

**PSYCHOSOCIAL FACTORS ASSOCIATED WITH ABSTINENCE AND RELAPSE IN ALCOHOL DEPENDENCE: A CROSS-SECTIONAL COMPARATIVE STUDY****M TABITHA SHARON<sup>1</sup>**, **S SARATH AJAY KUMAR<sup>2</sup>**, **B ROSHNI<sup>3</sup>**, **P JAHNAVI<sup>3</sup>**, **CH. NAGA SIVANI<sup>3</sup>**,  
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**ABSTRACT****Objectives:** This study evaluated psychosocial predictors of relapse and abstinence in alcohol-dependent individuals using standardized psychosocial assessment tools.**Methods:** A cross-sectional study was conducted among 100 Diagnostic and Statistical Manual of Mental Disorders, 5<sup>th</sup> Edition–diagnosed alcohol-dependent patients (50 relapse; 50 abstinent). Four validated scales – Coping Behavior Inventory (CBI), Alcohol Abstinence Self-Efficacy Scale (AASES), Multidimensional Scale of Perceived Social Support (MSPSS), and Social Readjustment Rating Scale (SRRS) – were administered. Continuous predictors were standardized (z-scores). A single logistic regression model predicted relapse.**Results:** Maladaptive coping was the strongest predictor of relapse (odds ratio [OR] = 30.98; 95% confidence interval [CI]: 7.99–120.16; p<0.001). Higher self-efficacy was protective (OR=0.34; 95% CI: 0.16–0.70; p=0.003). Higher perceived social support predicted relapse (OR=3.61; 95% CI: 1.52–8.58; p=0.004). Stress showed borderline significance (OR=2.06; p=0.055). Model fit was strong (Nagelkerke R<sup>2</sup>=0.54).**Conclusion:** Coping, self-efficacy, social support, and stress significantly influence relapse risk. Psychosocial interventions enhancing coping and self-efficacy and modifying maladaptive family support may reduce relapse.**Keywords:** Alcohol dependence, Relapse, Coping, Self-efficacy, Social support, Stress.© 2026 The Authors. Published by Innovare Academic Sciences Pvt Ltd. This is an open access article under the CC BY license (<http://creativecommons.org/licenses/by/4.0/>) DOI: <http://dx.doi.org/10.22159/ajpcr.2026v19i3.57345>. Journal homepage: <https://innovareacademics.in/journals/index.php/ajpcr>**INTRODUCTION**

Alcohol dependence is a major global health issue and is characterized by chronic relapse [1,2]. Indian relapse rates remain high, with nearly half of treated patients relapsing within the 1<sup>st</sup> year [3]. Psychosocial factors – coping ability [4], self-efficacy [5], perceived social support [6], and stress [7] – play central roles in determining relapse risk. However, few Indian studies have examined these domains together in a unified regression model [8-10].

Coping deficits and reduced self-efficacy are major determinants of relapse, consistent with cognitive-behavioral models [4,11]. Although social support is generally protective, it may paradoxically worsen relapse when expressed through enabling behaviors or high family expressed emotion (EE), creating emotional strain [12,13]. Stressful life events further increase relapse vulnerability [7,13].

This study evaluated the psychosocial determinants of relapse using standardized predictors and a single logistic regression model to improve clarity and interpretability.

**METHODS****Study design and setting**

A cross-sectional comparative study was conducted at the Department of Psychiatry, Government General Hospital, Vijayawada, from October 2023 to March 2024. Ethics approval was obtained (VIPW/IEC-PD PROJECT 06/2023-2024).

**Participants**

A total of 100 patients with alcohol dependence syndrome (Diagnostic and Statistical Manual of Mental Disorders, 5<sup>th</sup> Edition [DSM-5]) participated (50 relapse; 50 abstinent).

**Inclusion criteria**

- Age 18–65
- DSM-5 diagnosis
- Consent provided

**Exclusion criteria**

- Severe withdrawal
- Psychotic disorders
- Cognitive impairment

**Assessment tools**

- Coping Behavior Inventory (CBI): Coping assessment [4]
- Alcohol Abstinence Self-Efficacy Scale (AASES): Abstinence self-efficacy [5]
- Multidimensional Scale of Perceived Social Support (MSPSS): Perceived social support [6]
- Social Readjustment Rating Scale (SRRS: Life stress scale [7]

**Statistical analysis**

Predictors were standardized (z-scores). Logistic regression predicted relapse (1) versus abstinent (0). Model fit was evaluated using LLR, AIC, and Nagelkerke R<sup>2</sup>. MSPSS and SRRS were categorized using established reference cutoffs [6,7].

**Table 1: Sociodemographic characteristics (n=100)**

Variable	Abstinent	Relapsed	Total
Age (years)	39.5±9.4	39.1±9.8	39.3±9.6
Male (%)	100	96	98
Married (%)	84	78	81
Class I	28	18	23
Class II	52	60	56
Class III	18	20	19
Class IV	2	2	2

Data presented as mean±standard deviation, or n (%). Socioeconomic status was determined using the Modified Kuppuswamy Scale [14]

**Table 2: Clinical characteristics**

Variable	Abstinent (%)	Relapsed (%)	p-value
Family history	46	92	<0.001
≥1 prior relapse	34	84	<0.001

Data are presented as a percentage (%). Group comparisons were performed using Chi-square tests. All comparisons were statistically significant (p<0.001)

**Table 3: Logistic regression predicting relapse**

Predictor	OR (95% CI)	p-value
CBI	30.98 (7.99–120.16)	<0.001
AASES	0.34 (0.16–0.70)	0.003
MSPSS	3.61 (1.52–8.58)	0.004
SRRS	2.06 (0.99–4.32)	0.055

Results of binary logistic regression analysis with relapse status as the dependent variable (Relapsed=1, Abstinent=0). OR represents the change in odds of relapse for a one standard deviation increase in the predictor. Model fit: Hosmer–Lemeshow goodness-of-fit test p=0.69, Nagelkerke  $R^2$ =0.54, Log-Likelihood Ratio test p<0.001. OR: Odds ratios, CI: Confidence interval. CBI: Coping behavior inventory; AASES: Alcohol abstinence self-efficacy scale; MSPSS: Multidimensional scale of perceived social support; SRRS: Social readjustment rating scale

**Table 4: Significant subscale predictors of relapse**

Subscale	OR (95% CI)	p-value
Negative thinking	3.44 (1.31–9.06)	0.012
Social support-seeking	4.03 (1.56–10.41)	0.004
Positive thinking	2.91 (1.21–7.04)	0.016
Physical concerns	1.88 (1.12–3.14)	0.017

Only statistically significant subscales (p<0.05) are included. OR: Odds ratios, CI: Confidence interval

**Table 5: Social support and stress levels**

Factor	Abstinent	Relapsed	p-value
Social Support	Low 2%, Moderate 52%, High 46%	Low 2%, Moderate 34%, High 64%	<0.001
Stress	Moderate 64%, High 36%	Low 4%, Moderate 56%, High 40%	0.014

MSPSS categories: Low (1.0–2.9), Moderate (3.0–5.0), and High (5.1–7.0). SRRS categories: Low (<150), Moderate (150–299), and High (>300). Chi-square test used

## RESULTS

Sociodemographic characteristics of the participants are presented in Table 1. Of the 100 participants, relapse was significantly associated with family history of alcohol dependence and prior relapse episodes (Table 2). Logistic regression analysis demonstrated that maladaptive coping (Coping Behavior Inventory [CBI]) was the strongest predictor of relapse (OR = 30.98; 95% CI: 7.99–120.16; p < 0.001), while higher self-efficacy (Alcohol Abstinence Self-Efficacy Scale [AASES]) was protective (OR = 0.34; 95% CI: 0.16–0.70; p = 0.003). Higher perceived social support (Multidimensional Scale of Perceived Social Support

[MSPSS]) significantly predicted relapse (OR = 3.61; 95% CI: 1.52–8.58; p = 0.004), and stress (Social Readjustment Rating Scale [SRRS]) showed borderline significance (OR = 2.06; 95% CI: 0.99–4.32; p = 0.055) (Table 3). Subscale analysis revealed that negative thinking, social support-seeking, positive thinking, and physical concerns were significant predictors of relapse (Table 4). Distribution of social support and stress categories differed significantly between abstinent and relapsed groups (Table 5).

## DISCUSSION

Maladaptive coping was the strongest predictor of relapse, consistent with previous findings that inadequate coping strategies predispose individuals to continued alcohol use [4,11]. Higher self-efficacy significantly reduced relapse risk, supporting evidence that confidence in resisting alcohol predicts sustained abstinence [5].

Higher perceived social support unexpectedly predicted relapse. This may reflect enabling behavior, emotional overinvolvement, or high Family EE, which increases stress and undermines autonomy [12,13]. Such dynamics are commonly observed in Indian family systems.

Positive thinking predicted relapse, likely due to denial, minimization of risk, or unrealistic optimism, as identified in addiction psychology [12,13]. Stress showed borderline significance, reinforcing the stress–vulnerability framework [7,13]. Recent studies in Indian journals emphasize similar psychosocial mechanisms. IJAP findings highlight coping deficits among substance users, supporting the current study's findings [18,19]. Similarly, IJPPS and IJCPR articles report strong associations between stress, family factors, and relapse risk [20,21]. These results collectively align with and strengthen the present study's conclusions.

Strengths include standardized predictors and comprehensive model evaluation. Limitations include a cross-sectional design and self-report data.

## CONCLUSION

Coping deficits, reduced self-efficacy, high perceived social support, and stress contribute significantly to relapse. Interventions that strengthen coping, bolster self-efficacy, and restructure maladaptive family support may enhance recovery outcomes.

## ETHICAL APPROVAL

Approved by VIPW IEC (VIPW/IEC-PD PROJECT 06/2023-2024).

## FUNDING

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## CONFLICTS OF INTEREST

None declared.

## AUTHOR'S CONTRIBUTIONS

M Tabitha Sharon: Conceptualization, methodology, investigation, data curation, and writing – original draft. S Sarath Ajay Kumar: Formal analysis, supervision, writing – review, and editing. B Roshni: Data collection and investigation. P Jahnavi: Data collection and investigation. Ch. Naga Sivani: Data collection and investigation. K Padmalatha: Project administration, critical review, and final approval of the manuscript. All authors approved the manuscript.

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