



DETERMINING WORK OUTCOMES IN PERSONS WITH ALCOHOL USE DISORDER: A SYSTEMATIC REVIEW

Dr. Karuna Nadkarni	Associate Professor and In-Charge, Occupational Therapy Training School and Center, Seth G.S. Medical College and KEM Hospital
Griva Bheda*	Interns, Occupational Therapy Training School and Center, Seth G.S. Medical College and KEM Hospital *Corresponding Author
Sakshi Chheda	Interns, Occupational Therapy Training School and Center, Seth G.S. Medical College and KEM Hospital
Shraddha Bagul	Interns, Occupational Therapy Training School and Center, Seth G.S. Medical College and KEM Hospital
Keval Bhoir	Interns, Occupational Therapy Training School and Center, Seth G.S. Medical College and KEM Hospital

ABSTRACT **Aim:** To systematically review existing literature on work-related outcomes among individuals with Alcohol Use Disorder (AUD) and to identify gaps requiring further research. **Methods:** A systematic literature search was conducted using PubMed, Google Scholar, Embase, and PsycINFO databases. Peer-reviewed English-language articles published from the year 2000 onwards were included. Studies examining employed individuals with alcohol use or AUD and its impact on workplace outcomes were selected. Article screening and selection were performed in accordance with PRISMA guidelines. Data from 22 eligible studies were extracted and synthesized narratively. **Results:** The review demonstrated a consistent association between alcohol use and negative workplace outcomes. Commonly reported effects included absenteeism, presenteeism under intoxication, reduced productivity, impaired work performance, workplace injuries, psychological distress, interpersonal conflicts, unemployment, and early retirement. Most included studies were cross-sectional, limiting causal inference. Managerial burden and work-family imbalance were also identified as significant consequences of alcohol use in occupational settings. **Conclusion:** Alcohol Use Disorder has a substantial negative impact on occupational performance and workplace functioning. These findings highlight the importance of early screening, workplace-based preventive strategies, and supportive interventions. Further longitudinal and intervention-based studies are required, particularly in low- and middle-income countries such as India.

KEYWORDS : Alcohol Use Disorder, Work Outcomes, Absenteeism, Presenteeism, Occupational Performance, Productivity

INTRODUCTION

The World Health Organization (WHO) defines a drug as any chemical compound that, when ingested, can alter one or more of the body's processes⁽¹⁾. Of all psychoactive drugs with the potential to impair cognitive and behavioral performance, alcohol is the most widely used and misused substance in the general population and in the workforce⁽²⁾.

The World Drug Report (2013) recognizes alcohol consumption as a global concern with major consequences for people's health, security, socioeconomic standing, and cultural welfare⁽³⁾.

The National Family Health Survey 2019–21 (NFHS-5), funded by India's Ministry of Health and Family Welfare (MoHFW), covered every state and UT as of March 2017. The survey highlights that only 1% of women and 19% of men reported alcohol consumption⁽⁴⁾.

15% of male drinkers consume almost daily, 43% drink weekly, and 42% drink less frequently than weekly. Notably, alcohol use is more prevalent among uneducated men, scheduled tribes, and those aged 35–49⁽²⁴⁾.

Alcohol use disorder (AUD) is defined by the Diagnostic and Statistical Manual of Mental Disorders (DSM-5-TR) as “a problematic pattern of alcohol use leading to clinically significant impairment or distress”. The number of symptoms determines the severity: 2 to 3 symptoms for mild AUD, 4 to 5 for moderate, and 6 or more for severe⁽²⁵⁾.

- Alcohol is often taken in larger amounts or over a longer period than was intended.
- There is a persistent desire or unsuccessful efforts to cut down or control alcohol use.
- A great deal of time is spent in activities necessary to obtain alcohol, use alcohol, or recover from its effects.
- Craving, or a strong desire or urge to use alcohol.
- Recurrent alcohol use resulting in a failure to fulfil major role obligations at work, school, or home.
- Continued alcohol use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of alcohol.
- Important social, occupational, or recreational activities are given up or reduced because of alcohol use.

- Recurrent alcohol use in situations in which it is physically hazardous.
- Alcohol use is continued despite knowledge of having a persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by alcohol.
- Tolerance, as defined by either of the following:
 - A need for markedly increased amounts of alcohol to achieve intoxication or desired effect.
 - A markedly diminished effect with continued use of the same amount of alcohol.
- Withdrawal, as manifested by either of the following:
 - a. The characteristic withdrawal syndrome for alcohol
 - b. Alcohol (or a closely related substance, such as a benzodiazepine) is taken to relieve or avoid withdrawal symptoms⁽²⁵⁾.

It is the most used and misused psychoactive substance in the workforce; up to three out of ten workers can be involved in regular consumption of alcohol, which increases the risk of workplace accidents and injuries and has a negative effect on work productivity⁽²³⁾.

AIM

This systematic review aims to synthesize the available evidence on work-related outcomes in individuals with Alcohol Use Disorder (AUD) and to identify the critical gaps in the literature that warrant further exploration.

OBJECTIVES

- To explore occupational aspects which are most affected by Alcohol use disorder in employed individuals.
- To explore how Alcohol use disorder influences absenteeism, presenteeism under influence, reduced productivity, workplace injuries, psychological distress, unemployment, work limitations, legal and ethical issues, early retirement and interpersonal conflicts at workplace.

MATERIALS & METHODS

Eligibility Criteria

Articles were selected based on the following Inclusion criteria -

1. Keywords: Articles including the terms “Alcohol use disorder” + “Work”

2. Study type: Peer-reviewed research articles.
 Articles were excluded based on the following Exclusion criteria-
 1. Publications in languages other than English.
 2. Studies published before the year 2000
 3. Articles focusing on substances other than Alcohol.
 4. Informational articles, websites, or non-research literature.

Information Sources

The following scientific databases were searched for relevant articles:

1. PubMed
2. Google Scholar
3. Embase
4. PsycINFO

Search Strategy

A comprehensive search strategy was developed and adapted for each database.

Medical Subject Heading (MeSH) terms and Boolean operators (AND; OR) were utilized.

Initially, studies relating to the population, that is, employees were searched for (employee; employed; worker) followed by studies relating to the exposure, that is, alcohol consumption (alcohol; drink; hangover; alcohol drinking; binge drinking) and the outcome (work performance; presenteeism; job productivity; work productivity; job capacity; work capacity; job ability; work ability; job performance; work performance).

Finally, search blocks for population, exposure and outcome were combined. Additionally, reference lists in included studies were hand searched for potential relevant studies.

Selection Process

After database searches and hand-searching of references, duplicates were removed.

The remaining records were screened for relevance at the title and abstract level.

Based on the predefined inclusion and exclusion criteria, 22 articles were finally included in this systematic review.

A Preferred Reporting Items for Systematic Reviewing and Meta - Analysis (PRISMA) diagram is shown for demonstration.

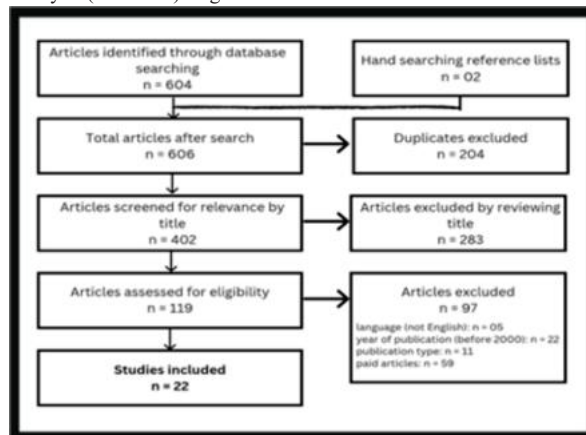


Figure 1. PRISMA Flow Diagram

Quality Assessment

For quality assurance of the search strategy and eligibility criteria, the studies were independently screened by four reviewers, consistent with the PRISMA guidelines.

Disagreements at any stage (title and abstract or full-text screening) were resolved by mutual discussion between reviewers.

Evidence Synthesis

The findings from the included studies were systematically extracted and summarized in an evidence synthesis table. The table provides a structured overview of each study.

Sl. No.	TITLE	AUTHOR	PUBLICATION DATE	STUDY DESIGN	POPULATION	INTERVENTION/ EXPOSURE	OCCUPATION AFFECTED	OUTCOME MEASURE	ALCOHOL MEASURE	WORK AFFECTATION	SUMMARY FINDINGS
1	The workplace and alcohol problem prevention	Paul M Norman, Terry C. Ryan	2002	Narrative review	11 employees in various industries	Review of Employee assistance programs, workplace education, health promotion, peer assistance	Therapeutic workplaces (unrelated offices (eg data entry tasks). Compensated work therapy programs in the oil system. Manual and office labor types were included. Competitive employment programs in the general labor market. Work for pay therapy in transitional housing programs.	Effectiveness of EAPs, relapse prevention, alcohol related job performance	Alcohol use was measured via urinalysis, breath samples, Addiction severity index self-report, alcohol use. Don diagram	Lack of job readiness, criminal records, unstable histories, and health issues were noted as barriers to employment.	11 of 12 studies showed a positive relationship between employment interventions and addictive outcomes. Employment interventions were linked to higher rates of abstinence. Reduced HW use behaviors. Better employment outcomes. Improved housing stability and reduced homelessness. Reduced criminal activities in drug court participants. Some improvements in health and psychological well-being.
2	Working at home and alcohol use	Morten Bekkedam Nielsen, Jan Ole Christensen, Steen Knudsen	2015	cross sectional survey study	Nonunion employees, age group 18-73 years	Working at home (between measured as hours per week. Any threshold >11 hours per week (92 full workdays at home).	Employees in service across diverse sectors: municipalities, insurance companies, health institutions, and public organizations. Both full-time and part-time workers included. Leadership roles also considered (21% had personal responsibility). Controlled for age, gender, leadership position, education.	Primary outcome: Alcohol consumption. Measured by self-report. "How many units of alcohol do you consume in a typical week?" Categories: 0, 1-2, 3-4, 5-6, 87 units. Statistical method: Ordinal logistic regression.	Defined 1 unit = 10-15g ethanol (0.5 Star beer, 1 glass wine, 1 ordinary drink). Alcohol intake categorized into 5 groups: 0 (abstainers), 1-2, 3-4, 5-6, 87 drinks/week.	Work-family imbalance, job satisfaction, work performance, turnover intent, role stress	Working at home (29% week) significantly associated with higher alcohol use. OR = 1.87 (unadjusted), OR = 1.42 (fully adjusted). Other predictors of higher alcohol use: Male gender (OR 1.35), Higher age (OR 1.02 per year), Leadership position (OR 1.16), Higher education (OR 1.42). Explanations proposed: 1. Employees with higher alcohol use may prefer working at home to conceal drinking. 2. Working at home lowers barriers to alcohol use (reduced supervision, fewer penalties). 3. Reduced social support at home may drive alcohol as a coping strategy. Implications: Employers should implement policies to discourage alcohol use during working hours among remote workers (e.g., manager training, video checks).
3	The impact of alcohol consumption on employee job performance	Masira Saeed, Razi Hashim Khadka, Aysha Mujeeb Khatami, Amalika Ajith Nair	2004	Descriptive cross sectional study	180 respondents from callcenter. Organized. Age 20-40 years (mean 30 ± 1). Male predominance (98.1%). Out of 180, 137 (76%) had consumed alcohol, 43 abstained.	Alcohol consumption habits (frequency, reasons, timing). Data collected via Google Forms questionnaire (Sept-Nov 2003).	Private job holders: 88.2%. Government job holders: 11.8%. Small business owners: 3.6%. Retired: 3.8%.	Self-reported job performance indicators: Concentration at work. Absenteeism/leave. Accidents/road traffic accidents (RTA). Initiation with colleagues. Warnings from manager. Task completion on time.	Frequency of drinking: Monthly or less (36.2%), 2-4 times/week (38.9%), 5-8 times/week (18.7%), 9-16 times/week (3.4%). Frequency of alcohol consumption (0, 1-5, 6-15 occasions per past 30 days). Frequency of drunkenness (0 or 1-2 times for lifetime, past 12 months, and past 30 days).	Reduced concentration and productivity. Accidents (including traffic related). Interpersonal conflicts due to irritability with colleagues. Absenteeism and manager warnings (though not statistically strong). Lower task completion rates.	23.9% (n=28) reported significant impact on job performance. 76.1% reported lesser impact. Statistically significant associations: Decreased concentration (p = 0.038), Traffic accidents (38.2%, p = 0.045). Non-significant but notable: absenteeism (23.1%), warnings from managers (45.8%), failure to complete tasks (57.2%).
4	Work stress and alcohol consumption among adolescents: moderation by family and peer influences	Kianfeng C. Liu, Katherine M. Keyes, Guohua Li	2018	Cross-sectional analysis using data from the Monitoring the Future national survey (2005-2006).	U.S. 11th Grade 12 students (high school seniors) from across the United States.	Work stress (measured by job satisfaction, perceived personal safety at work, and perceived safety of possessions at work).	Adolescent part-time work (students employed outside of school).	Alcohol use (frequency: lifetime, past 12 months, past 30 days). Drunkenness (lifetime, past 12 months, past 30 days).	Any work stress was positively associated with alcohol use over the past 12 months (OR = 1.12, 95% CI 1.02-1.23). Adolescents with low peer pressure had reduced odds of alcohol use even when experiencing work stress. Negative peer influence amplified the association between work stress and alcohol use.	Any work stress was positively associated with alcohol use over the past 12 months (OR = 1.12, 95% CI 1.02-1.23). Adolescents with low peer pressure had reduced odds of alcohol use even when experiencing work stress. Negative peer influence amplified the association between work stress and alcohol use.	Adolescents experiencing work stress were more likely to use alcohol and report drunkenness. Peer influence strongly moderated this relationship: negative peer influence increased risk, while positive peer influence buffered the adverse effects. The study concluded that stressful work environments and peer dynamics play an important role in adolescent alcohol consumption patterns.
5	Association between workplace absenteeism and alcohol use disorder from the National Survey on Drug Use and Health, 2010-2019	Jan Parvity, Ann Marie Dale, Sherril L. Fisher, Carrie M. Morris, Sarah M. Hunt, Bradley A. Hanoff, Laura J. Bieral	2022	Cross-sectional study	Adults aged 18 years and older, employed full-time	Prevalence and severity of AUD defined by DSM-V	Full-time employed adults in the US	Workplace absenteeism	Diagnosis of Alcohol Use Disorder (AUD) based on DSM-5 criteria (Days missed due to illness, injury, or skipping work). Classified into mild, moderate, and severe AUD. Past-year prevalence of AUD among full-time workers assessed from NSDUH (2010-2016).	Increased workplace absenteeism (Days missed due to illness, injury, or skipping work). Higher likelihood of missing 80 days/month with increasing severity of AUD. AUD accounted for a disproportionate share of total absences in the workforce.	Absenteeism increased with AUD severity: No AUD: 10.0 missed days/year; Mild AUD: 17.3 days/year; Moderate AUD: 23.8 days/year; Severe AUD: 32.3 days/year. Individuals with AUD made up 9.3% of the workforce but accounted for 14.1% of all missed workdays (~232 million days annually). Severe AUD workers were nearly 3 times more likely to skip work than those without AUD.

Certainty Assessment

A Preferred Reporting Items for Systematic Reviewing and Meta - Analysis (PRISMA) is shown for demonstration.

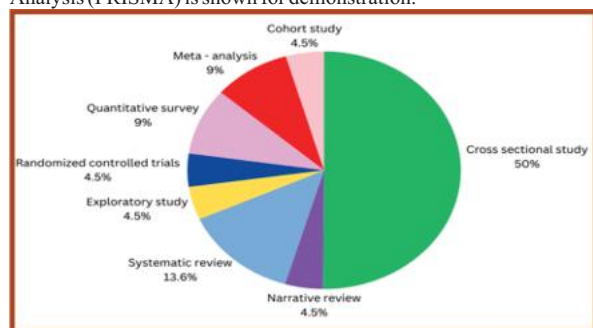


Figure 2. Pie Diagram Showing Certainty Assessment

RESULT

- We retrieved a total of 606 articles from four different scientific databases, from which a total of 22 articles were reviewed.
- Most of the studies were cross sectional studies (11).
- The second most studies were systematic reviews (3) followed by meta - analysis (2) and quantitative surveys (2).
- We also reviewed articles that were a cohort study (1), randomized controlled trials (1), exploratory study (1) and narrative review (1).

The included studies highlight the multifaceted relationship between alcohol use and workplace outcomes. Across diverse contexts, alcohol consumption consistently demonstrated adverse effects on employee performance, absenteeism, and overall organizational productivity.

Nielsen et al. (2021) found that employees working from home for more than 15 hours per week reported significantly higher alcohol consumption, suggesting that remote working arrangements may blur work-life boundaries and increase vulnerability to unhealthy coping behaviors.

Further, Gawali et al. (2024) reported that nearly a quarter of respondents acknowledged reduced productivity and concentration linked to alcohol use, with both government and private sector employees being affected.

Parsley et al. (2022) extended this evidence by showing a clear association between Alcohol Use Disorder (AUD) and increased absenteeism among full-time employees, underscoring the economic burden of alcohol misuse on organizations.

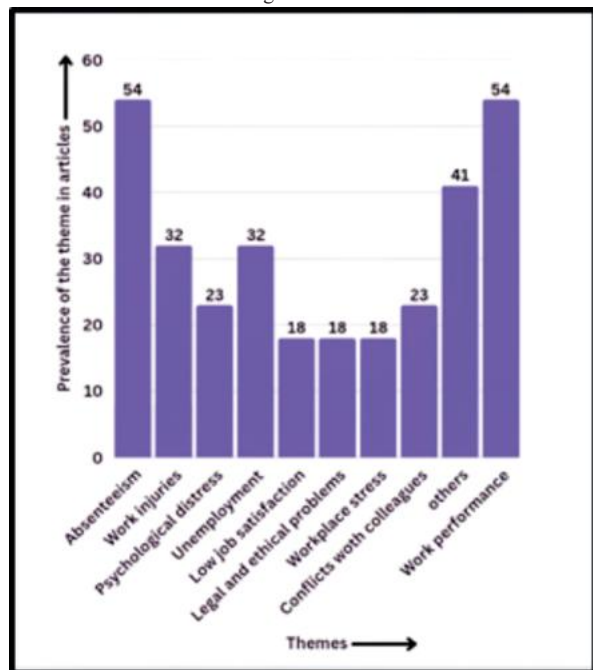


Figure 3. Distribution of Workplace Impact Themes Related to AUD Across Included Studies

DISCUSSION

Many people drink in social contexts to connect with others and improve social relationships. Some civilizations use alcohol in their rituals, celebrations and religious activities. Social standards, cultural influences and individual actions all have an impact on alcohol consumption trends across genders.

The Following Themes were Identified in Our Review:

• **Work Performance**

Alcohol impairs cognitive and psychomotor abilities, reducing attention, memory, and concentration^(3,6). Hangovers and intoxication further decrease productivity and decision-making capacity⁽¹²⁾. Drinking on or before work can disrupt normal functioning, leading to conflicts, accidents, and reduced efficiency⁽¹⁴⁾.

• **Absenteeism**

Alcohol use contributes to absenteeism because it impairs cognitive and psychomotor function, causes hangovers, and may worsen health over time⁽⁶⁾. Excessive drinking is linked to higher sickness absence⁽⁶⁾. In one study, 83% of alcohol users reported being absent from work⁽¹⁰⁾. Absenteeism is more common among employees in lower socioeconomic groups, likely due to fewer coping resources and higher exposure to stressors⁽¹²⁾.

• **Workplace Injuries**

Alcohol use increases the risk and severity of workplace injuries due to impaired concentration, coordination, and judgment⁽³⁾. Workers under the influence are more likely to suffer severe injuries than non-drinkers under similar conditions⁽⁶⁾. Late-shift workers are at higher risk due to proximity to social drinking time⁽¹⁶⁾.

Artisans commonly consume alcohol or alcohol-based herbal mixtures, often taken in the morning at their workplaces for perceived health benefits⁽¹⁹⁾.

• **Psychological Distress**

Alcohol use is closely linked with psychological distress, including depression, anxiety, and general emotional strain⁽¹¹⁾. Distress often mediates alcohol consumption, as individuals use drinking to cope with stress⁽¹¹⁾. Individuals who feel distressed due to conflict between their families and their jobs are more likely to drink because they believe that drinking will make them feel better⁽¹¹⁾.

• **Unemployment**

Alcohol use can increase the risk of unemployment, especially among young people with academic or skill deficits⁽¹⁰⁾. Impaired cognitive function, lower work performance, and poor decision-making may reduce employability⁽¹⁰⁾.

• **Job Satisfaction**

Low job satisfaction and dissatisfaction with the work environment encourage alcohol use as a coping mechanism⁽⁴⁾. High physical demand with low autonomy increases vulnerability to misuse⁽²¹⁾.

• **Legal and Ethical Issues**

Alcohol use is associated with a range of legal and ethical issues. Individuals have been found positive for alcohol following road traffic accidents⁽³⁾. Alcohol use also contributes to acts of violence and criminal behavior, influenced by personal predispositions and situational factors.. Legal problems documented include police detention, formal complaints, suicide attempts, involvement in illegal gangs, and drink-driving⁽¹⁰⁾.

• **Workplace Stress**

Work stress, including low job satisfaction, unsafe conditions, and high physical demand, is linked to increased alcohol use^(4, 21). Employees with unclear roles, strained coworker relations, or low job autonomy are more likely to drink to cope. Shift in working hours further increases stress and alcohol use by disrupting sleep and family routines^(4,21).

• **Conflicts With Colleagues**

Alcohol can affect mood regulation and exacerbate feelings of irritability which may lead to conflicts with coworkers⁽³⁾. Furthermore, alcohol -related irritability among co-workers worsens workplace dynamics, potentially leading to strained relationships and low morale⁽³⁾.

• **Presenteeism Under Intoxication**

Employees may attend work while intoxicated to avoid penalties or negative labeling, leading to presenteeism under intoxication⁽⁶⁾. Presenteeism occurs when employees work while impaired by alcohol, often to avoid being labeled unreliable or losing pay⁽⁶⁾. Strict attendance rules can push employees to attend work even when intoxicated or hungover⁽⁶⁾.

• **Work Family Imbalance**

Individuals experiencing work-family conflict are more likely to drink, especially if they believe alcohol will reduce tension or help cope with stress⁽¹¹⁾.

• Managerial Burden

Managers face added responsibility in dealing with employees' alcohol-related issues, absenteeism, or presenteeism under intoxication. Workplace stress and conflicts increase supervisory challenges, as risky drinking patterns may worsen team dynamics and reduce overall productivity⁽²³⁾.

Collectively, these findings suggest that alcohol use in the workplace is not only an individual health issue but also a structural challenge for organizations, influencing job satisfaction, absenteeism, and workplace safety.

CONCLUSION

This systematic review underscores the significant negative impact of Alcohol Use Disorder (AUD) on work-related outcomes, including productivity, attendance, workplace safety, and psychological well-being. While the findings consistently indicate an association between alcohol use and impaired occupational functioning, interpretation is limited by the predominance of cross-sectional designs, reliance on self-reported measures, and lack of standardized assessment tools. The paucity of Indian research further restricts contextual applicability. Overall, the evidence highlights the need for robust longitudinal and experimental studies, standardized outcome measures, and region-specific research to better inform workplace policies, preventive strategies, and intervention programs addressing AUD.

REFERENCES

1. Paul M Roman, et. Al: The workplace and alcohol problem prevention.
2. Morten Birkeland Nielsen, et. Al: Working at home and alcohol use
3. Meena Gawali, et. Al: The impact of alcohol consumption on employee job performance
4. Xianfang C. Liu, et. Al: Work stress and alcohol consumption among adolescents: moderation by family and peer influences
5. Ian Parsley, et. Al: Association between workplace absenteeism and alcohol use disorder: from the National Survey on Drug use and Health, 2015 - 2019
6. Mikkel Magnus Thorrisen, et. Al: Association between alcohol consumption and impaired work performance (presenteeism): a systematic review
7. Samuel B. Bacharach, et. Al: Alcohol Consumption and Workplace Absenteeism: The Moderating Effect of Social Support
8. Carol B. Cunradi, et. Al: Alcohol, Stress-Related Factors, and Short-Term Absenteeism Among Urban Transit Operators
9. Ashleigh K. Morse, et. Al: A Systematic Review of the Efficacy, Effectiveness and Cost-Effectiveness of Workplace-Based Interventions for the Prevention and Treatment of Problematic Substance Use
10. Barikar Malathesh, et. Al: Legal, social and occupational problems in persons with alcohol use disorder: An exploratory study
11. Jennifer Wolff, et. Al: Work-family conflict and alcohol use: examination of a moderated mediation model
12. Inger Synnove Moan, et. Al: Socio-demographic differences in alcohol-related work impairment
13. Line Iden Berge, et. Al: General specific early treatment for women with alcohol addiction: impact on work related outcomes A 25 - year registry follow up of a randomized controlled trial
14. Michael R. Frone: Prevalence and distribution of alcohol use impairment in the workplace: A U.S National survey
15. Matthew T. Walton, et. Al: The effects of employment interventions on addiction treatment outcomes: A review of the literature
16. Kristin Buvik, et. Al: Alcohol-related absence and presenteeism: Beyond productivity loss
17. Hagihara, A., et. Al: Work Stressors, Drinking with Colleagues after Work, and Job Satisfaction among White-Collar Workers in Japan
18. Cain, L., et. Al: Heavy alcohol use, job satisfaction, and job escapism drinking among foodservice employees: a comparative analysis
19. Funmilayo Juliana Afolabi: Alcohol consumption and work-related health problems: Nigerian informal automobile artisans
20. Lena Fellbaum, et. Al: The effectiveness of workplace interventions for the prevention of alcohol use: A meta-analysis
21. Andrew Barnes, et. Al: Associations of occupational attributes and excessive drinking
22. Neda S. Hashemi, et. Al: A systematic review and meta-analysis uncovering the relationship between alcohol consumption and sickness absence. When type of design, data, and sickness absence make a difference
23. Leah K. Walker: The effects of Alcohol use in the workplace
24. Venkata Lakshmi Narasimha: Alcohol use disorder research in India: An update
25. Diagnostic and Statistical Manual of Mental Disorders (DSM-5)