



THE ASSOCIATION OF ADULT MUSLIMS' SPIRITUALITY WITH ALCOHOLISM: A CROSS-SECTIONAL STUDY

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ABSTRACT

Alcohol consumption among adolescents and young adults continues to increase. Excessive alcohol consumption can cause poisoning or overdose as well as ventricular rhythm disturbances and fatal tachyarrhythmias, which can increase the risk of sudden death. Objective: This study aims to determine the relationship between Muslims' spirituality and alcohol consumption. Cross-sectional design on 100 Muslims who consumed alcohol, selected by using the total sampling technique. Data was collected in April 2025 through online questionnaires by using Google Forms. The Daily Spiritual Experience Scale (DSES) (Cronbach alpha 0.94), Muslim Religious Practices (Cronbach alpha 0.80), and the Alcohol Use Disorders Identification Test (AUDIT) (Cronbach alpha 0.86) are the instruments for the questionnaire. The collected data were analyzed using the Pearson Test ($\alpha \leq 0.05$). This study shows that 62% of the population has moderate spirituality, 64% of the population has moderate Muslim spirituality, and 54% of the population were categorized as alcohol dependent. There was a strong correlation between spirituality and alcohol consumption habits ($p=0.000$, $r=0.412$). There was a very strong correlation between Muslim spirituality and alcoholism ($p=0.000$, $r=0.927$). These findings indicate that the lower the personal level of spirituality, the higher an individual's tendency to consume alcohol excessively.

Keywords: alcohol; muslim spirituality; spirituality

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INTRODUCTION

Alcohol consumption is a significant social problem in different parts of the world, including Indonesia. Data shows that alcohol consumption rate continues to rise, especially among adolescents and young adults. This phenomenon raises concerns because it can impact individuals' physical and mental health as well as broader social impacts. Worldwide, there have been 2.6 million deaths caused by alcohol consumption in 2019, of 2 million affecting men and 0.6 million affecting women. Mortality rates due to alcohol consumption in the European and African Regions reached 52.9 deaths and 52.2 deaths per 100,000 people, respectively (WHO, 2021). 83.1% of US citizens are regular alcohol consumers, either currently or previously, while in Europe this figure reaches 76.6% and in Africa, only 42.6%. Women tend to consume alcohol less frequently and have lower rates of binge drinking. Alcohol consumption trends indicate that related disorders are likely to increase, as per capita consumption rose by 2.9% from 2019 to 2020. More than 3 million people die from harmful alcohol consumption, with nearly 19% of all alcohol-related deaths worldwide caused by cardiovascular disease (Kilcoyne & Assaassa, 2023).

Based on data from the Central Statistics Agency (BPS), per capita alcohol consumption among Indonesians aged over 15 years old in 2022 was 0.33 liters per year. This figure decreased by 8.33 % compared to 0.36 liters in 2021. In urban areas, per capita alcohol consumption in 2022 was 0.18 liters, unchanged from 2021. In rural areas, per capita alcohol consumption in 2022 was 0.53 liters, decreased from 0.60 liters in 2021. The province with the highest proportion of alcohol drinkers was East Nusa Tenggara, at 15.2 %. The provinces with the lowest proportion of alcohol drinkers

were Jambi, Aceh, South Kalimantan, Bengkulu, South Sumatra, West Sumatra, and Riau, with a prevalence number of less than 1 (BPS, 2023).

Excessive alcohol consumption can be a trigger for such crimes as rape, theft, assault, extortion, domestic violence, and murder, which can affect an individual's psychological and spiritual well-being (Ilham, 2020). Prasasti (2017) states that alcohol may affect people from different social, economic, or age statuses. Parents and adults, as well as teenagers, are often involved in consuming alcohol. Most of those who frequently consume alcohol are teenagers and adults, regardless of their residential areas, economic status, and education level (Banat, 2017).

Empirical evidence from studies on male adolescents suggests that the consumption of alcoholic beverages is significantly associated with an increased propensity for high-risk behaviors, such as tobacco use, illicit drug abuse, and premarital sexual activity, all of which may adversely affect overall quality of life (Pihahay & May, 2022). Wijaya's (2016) research stated that the high alcohol consumption in Keramas Village, Blahbatuh District, Gianyar Regency is influenced by the level of knowledge, attitudes, parenting patterns, peers, and social environment. This is in line with Lito's (2022) which shows that curiosity about alcohol, environmental influences, and the desire for being cool in the social milieu are some of the factors underlying alcohol consumption in late adolescents in Surakarta. Amalia's (2024) states that the intensity of alcohol consumption varies among individuals, this difference is influenced by factors including personal knowledge about the dangers of consuming alcohol, economic, family, environmental, and spiritual factors, and so on.

Another factor influencing alcohol drinking habits is an individual's spirituality. A study indicates that alcoholics rarely perform such religious commands as praying, fasting during Ramadan, helping others in need, and actively participating in social activities. This is in line with Putri's (2018) that consuming alcohol causes a tendency to have higher aggressive behavior. Alcoholism often poses negative behaviors, such as abuse, murder, extortion, mob violence, vandalism, fights, rape, and robbery, due to the influence of alcohol (Ilham, 2020).

Spirituality can serve as a protective factor that can reduce the tendency to consume alcohol, although other factors may also influence this behavior. Solutions to address this issue can involve increasing spiritual awareness through religious education programs and community activities. The practice of dhikr (remembrance of God) has also been shown to be effective in helping individuals experiencing alcoholism by providing a sense of calm and increasing discipline in practicing religious teachings (Ilham, 2020).

Religiosity and spirituality can help individuals avoid alcohol consumption, but they frequently highlight the negative impacts of alcohol only (Amalia, 2024). Kusuma et al. (2024) shows that religiosity and spirituality can serve as protective factors against alcohol consumption. People with high levels of spirituality tend to avoid negative behaviors, including alcohol consumption. An individual's level of spirituality can be closely related to the level of alcoholism. Individuals with high spirituality tend to adopt values that prioritize health and well-being, making them more likely to avoid or limit alcohol consumption (Amalia, 2024).

Based on the description above, there has not been a study identifying the spirituality of Muslims versus alcoholism, so researchers are interested in conducting research on the relationship between the level of Muslim spirituality and the habit of drinking alcohol. This study aims for determining the relationship between the spirituality of adult Muslims and alcohol drinking habits.

METHOD

The Instrument of this study uses the Daily Spiritual Experience Scale (DSES) questionnaire. Religious Practices of Muslims, and the Alcohol Use Disorders Identification Test (AUDIT). Daily Spiritual Experience Scale (DSES) questionnaire is a questionnaire to measure spirituality adopted

from Underwood & Teresi, (2002) which has been translated into Indonesian by Riyanti (2021). The DSES questionnaire is a type of closed questionnaire consisting of 16 statement items, consisting of 4 indicators with options to choose include: never, once in a while, some time, almost every day, every day, several times every day. The question indicators consist of transcendental (10 questions), environmental (2 questions), communal (2 questions), and personal (2 questions), with 35 for the lowest score and 65 for the highest score. The scoring results are divided into 3 categories including low, medium, and high. The validity and reliability tests show that this questionnaire is valid and reliable, with a Pearson r value of $0.410 > r$ table 0.352 and a Cronbach alpha (α) value of 0.94 .

The Muslim Religious Practices Questionnaire is a closed-ended questionnaire adopted from Amir (2021) to measure the level of Muslims' religiosity. It contains 13 items covering 3 indicators: belief (10 questions), experience (2 questions), and practice (1 question), with options to choose from, including often, sometimes, rarely, never, every day, and several times a day. The lowest score is 13 and the highest is 38, with the total score categorized into: low (01-17), medium (18-37), and high (38-55). The validity and reliability tests show that this questionnaire is valid and reliable, the Pearson correlation r value is $0.518 > r$ table 0.455 , and the Cronbach alpha (α) value is 0.80 .

Alcohol Use Disorders Identification Test Questionnaire (AUDIT) is a questionnaire containing alcoholism-related questions adopted from Lawford et al., (2012) Which has been translated into Indonesian by Prasetyo et al. (2022). Alcohol Use Disorders Identification Test Questionnaire (AUDIT) is closed questionnaire, with 10 questions consisting of 5 indicators covering dependency (1 question), symptoms (2 questions), dangerous (2 questions), use (2 questions), alcohol (3 questions) with total score is categorized into: low (0-7), medium (8 - 15), and high (15 - 20) and dependency (>20). with options to choose: "never", "one" No once or less", "2 to 4 times a month", "2 to 3 times a week". The validity and reliability tests show that this questionnaire is valid and reliable, with Pearson's r value. correlation $0.430 > r$ table 0.352 and Cronbach's value alpha (α) 0.86 .

The researcher selected the respondents through information from local village officials. After researchers get appropriate respondents with inclusion and exclusion criteria, researchers contact the candidate via personal WhatsApp for an introduction and to convey the purpose and objectives of the study. If the candidates are willing, then researchers have them sign a consent form via Google Forms. By clicking "agree," respondents will then complete a questionnaire. The results will be tabulated and subjected to statistical testing.

Data processing is carried out with SPSS version 23. The research data scale is an interval; therefore normality test was initially performed before conducting statistical tests. The results of the Kolmogorov-Smirnov test showed that all data groups on spirituality levels, Muslim spirituality, and alcohol drinking habits were normally distributed ($p = 0.200$, $p = 118$, $p = 182$). Therefore, to analyze the relationship between variables, the Pearson test was used with an error rate of 0.001 . $\alpha \leq 0.05$.

This study has been declared ethical by the Ethics Committee of Muhammadiyah University of Lamongan, no 118 /EC/KEP-S1/03/25 issued on March 21, 2025. Ethics permit ensures that the study has been done in accordance with ethical principles, including giving clear information, consent from respondents (informed consent), guarantee of data confidentiality, as well as protection to participants of this study in accordance with prevailing laws.

RESULT

Of the total of 100 people, all of whom were male and Muslim, no respondents dropped out. Table 1 outlines that the average respondent is 21-30 years old, 58 people are single, and 53 respondents have a high school education.

Table 1.
Respondent Demographic Data (n=100)

Variables	Category	f	%
Gender	Man	100	100
Religion	Islam	100	100
Age	14 – 20	36	36
	21 – 30	41	41
	31 – 40	10	10
	41 – 50	7	7
	51 – 61	6	6
Marital status	Not married yet	58	58
	Marry	39	39
	divorced	3	3
last education	Junior High School	30	30
	Senior High School	53	53
	Bachelor	17	17

Table 2.
Overview of the Residents’ Spirituality and Muslims’ Spirituality of Village X (N=100)

Variable	Category	f	%	Mean ± S.D	Min - Max
Residents’ spirituality	Low	37	37	45.76 ± 8.00	24 – 65
	Moderate	62	62		
	High	1	1		
Muslims’ spirituality	Low	35	35	22 ± 6.31	13 - 38
	Moderate	64	64		
	High	1	1		

Table 2 outlines that the residents’ spirituality of Village X Regency Lamongan, of whom 62 respondents have moderate spirituality. 1 respondent has low spirituality, and a small number of respondent has low spirituality 1 person (1%). The minimum score is 24 and the maximum score is 65, with an average score of 45.76. Most respondents with moderate spirituality, 64 people (64%), and a small number of respondents have high spirituality, 1 person (1%). The minimum score is 13 and the maximum score is 38, with an average score of 6.31.

Table 3.
Level of Respondents’ Alcoholism in Village X (N=100)

Category	n	%	Mean ± S.D	Min - Max
Low	1	1	19.84 ± 0.572	8 - 33
Currently	25	25		
High	20	20		
Dependent	54	54		

Table 3 outlines that the majority of respondents are alcohol dependent, 54 people (54%), and a small number of respondents have low alcoholism, 1 person (1%). The minimum score is 8 and the maximum score is 33, with an average score of 19.84.

Table 4.
Connection Level Spirituality with Habit Drink Alcohol (N=100)

Level Spirituality	Alcoholism						Total	
	Currently		high		Dependent		F	%
	F	%	F	%	F	%		
Low	3	8.1	9	24.3	25	67.6	37	100
Moderate	17	27.4	17	27.4	28	45.2	62	100
High	1	100	0	0	0	0	1	100
Total	21	21.0	26	26.0	53	53	100	100

Test Pearson r= 0.416

P=0.000

Table 4 explains the Pearson correlation results, which show a strong relationship between spirituality and alcoholism with p = 0.000 and r = 0.416. Respondents with a low level of spirituality are alcohol dependent (67.6%), respondents with a moderate level of spirituality are alcohol dependent (45.2%), and respondents with high spirituality are moderately alcohol dependent (1 person).

Table 5.
Correlation of Muslims' Spirituality vs Alcoholism (N=100)

Muslim spirituality level	Alcohol drinking habits								Total	
	Low		Currently		Tall		Dependence		f	%
	f	%	f	%	f	%	f	%		
Low	0	0	4	11.4	8	22.9	23	65.7	35	100
Moderate	0	0	21	32.8	12	18.8	31	48.4	64	100
High	1	100	0	0	0	0	0	0	1	100
Total	1	1.0	25	25.0	20	20.0	54	54.0	100	100

Pearson test $r = 0.927$

$P = 0.000$

The Pearson test in Table 5 shows a very strong relationship between Muslims' spirituality and alcoholism ($p = 0.000$, $r = 0.927$). Respondents with low spirituality are alcohol dependent (65.7%), respondents with high spirituality are moderately alcohol dependent (48.4%), and respondents with high spirituality are alcohol independent (100%).

DISCUSSION

Studies show a strong association between spirituality and alcoholism and a very strong relationship between Muslims' spirituality and alcoholism, which means that the higher an individual's spirituality, the lower the level of alcoholism, and vice versa, the lower an individual's spirituality, the higher the level of alcoholism. Amalia (2024) support this finding, showing that religiosity and spirituality can influence Alcoholism. Individuals with high spirituality tend to adopt values that prioritize health and well-being, making them more likely to avoid or limit alcohol consumption.

Studies reveal that the spiritual behavior of alcoholics involves practicing religious commands and social values such as prayer, fasting during Ramadan, helping those in need, and actively participating in social activities. In contrast, previous studies found that consuming alcohol causes a person to have a higher tendency toward aggressive behavior (Putri, 2018). Alcoholism frequently triggers negative behaviors, such as abuse, murder, extortion, mob violence, vandalism, fights, rape, and robbery, due to the influence of alcohol (Ilham, 2020).

Based on the study, it shows that 62% respondents are categorised as moderate spirituality and 1% respondents are categorised as high spirituality. Wardoyo's (2025) support this study showing that most alcoholic respondents in Pasirian District have poor religiosity. People with a moderate spirituality tend to be less convinced of their religion and spirituality, and do not feel that religion is important or necessary in their lives.

Spirituality is often associated with positive behaviors, such as good morals. Religious individuals tend to reflect a closeness to God, encouraging individuals to obey His commands by carrying out obligations and avoiding prohibitions, both the rituals and consequences. They also consume alcohol less frequently than agnostics (Kusuma et al., 2024). This study reveals that 64% of respondents are categorised as moderate spirituality, and 1% respondents are categorised as high spirituality. Refnandes et al. (2023) supports this study, showing that the spirituality of students at Kosgoro 1 Vocational High School of Padang who drink alcohol mostly possess high spirituality, and almost half of them possess poor spirituality.

Spirituality or religiosity is generally negatively associated with alcohol consumption. Those with high spirituality tend to reduce or prevent alcohol. However, social, psychological, and cultural environmental factors also play a significant role in alcohol consumption, so not all individuals with high spirituality are completely free from alcohol. Moral awareness and personal responsibility deriving from spirituality can be an important foundation for decision-making regarding alcohol consumption (Kusuma et al., 2024).

This study reveals that 54% of respondents are addicted to alcohol, and 1% Respondents are categorised as low alcoholics. Alcoholism has recently become more prominent in society. The

biggest concern so far is alcohol abuse among the public. Many reasons for consuming alcohol include the influence of social milieu, hanging out with friends frequently drinking alcohol as an escape to their problems. They think that consuming alcohol will keep them away from problems (Rori, 2015). Additionally, lack of self-confidence, curiosity about alcohol as a means to solve problems, lack of understanding of the dangers of alcohol, broken homes, and unsupportive environment may lead to alcohol addiction (Nurjannah, 2021).

The excessive impact of alcohol consumption is a decrease in spiritual intelligence. Individuals who consume alcohol no longer care about religious obligations, show tolerance towards others, and are unable to relate well to their surroundings. Yet, adolescence is a time when spiritual intelligence is honed. Spiritual intelligence will serve as a foundation for planning the future (Fahlin, 2019).

Epidemiological research highlights a multifaceted association between different aspects of alcohol consumption, particularly drinking patterns over the life course, and cardiovascular disease outcomes (Roerecke, 2021). Drinking alcohol can increase the risk of arrhythmias, both with and without heart disease, as alcohol alters autonomic control of heart function, resulting in increased catecholamine circulation after drinking alcohol. The accelerated response to catecholamines may contribute to the density and affinity of lymphocytes. Adrenergic stimulation can trigger increased automatic ventricular activity, arrhythmia. Alcohol not only produces adrenergic stimulation, but also damages the parasympathetic. Alcohol can increase susceptibility to ventricular rhythm disturbances and fatal alcohol-induced tachyarrhythmias, which can cause the risk of sudden death in alcoholics (Kilcoyne & Assaassa, 2023) .

Beyond the aforementioned adverse effects, empirical evidence also suggests that limited alcohol consumption may confer certain health benefits. Epidemiological investigations and the most recent meta-analytical evidence have substantiated that individuals who consume alcohol in moderation exhibit a decreased likelihood of developing coronary artery disease and experiencing myocardial infarction, in comparison to those who refrain from alcohol consumption (Hoek et al., 2022). In a cohort of Chinese adults, light alcohol consumption—defined as approximately 25 grams per week—was significantly associated with a lower incidence of cardiovascular disease, malignancies, and all-cause mortality, in comparison to both non-drinkers and individuals with higher levels of alcohol intake (Zhang et al., 2021).

A person with good spirituality is characterized by an awareness of God's existence and obeying His commands with love and sincerity, having fundamental meaning and objectives in life, having a sense of compassion for fellow creatures and nature, and always feeling grateful and happy. Spirituality plays a role in shaping individual behavior; people with high religiosity usually have strong moral guidelines, which can reduce involvement in risky sexual behavior (Rahmawati, 2023). However, for individuals with low spirituality, religious teachings may not have a significant influence on their behavior. Lack of attachment to the moral values taught by religion can make individuals more vulnerable to risky behavior, including drinking alcohol. Therefore, education that integrates health and religion can increase awareness of the importance of avoiding alcohol (Wardoyo, 2025). The limitation of the study is the data collection was used Google Forms, so respondents' honesty cannot be guaranteed. Furthermore, researchers were unable to clarify any inaccurate answers due to confidentiality requirements.

CONCLUSION

There is a strong correlation between spirituality and alcoholism, and there is a powerful correlation between Muslims' spirituality and alcoholism. It is concluded that the higher the spirituality of a person, the lower the level of alcoholism, and vice versa, the lower the spirituality of a person, the higher the alcoholism. Therefore, further study is required to improve spirituality and Muslims' spirituality to prevent and or stop individuals from consuming alcohol, assuming that the higher spirituality and Muslims' spirituality, the lower the tendency to consume alcohol excessively.

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