol dependence: Results of a cross-sectional and prospective cohort study. *Alcohol and Alcoholism*, 53(4), 426-434. <https://doi.org/10.1093/alcalc/agy026>
- Bush, D. M., & Lipari, R. N. (2016). Substance use and substance use disorder by industry. <https://www.ncbi.nlm.nih.gov/books/NBK343542/>
- Diepeveen, S., Ling, T., Suhrcke, M., Roland, M., & Marteau, T. M. (2013). Public acceptability of government intervention to change health-related behaviours: a systematic review and narrative synthesis. *BMC public health*, 13(1), 1-11. <https://doi.org/10.1186/1471-2458-13-756>
- Griswold, M. G., Fullman, N., Hawley, C., Arian, N., Zimsen, S. R., Tymeson, H. D., . . . Salama, J. S. (2018). Alcohol use and burden for 195 countries and territories, 1990–2016: a systematic analysis for the Global Burden of Disease Study 2016. *The Lancet*, 392(10152), 1015-1035. [https://doi.org/10.1016/S0140-6736\(18\)31310-2](https://doi.org/10.1016/S0140-6736(18)31310-2)
- International Center for Alcohol Policies (ICAP). (2008). International Center for Alcohol Policies (ICAP) (pp. Access: <https://cwhn.ca/en/node/43441>). USA: Washington
- Luczak, S. E., Prescott, C. A., Dalais, C., Raine, A., Venables, P. H., & Mednick, S. A. (2014). Religious factors associated with alcohol involvement: Results from the Mauritian Joint Child Health Project. *Drug and alcohol dependence*, 135, 37-44. <https://psycnet.apa.org/doi/10.1016/j.drugalcdep.2013.10.028>
- Martin, C. (2021). *The Work of the Holy Spirit in Jesus' Life and Ministry*. Regent University.
- Meneses-Gaya, C. d., Zuardi, A. W., Loureiro, S. R., & Crippa, J. A. S. (2009). Alcohol Use Disorders Identification Test (AUDIT): An updated systematic review of psychometric properties. *Psychology & Neuroscience*, 2(1), 83-97. <http://dx.doi.org/10.3922/j.psns.2009.1.12>
- Muhaise, H., & Kareeyo, M. (2017). Electronic Health Information Systems Critical Implementation Issues (E-HMIS): District Health Information Software Version. 2 in the Greater Bushenyi, Uganda. *American Scientific Research Journal for Engineering, Technology, and Sciences (ASRJETS)*, 34(1), 205-212.
- Odejide, O. A., & Ibadan, N. (2006). Alcohol policies in Africa. *African Journal of Drug and Alcohol Studies*, 5(1), 27-39.
- Peer, N. (2017). There has been little progress in implementing comprehensive alcohol control strategies in Africa. *The American journal of drug and alcohol abuse*, 43(6), 631-635. <https://doi.org/10.1080/00952990.2017.1316986>
- Rehm, J., Baliunas, D., Borges, G. L., Graham, K., Irving, H., Kehoe, T., . . . Poznyak, V. (2010). The relation between different dimensions of alcohol consumption and burden of disease: an overview. *Addiction*, 105(5), 817-843. <https://doi.org/10.1111/j.1360-0443.2010.02899.x>
- Rukundo, A., & Magambo, J. (2013). Professional impotence: Impact of alcoholism on secondary school teachers in Uganda. *The International Journal of Alcohol and Drug Research*, 2(2), 69-74. <https://doi.org/10.7895/ijadr.v2i2.104>
- Saunders, J. B., Aasland, O. G., Babor, T. F., De la Fuente, J. R., & Grant, M. (1993). Development of the alcohol use disorders identification test (AUDIT): WHO collaborative project on early detection of persons with harmful alcohol consumption-II. *Addiction*, 88(6), 791-804. <https://doi.org/10.1111/j.1360-0443.1993.tb02093.x>
- Schwadel, P. (2019). *Americans' drinking habits vary by faith*. Pew Research Center
- SESEMAT Bushenyi Region. (2020). *School remittances*. Bushenyi: Education Department of Bushenyi.

- Slade, S. (2020). What is the relationship between Catholics and alcohol? , from Accessed: <https://www.americamagazine.org/faith/2020/01/07/what-relationship-between-catholics-and-alcohol>
- Ssebunnya, J., Kituyi, C., Nabanoba, J., Nakku, J., Bhana, A., & Kigozi, F. (2020). Social acceptance of alcohol use in Uganda. *BMC psychiatry*, 20(1), 1-7. <https://doi.org/10.1186/s12888-020-2471-2>
- Sturm, R., An, R., Maroba, J., & Patel, D. (2013). The effects of obesity, smoking, and excessive alcohol intake on healthcare expenditure in a comprehensive medical scheme. *South African Medical Journal*, 103(11), 840-844. <http://dx.doi.org/10.7196%2FSAMJ.7260>
- Watts, W. D., & Short, A. P. (1990). Teacher drug use: A response to occupational stress. *Journal of drug education*, 20(1), 47-65. <https://doi.org/10.2190/xww0-7fbh-fxvb-2k3c>
- World Health Organization. (2014). Management of Substance Abuse Unit. Global status report on alcohol and health, 2014. *World Health Organization*.
- World Health Organization. (2019). *Global status report on alcohol and health 2018*: World Health Organization.