



The Interplay of Alcohol, Emotion, and Aggression

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Abstract

Alcohol affects emotions and aggression by lowering self-control and increasing impulsivity. It weakens the brain's ability to regulate emotions, making people more likely to react strongly to situations. While some may feel relaxed, others can become easily irritated or aggressive. Alcohol also impairs judgment, leading to risky behaviors and conflicts. Higher consumption increases aggression, especially in stressful or provoking situations. Additionally, alcohol reduces empathy, making it harder to understand others' feelings. These effects vary based on personality, environment, and alcohol tolerance.

Understanding alcohol's impact on emotions and aggression can help in preventing violence and making safer choices. The purpose of this research is to investigate the effect of consuming alcohol on our feelings and factors leading to aggression. Around 100 participants from the working population were in it. The Alcohol Use Disorder Identification Test (AUDIT) published by WHO, the Emotion Regulation Questionnaire (ERQ) by Gross, J.J., John, O.P. (2003), and the Aggression Scale by Dr. G.P Mathur C Dr. Raj Kumari Bhatnagar.

Keywords: Alcohol, Emotion Regulation, Aggression

1.Introduction

Alcohol consumption has been historically linked to notable psychological and behavioral alterations, affecting emotional regulation and increasing the propensity for aggressive actions. While moderate intake may foster relaxation and social connections, excessive drinking can hinder cognitive abilities, diminish self-control, and amplify emotional responses, frequently resulting in aggressive incidents. The interplay between alcohol, emotions, and aggression is intricate, and shaped by a variety of factors such as personal characteristics, social contexts, and neurobiological processes.

Alcohol impairs the functioning of the prefrontal cortex, which diminishes an individual's capacity to manage emotions and make sound judgments. This dysfunction, coupled with intensified negative feelings like anger and frustration, creates a precarious situation that can lead to aggressive conduct. Furthermore, the theory of "alcohol myopia" suggests that.

Alcohol restricts an individual's attention, increasing the likelihood of impulsive reactions to immediate emotional triggers while disregarding potential long-term repercussions.

1.1 Alcohol

Alcohol consumption has played a significant role in various cultures for centuries, often being used for social, religious, and recreational purposes. However, alcohol is a psychoactive and toxic substance with dependence-producing properties, and its consumption is linked to severe health and societal consequences. Excessive alcohol consumption poses a significant public health challenge, leading to various physical, mental, and social issues, such as heightened emotional instability and increased aggressive tendencies.

The World Health Organization (WHO) reported that alcohol consumption caused approximately 2.6 million deaths globally in 2019, with men accounting for 2 million of these deaths and women for 0.6 million. The WHO European and African Regions had the highest alcohol-related mortality rates, at 52.9 and 52.2 deaths per 100,000 individuals, respectively. Young adults aged 20–39 were particularly affected, with 13% of alcohol-attributable deaths occurring in this age group. Furthermore, it is estimated that 400 million people aged 15 and older struggle with alcohol use disorders, including 209 million suffering from alcohol dependence.

Despite progress—such as a 20.2% global reduction in alcohol-attributable deaths per 100,000 people from 2010 to 2019—challenges remain. While many countries have developed national alcohol policies and implemented excise taxes, there is continued interference from the alcohol industry in policy development. Furthermore, access to treatment for alcohol use disorders remains limited, with less than 14% of affected individuals receiving necessary care in most countries.

The connection between alcohol consumption, emotional regulation, and aggression is a critical area of study. Alcohol impairs cognitive functioning, lowers inhibitions, and intensifies emotional responses, often leading to aggressive behaviors. The "alcohol myopia" theory suggests that intoxicated individuals focus narrowly on immediate emotional cues, reducing their ability to process long-term consequences. This can escalate conflicts and contribute to violent behaviors in both personal and social settings.

1.2 Emotion

Emotions play a fundamental role in human cognition, behavior, and social interactions. They influence decision-making, perception, and physiological responses, shaping how individuals navigate their environment. Emotions are complex psychological states involving subjective experiences, physiological arousal, and behavioral expressions. While they serve adaptive functions—such as signaling danger or fostering social bonds—dysregulated emotions can contribute to mental health disorders, aggression, and impaired interpersonal relationships.

Research in psychology and neuroscience has explored how emotions arise, their regulation mechanisms, and their impact on behavior. The James-Lange, Cannon-Bard, and Schachter-Singer theories present distinct interpretations of how emotions are processed. Furthermore, emotional intelligence, which encompasses the capacity to identify, comprehend, and regulate emotions, is vital for achieving success both personally and professionally.

1.3 The interplay of alcohol on emotion

Alcohol affects how people control their emotions, often making feelings stronger while reducing self-control. It changes brain chemicals like GABA and dopamine, which can create feelings of relaxation and happiness. However, drinking too much can lead to mood swings, impulsive actions, and stronger negative emotions like anger, sadness, or anxiety.

The "alcohol myopia" theory explains that alcohol narrows a person's focus, making them react more to immediate emotions while ignoring long-term consequences. This can make both good and bad emotions more intense. Alcohol also weakens the part of the brain that helps with self-control, increasing the chances of aggressive or risky behavior.

1.4 Aggression

Aggression is a multifaceted behavior defined by actions aimed at causing harm or instilling fear in others, whether through physical or verbal means. It is shaped by a combination of biological, psychological, and social influences. While aggression can sometimes serve as a defensive or survival mechanism, uncontrolled aggression often leads to violence, conflict, and negative social consequences.

Studies indicate that aggression is associated with specific brain regions, including the amygdala and prefrontal cortex, as well as neurotransmitters like serotonin and dopamine. Psychological theories, including the frustration-aggression hypothesis and social learning theory, explain how aggression develops due to personal experiences and environmental influences. Factors such as stress, substance use, and emotional dysregulation can further increase aggressive tendencies.

1.4 Interplay of Alcohol on Aggression

Alcohol is a key factor in aggressive behavior, as it impairs cognitive function and lowers self-control. By affecting brain chemicals like GABA, dopamine, and serotonin, alcohol reduces inhibitions and increases impulsivity, making people more likely to act aggressively. It also weakens the prefrontal cortex, which is responsible for decision-making and emotional regulation, leading to poor judgment and reckless actions.

The "alcohol myopia" theory explains that alcohol narrows a person's focus, making them react strongly to immediate emotions or threats while ignoring long-term consequences. This can lead to aggressive outbursts, especially in stressful or confrontational situations. Additionally, alcohol increases emotional instability, making anger or frustration more intense, which further fuels aggression.

2. Methods

2.1 Subjects

The subjects consisted of 100 working males. Subject age ranged from mid-20s to older, generally around later adulthood.

2.2 Variables of the Research

The independent variable of the research is alcohol range, and the dependent variable is the emotion that deals with the repression and suppression, and aggression outbursts.

2.3 Instrument

a) The Alcohol Use Disorders Identification Test (AUDIT), developed by the WHO, is a 10-item screening tool designed to evaluate alcohol consumption, drinking patterns, and alcohol-related issues. It includes both a clinician-administered version and a self-report version.

b) The Emotion Regulation Scale is a modified version of the Emotion Regulation Questionnaire (ERQ) developed by Gross in 1998, designed to measure strategies such as cognitive reappraisal and suppression. In 2007, Gross recommended expanding the measurement of antecedent-focused strategies to include not only cognitive reappraisal but also situation selection, situation modification, attention deployment, and suppression. Researchers subsequently created 50 items based on the conceptual framework of these factors, with the items drafted in Indonesian. Responses are scored on a scale ranging from "not very suitable" (1), "not suitable" (2), "rather suitable" (3), "suitable" (4), to "very suitable" (5), with adjustments for unfavorable items. Total scores reflect the extent of individuals' use of emotion regulation strategies. After testing, 12 items with low discriminatory power were removed, leaving 38 valid items on the scale. Reliability testing of the scale yielded alpha indices of $\alpha = 0.685$ for strategy selection, $\alpha = 0.712$ for situation modification, $\alpha = 0.571$ for attentional deployment, $\alpha = 0.716$ for cognitive reappraisal, and $\alpha = 0.780$ for suppression.

c) Aggression Scale by Dr. Guru Pyari Mathur (Raebareli) and Dr. Raj Kumari Bhatnagar (Agra) is a psychological assessment tool that measures an individual's level of aggression by presenting a 55 of statements which the person rates on a 5 -5-point Likert scale (strongly agree to strongly disagree). It is designed to evaluate various aspects of aggression across different situations, with the key feature being its focus on both positive and negative worded statements to capture a comprehensive view of aggressive behaviors.

2.4 The procedure of the Research

Data collection was done through an online form using the scale of AUDIT, Emotion Regulation Scale, and Aggression Scale. The data was analyzed through correlation methods statistics with stepwise method. The computation was carried out using the SPSS program.

3. Result

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
AUDIT_SCORE	100	0	21	3.56	5.997
AGGRESSION_SCORE	100	65	247	197.14	38.368
REAPPRAISAL_SCORE	100	6	42	27.64	9.334
SUPPRESSION_SCORE	100	4	28	19.69	6.465
Valid N (listwise)	100				

Correlation was done between AUDIT and ERQ. We find a negative correlation between alcohol and reappraisal (— .375). Then, we find a positive correlation between aggression and reappraisal (.548) and a positive correlation between aggression and suppression (.400).

All three are significant at 0.01 level.

Correlations					
		AUDIT_SCORE	AGGRESSION_SCORE	REAPPRAISAL_SCORE	SUPPRESSION_SCORE
AUDIT_SCORE	Pearson Correlation	1	-0.162	-.375**	0.008
	Sig. (2-tailed)		0.107	0	0.934
	N	100	100	100	100
AGGRESSION_SCORE	Pearson Correlation	-0.162	1	.548**	.400**
	Sig. (2-tailed)	0.107		0	0
	N	100	100	100	100
REAPPRAISAL_SCORE	Pearson Correlation	-.375**	.548**	1	.636**
	Sig. (2-tailed)	0	0		0
	N	100	100	100	100
SUPPRESSION_SCORE	Pearson Correlation	0.008	.400**	.636**	1
	Sig. (2-tailed)	0.934	0	0	
	N	100	100	100	100
** The correlation is statistically significant at the 0.01 level (two-tailed).					

4. Conclusion

This study explored the connections between alcohol consumption, aggression, and emotional regulation strategies, with a focus on cognitive reappraisal and impression management. The findings indicate a negative correlation between alcohol use and cognitive reappraisal, suggesting that individuals who consume more alcohol may struggle with effectively constructively reinterpreting emotional experiences. This aligns with prior research indicating that alcohol impairs higher-order cognitive functions, including self-regulation and emotional control.

Additionally, the study found a positive correlation between aggression and reappraisal, implying that individuals with higher aggression levels may still engage in reappraisal but possibly in a maladaptive manner, such as justifying or reinforcing aggressive behavior rather than mitigating it. This highlights the complexity of emotional regulation in aggressive individuals, who may use reappraisal to rationalize their actions rather than to control negative impulses.

Furthermore, the relationship between impression management and these variables suggests that individuals may regulate their emotions and behaviors differently based on social desirability. This could indicate that while some individuals attempt to manage their outward aggression for social acceptance, their internal emotional regulation strategies remain insufficiently developed.

Overall, these findings emphasize the importance of targeted interventions, such as cognitive-behavioral strategies, to improve emotional regulation, particularly in populations prone to alcohol misuse and aggression. Future research should explore the underlying mechanisms of these relationships and develop more effective intervention programs to enhance adaptive emotional regulation strategies.

5. Reference

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