

A Comparative Study of Alexithymia, Coping Strategies, and Perceived Social Support Among Alcohol and Opioid Dependents

Esther V.L. Ngaihsaki*
Sandhyarani Moirangthem**

Abstract:

The present study examines the association between alexithymia, coping strategies and perceived social support among 90 male participants ($M = 36.17$ years, $SD = 8.26$) comprising of 30 alcohol dependents, 30 opioid dependents, and 30 healthy individuals. A cross-sectional descriptive research design was used to collect data using purposive sampling in Aizawl, Mizoram. The Toronto alexithymia scale-20 (TAS-20; Bagby et al., 1994), brief COPE (Carver, 1997) and the multidimensional scale of perceived social support (MSPSS; Zimet GD et al, 1988) were used to measure alexithymia, coping strategies and perceived social support respectively. Data analysis was done employing descriptive statistics, correlation analysis, chi square and ANOVA. Findings indicated that alexithymia has strong, significant negative associations with adaptive coping and perceived social support, whereas adaptive coping and perceived social support had significantly strong positive association. Findings further revealed significant group differences in alexithymia, coping strategies and perceived support across the three groups; opioid dependents reported highest mean score on alexithymia and maladaptive coping strategies followed by the mean score of alcohol dependents, whereas healthy control group reported highest mean score on adaptive coping strategies and perceived social support. The present findings highlight the need for incorporating interventions aimed at improving emotional insight, enhancing adaptive coping mechanisms, and strengthening social support system, in addition to pharmacotherapy, for successful treatment and recovery.

Keywords: Alexithymia, Coping, Social Support, Alcohol, Opioid, Substance.

Introduction

Substance use disorders (SUDs) is one of the main detriments of global quality of life and is characterized by relapsing patterns of continued substance use despite harmful consequences in physical and mental states. Alcohol and opioid dependence are among the most prevalent forms of SUDs which contribute to substantially to global disability, deterioration in subjective well-being, psychiatric comorbidity, and mortality rates (American Psychiatric Association, 2022).

In India the most used substance is alcohol with 14.6% of the total population, aged between 10 and 75 years, reported to be indulging in alcohol intake and men (27.3%) have been found to use alcohol more than women (1.6%). The prevalence rate for Mizoram has been reported as 15.1% total, and 7.8% males (Ambekar et al., 2019). Substance abuse in Mizoram is influenced by a complex interaction between of psychosocial and ancestral (Khanna 2024) and catalysts include curiosity, pleasure-seeking, distress and acts of rebellion against parental authority. Sociocultural influences such as peer pressure, lifestyle youth trends, media influence, family conflict are found to be important contributing variables (Khanna, 2024; Venkatesh et al., 2024).

* Research Scholar, Department of Clinical Psychology, Mizoram University

** Assistant professor, Department of Clinical Psychology, Mizoram University

Alexithymia may be defined as difficulty in identifying and describing feelings complemented by an externally thinking orientation (Sifneos, 1973), and it has been widely recognized as a significant psychological factor underlying substance use disorders (Taylor et al., 1997). The transactional model of stress and coping proposed by Lazarus and Folkman (1984) conceptualizes coping as the cognitive and behavioural efforts individuals employ to events that are perceived as stressful. Adaptive coping strategies, such as problem-solving, planning, acceptance, and seeking social support, generally promote psychological adjustment, whereas maladaptive coping strategies, including denial, behavioural disengagement, self-blame, and avoidance, are associated with emotional distress and poorer mental health outcomes (Carver, 1997). Perceived social support is an important psychosocial resource that facilitates recovery from substance dependence by enhancing resilience and reducing psychological distress. Zimet et al. (1988) conceptualized perceived social support as the subjective perception of support received from family, friends, and significant others, emphasizing that perceived availability of support may be more impactful than objective social connections.

Statement of the Problem

Substance use disorders, particularly Alcohol Dependence Syndrome (ADS) and Opioid Dependence Syndrome (ODS), remain a significant global public health concern, especially in a developing country like India, because of their increased prevalence, chronic relapsing condition, and debilitating psychosocial burden (Ambekar et al., 2019; Mattoo et al., 2009). Clinical and theoretical models of emotional processing deficits, ineffective coping strategies, and impaired social support network have been identified as important psychological factors in substance dependence (Cohen & Wills, 1985; Maulik et al., 2002). Previous research has consistently reported higher levels of alexithymia, more use of maladaptive coping, lesser use of adaptive coping, and lower perceived social support among individuals with substance dependence than among healthy individuals (Lahmingmawii & Fente, 2021; Pawar et al., 2017). However, most studies have examined these variables independently or focused on a single clinical cohort, limiting understanding of their combined role in addiction (Reddy & Jagannathan, 2017; Venkateswaran et al., 2024). Moreover, direct comparisons between individuals with ADS and ODS are scarce, particularly in the Indian context, where diverse sociocultural factors, family systems, and patterns of substance use may heavily influence these psychosocial variables. Upon critical investigation of past research, no published studies have examined alexithymia among substance-dependent individuals in Mizoram. Furthermore, studies specifically examining perceived social support among opioid-dependent individuals remain limited, and research investigating these psychosocial factors within the context of the Mizo population is lacking. Considering the strong community orientation of the Mizo society, along with specific challenges of drug-related stigma and family burden (Lalengzama & Lalmuansangi, 2020), further research is warranted to understand how perceived social support and coping mechanisms facilitate recovery among individuals with different forms of substance dependence. Therefore, the present study aims to compare alexithymia, adaptive and maladaptive coping strategies, and perceived social support among individuals with ADS, ODS and healthy controls among Mizo male population in Aizawl, Mizoram. The present study findings are expected to contribute toward a better understanding of disorder-specific psychosocial profiles and management strategies for substance use disorders by professionals, policy makers and members of the community in the region.

Review of Related Literature

Alexithymia: Emotion processing studies consistently demonstrate that individuals with alcohol and opioid dependence exhibit significantly higher levels of alexithymia than healthy controls (Morie et al., 2016; Parolin et al., 2018; Pinard et al., 1996) and that deficits in emotional processing may contribute to both the onset and maintenance of addictive behaviours. Kumar and Rathee (2020) reported that individuals with alcohol dependence exhibited significantly higher alexithymia and lower emotional intelligence than healthy controls, highlighting the role of impaired emotional awareness among alcohol dependents. Similarly, Kamboj et al. (2023) found that greater alexithymia was associated with ineffective emotion regulation strategies and stronger craving among alcohol-dependent men, suggesting

that difficulties in identifying and expressing emotions may facilitate substance use through ineffective resolution of negative affect, however evidence concerning opioid-dependent populations remains limited in the Indian context.

Adaptive and Maladaptive Coping: Among individuals with substance use disorders, maladaptive coping has consistently been linked to greater substance use severity and relapse, whereas adaptive coping predicts improved treatment engagement, lower craving and better recovery (Moos & Moos, 2006; Rose et al., 2020). Venkateswaran et al. (2024) reported that patients who mostly adopt maladaptive coping strategies were more likely to experience relapse during follow-up, underscoring the importance of strengthening adaptive coping skills in treatment programmes. Individuals with opioid dependence exhibited a higher preference for maladaptive coping responses when living in environments with low social support or stressful situations, compared to non-drug-using controls who use more adaptive coping mechanisms (Brar et al., 2005; Mattoo et al., 2009; Maulik et al., 2002). Individuals diagnosed with ODS were assessed by Chawla et al., 2024 and they found that patients who rely heavily on maladaptive coping strategies show lower treatment adherence and higher vulnerability to relapse.

Perceived Social Support: Pawar et al., in 2017 found alcohol dependents demonstrated lesser social support along with deficit in problem-solving skills and ultimately lower self-esteem. Kadam et al. (2017) also studied ADS and ODS patients and found that those with opioid dependents exhibited more reduced perceived lower support and are more frequently associated with employment issues, interpersonal relationship deterioration and legal challenges. Lalhmingmawii, & Fente, H. K. L. (2021) found that ODS group employ maladaptive coping styles and less adaptive coping styles as compared to non-user group. However, in the context of head-to-head comparison between ADS and ODS groups research studies are found to be extremely scarce.

Aim

To explore the association and group differences amongst alexithymia, coping strategies and perceived social support across alcohol dependents, opioid dependents and healthy control in Mizo population.

Objectives

1. To examine the relationships among alexithymia, adaptive coping, maladaptive coping and perceived social support across the sample.
2. To compare the scores on alexithymia among alcohol dependents, opioid dependents and healthy controls.
3. To compare the scores on adaptive coping and maladaptive coping strategies among alcohol dependents, opioid dependents and healthy controls.
4. To compare the scores on perceived social support among alcohol dependents, opioid dependents and healthy controls.

Hypotheses

H1. There will be significant relationship among alexithymia, adaptive coping, maladaptive coping and perceived social support across the study sample.

H2. There will be a significant difference in alexithymia mean scores among alcohol dependents, opioid dependents and healthy controls.

H3.1. There will be a significant difference in adaptive coping mean scores among alcohol dependents, opioid dependents and healthy controls.

H3.2. There will be a significant difference in maladaptive coping mean scores among alcohol dependents, opioid dependents and healthy controls.

H4. There will be significant difference in mean scores of perceived social support among alcohol dependents, opioid dependents and healthy controls.

Methodology and Procedure

Design

A cross-sectional design was adopted for this study to compare three groups on alexithymia, coping strategies and perceived social support and examine their relationships among Mizo males in Aizawl, Mizoram, using the Toronto Alexithymia Scale 20 (TAS-20), Brief Coping Orientation to Problems Experienced Inventory (Brief COPE) along with Multidimensional Scale of Perceived Social Support (MSPSS) respectively.

Sample

Ninety (90) samples were selected in the present study using purposive sampling procedure which comprised of: (i) 30 control group who are not dependent on alcohol or opioid as screened by AUDIT (WHO, 2001) and RODS (Wickersham et al., 2015), (ii) 30 alcohol dependents and (iii) 30 opioid dependents. Only healthy male control group and male clinical samples who are currently taking treatment in Hospitals and Deaddiction centres run by the Government of Mizoram and Registered NGOs in Aizawl, Mizoram between 25-54 years of age were considered in the present study. The inclusion and exclusion criteria for the three samples are given below:

(1) Alcohol dependents:

Inclusion criteria

- a) Male patients are diagnosed with alcohol dependence as per ICD 11 (WHO, 2018).
- b) the age range of 25-54 years.
- c) Primary Education who can read, write and understand Mizo and English.
- d) Those who have been drinking alcohol for more than 1 year.
- e) Those who have been under treatment and coming for follow-up.

Exclusion criteria

- a) Those who have suicidal ideas.
- b) Those who are having history of using other substances but excluding nicotine and caffeine.
- c) Unstable medical and psychiatric conditions.

(2) Opioid dependents:

Inclusion criteria:

- a) Male patients are diagnosed with opioid dependence as per ICD 11 (WHO, 2018).
- b) The age range of 25-54 years.
- c) Primary Education who can read, write and understand Mizo and English.
- d) Those who have been taking opioids for more than 1 year.
- e) Those who have been under treatment and coming for follow-up.

Exclusion criteria:

- a) Those who have suicidal ideas.
- b) Those who are having history of using other substances but excluding nicotine and caffeine.
- c) Unstable medical and psychiatric conditions.

(3) Control group:

Inclusion criteria

- a) Male subjects.
- b) the age range of 25-54 years.
- c) Primary Education who can read, write and understand Mizo and English.

- d) Those who are matched with the study group concerning age and education.
- e) Those with General Health Questionnaire 28 (GHQ-28) score 23 or below.

Exclusion criteria

- (a) Those who are having history of using other substances but excluding nicotine and caffeine.
- (b) Those with Alcohol Use Identification Test (AUDIT) score more than 8.
- (c) Those with Rapid Opioid Dependence Screen (RODS) score more than 3.

Tools Used

Socio-Demographic and Clinical Data Sheet (SDCS): A self-prepared semi-structured socio-demographic and clinical information related to alcohol and opioid dependents was used to extract the age, education, occupation, marital status, habitat, and family history of substance use/psychiatric illness of the sample.

Toronto Alexithymia Scale-20 (TAS-20; Bagby et al., 1994): The TAS-20 is a 20-item scale used to assess alexithymia because of its supposed good reliability and construct validity with scores ranging from 20–100 (higher scores indicate greater impairment/challenges). A score ranging 51 and below suggests no presence of alexithymia, score from 52 to 60 is suggestive of possible alexithymia and lastly score of 61 to 100 points towards presence of alexithymia. This tool has been observed to possess satisfactory internal consistency as well as reliability. Furthermore, the Cronbach's alpha reliability coefficient in the present study was $\alpha=.85$

Brief Coping Orientation to Problems Experienced Inventory (Brief COPE, Carver, 1997): The Brief COPE is a self-report questionnaire used to measure effective and ineffective ways to cope with a stressful situation. It has 28 items along with 14 subscales. Internal reliabilities for the 14 subscales range from $\alpha=0.57-0.90$ (Carver, 1997). For the purpose of the present study, subscales 1 through 8 will be regarded as adaptive, whereas subscales 9 through 14 will be considered as maladaptive (Meyer, 2001). The Cronbach's alpha reliability coefficient of brief COPE for the present investigation was $\alpha=.86$ for adaptive coping and $\alpha=.72$ for maladaptive coping.

Multidimensional Scale of Perceived Social Support (MSPSS; Zimet GD et al., 1988): This tool was constructed to explore social support networks from the view of the subject and it comprises of three subscales with four items constituting each subscale. This scale is reported to demonstrate satisfactory reliability and test-reliability of .88 and .85 respectively meanwhile for the present study the Cronbach's alpha reliability coefficient was $\alpha=.90$

General Health Questionnaire-28 (GHQ-28; Goldberg and Hillier, 1979): This is a screening tool in which participants subjectively report the status of their health and it uses Likert scoring system on a scale of 0, 1, 2, 3. Higher total scores suggest greater distress level, although one of the authors Goldberg gave a suggestion that total score of 23 or lower may be categorized as non-psychiatric, meanwhile total score of 24 and above may be considered as psychiatric. The GHQ-28 is used to measure current mental health condition and psychological distress in non-clinical samples and working populations as well (Goldberg & Williams, 1988; Jackson, 2007).

The Alcohol Use Identification Test (WHO, 2001): The AUDIT is a screening tool developed to assess alcohol consumption, drinking behaviour and alcohol-related problems. A score of 8 or more indicates alcohol dependence. The Cronbach's α Scores range was between 0 and 1, with score 0.6 to 0.8 indicating acceptable reliability.

The Rapid Opioid Dependence Screen (RODS; Wickersham et al., 2015): The RODS is a clinician-administered screening tool that contains 8 items of yes/ no questions to assess the risk of opioid dependence during current opioid dependence. Total score obtained of 3 or greater is considered for the diagnosis of opioid dependence. These items are constructed to align with the criteria in fourth edition

of the Diagnostic and Statistical Manual of Mental Disorders. It is also observed to possess a relatively strong internal consistency ($\alpha = .92$) and inter-item correlations (.66 to .87).

Ethical Considerations

Approval for conduction of the present study was obtained prior to data collection process, from the Institutional Ethics Committee with approval no. MZU/HEC/2024/085 and participants were selected accordingly. They were informed about the purpose and implications of this investigation and only those who volunteered were selected and provided with written informed consent which contained their right to withdraw at any stage. They were also assured of anonymity and confidentiality of their responses.

Procedure

The psychological tools were arranged and necessary permission was taken from the authorities of the hospitals and Deaddiction Centres for the conduction of psychological scales. Sample identification was done as per the objectives of the study. Informed consent was taken from the selected samples for the conduction of psychological tools and administration of the psychological tools was done following the instruction as given in the manuals. Further, responses were checked and coded for statistical analysis to test the hypotheses.

Statistical Analysis

IBM SPSS Statistics Version 25 was used for data analysis in which descriptive statistics such as frequencies, percentages for categorical variables along with means, standard deviations for continuous variables were investigated to enrich the sociodemographic factors being studied. Cronbach's alpha (α) was used to examine the internal consistency of the tools employed and the assumption of normality was analysed with the Shapiro–Wilk test meanwhile the Pearson's chi-square (χ^2) test was used to examine group differences in categorical sociodemographic variables. In addition to these, ANOVA was employed to find out the differences in continuous study variables (alexithymia, coping strategies, and perceived social support) across the three groups. Any relationship between the variables was evaluated with Pearson's product–moment correlation coefficient (r) and for the purpose of the current study, statistical significance was set at $p < .05$.

Result

In order to employ one-way analysis variance, the assumption of normality was assessed prior for all dependent variables using the Shapiro–Wilk test within each group. Data analysis revealed that for TAS-20 scores, the distributions did not significantly deviate from normality in the healthy control group $W(30) = .954, p = .220$, the ADS group $W(30) = .963, p = .368$, and the ODS group $W(30) = .939, p = .083$. Likewise, adaptive coping scores were found to be normally distributed across all three groups: the healthy control ($W = .969, p = .516$), ADS ($W = .949, p = .154$), and ODS ($W = .961, p = .324$) groups. Maladaptive coping scores were also found to be normally distributed all three groups: the healthy control ($W = .949, p = .155$), ADS ($W = .950, p = .173$), and ODS ($W = .952, p = .187$) groups. Additionally, MSPSS scores were shown to be normally distributed in the healthy control ($W = .952, p = .189$), ADS ($W = .931, p = .054$), and ODS ($W = .943, p = .108$) groups. Furthermore, skewness and kurtosis were investigated and the corresponding values reveals that skewness and kurtosis for all variables were within generally accepted limits and this provides important support for the assumption of normality.

TABLE 1

Socio-demographic details of the sample across Alcohol Dependents, Opioid Dependents and Healthy Controls

Characteristics	Alcohol Dependents n (%)	Opioid Dependents n (%)	Healthy Control n (%)	Total n (%)	χ^2	p
Age Group (yrs)					11.431	.022
25-34	14 (46.7)	21 (70.0)	9 (30.0)	44 (48.9)		
35-44	6 (20.0)	6 (20.0)	8 (26.7)	20 (22.2)		
45-54	10 (33.3)	3 (10.0)	13 (43.3)	26 (28.9)		
Total	30 (100.0)	30 (100.0)	30 (100.0)	30 (100.0)		
Education					19.009	.015
Primary	0(0.0)	0(0.0)	3(10.0)	3(3.3)		
Secondary	7(23.3)	6(20.0)	0(0.0)	13(14.4)		
Higher Secondary	16(53.3)	14(46.7)	12(40.0)	42(46.7)		
Graduate	6(20.0)	7(23.3)	14(46.7)	27(30.0)		
Post graduate & above	1(3.3)	3(10.0)	1(3.3)	5(5.6)		
Occupation					40.058	< .001
Employed	10(33.)	5(16.7)	28.86.7	41(45.6)		
Unemployed	7(23.3)	12(40.0)	1(3.3)	20(22.2)		
Student	(3.3)	3(10.0)	3(10.0)	7(7.8)		
Daily wage	4(13.3)	5(16.7)	0(0.0)	9(10.0)		
Self-employed	8(26.7)	5(16.7)	0(0.0)	13(14.4)		
Marital Status					6.650	.354
Married	18(60.0)	11(36.7)	16(53.3)	45(50.0)		
Unmarried	9(30.0)	14(46.7)	13(43.3)	36(40.0)		
Divorced/ separated	3(10.0)	4(13.3)	1(3.3)	8(8.9)		
Widowed	0(0.0)	1(3.3)	0(0.0)	1(1.1)		
Family Type					8.960	.011
nuclear	13(43.3)	13(43.3)	23(76.7)	49(54.4)		
Joint	17(56.7)	17(56.7)	7(23.3)	41(45.6)		
Habitat					17.104	< .001
Rural	16(53.3)	19(63.3)	4(13.3)	39(43.3)		
Urban	14(46.7)	11(36.7)	26(86.7)	51(56.7)		
Family H/o substance use					1.165	.559
Yes	12(40.0)	16(53.3)	13(43.3)	41(45.6)		
No	18(60.0)	14(46.7)	17(56.7)	49(54.4)		
Family H/o psychiatric illness					11.667	.003
Yes	4(13.3)	12(40.0)	2(6.7)	18(20.0)		
No	26(86.7)	18(60.0)	28(93.3)	72(80.0)		
H/o major Life event in past 1 year					0.000	1.000
Yes	8 (26.7)	8 (26.7)	8 (26.7)	24(26.7)		

No	22(73.3)	22(73.3)	22(73.3)	66(73.3)		
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Note. n (%) = Percentages represent within-group percentages; χ^2 = Pearson chi-square statistic; $p < .05$ indicates statistical significance.

Table 2 shows correlation matrix revealing TAS-20 (Alexithymia) to be significantly and strongly negatively correlated to adaptive coping $r(88) = -.886, p < .001$, and perceived social support $r(88) = -.810, p < .001$. TAS-20 was also strongly positively correlated to maladaptive coping $r(88) = .783, p < .001$ meanwhile, adaptive coping was observed to be strongly positively correlated to perceived social support $r(88) = .878, p < .001$ on the other hand adaptive coping was likewise strongly negatively correlated to maladaptive coping $r(88) = -.713, p < .001$. Maladaptive coping also showed a significant negative correlation with perceived social support $r(88) = -.622, p < .001$.

TABLE 2

Pearson Product–Moment Correlation between Alexithymia, Adaptive Coping, Maladaptive Coping, and Perceived Social Support in the present study sample

Variable	TAS-20	Adaptive Coping	Maladaptive Coping	MSPSS
TAS-20	-			
Adaptive Coping	-.886**	-		
Maladaptive Coping	.783**	-.713**	-	
MSPSS	-.810**	.878**	-.622**	-

Note: $N = 90$; ** $p < .01$ (two-tailed)

TABLE 3

One-Way Analysis of Variance comparing variables across Alcohol Dependents, Opioid Dependents, and Control group

Variables	Alcohol Dependents		Opioid Dependents		Healthy Control		F (2,87)	p-value
	M	SD	M	SD	M	SD		
Alexithymia	70.20	4.72	78.43	6.73	47.30	5.21	356.88	<.001***
Adaptive Coping	42.07	2.50	31.17	3.88	54.87	3.82	352.65	<.001***
Maladaptive Coping	37.13	4.26	38.50	2.35	27.03	3.58	96.78	<.001***
Perceived Social Support	4.60	0.76	2.38	0.80	6.11	0.50	214.87	<.001***

Note: $N=90$; * $p < .05$; ** $p < .01$, *** $p < .001$

Table 3 demonstrates significant group differences in alexithymia, adaptive coping, maladaptive coping, and perceived social support (all $p < .001$) and there were significant differences observed for alexithymia, $F(2,87) = 356.88, p < .001$, adaptive coping, $F(2,87) = 352.65, p < .001$, maladaptive coping, $F(2,87) = 96.78, p < .001$ and perceived social support, $F(2,87) = 214.87, p < .001$.

Discussion

The present study examined how sociodemographic characteristics differ among healthy controls, individuals with ADS and individuals with ODS along with the relationship between psychosocial vari-

ables namely alexithymia, coping strategies, and perceived social support. The study included 90 male participants ($M = 36.17$ years, $SD = 8.26$) and comprised of 30 healthy controls, 30 individuals with ADS, and 30 individuals with ODS, selected through purposive sampling procedure. In terms of characteristics of age, data analysis reveals that the largest percentage of participants belonged to the age range of 25–34 years (48.9%), then the 45–54 years (28.9%) and followed by 35–44 years (22.2%) age groups and there was observed significant differences in age distribution across the three groups, with the ODS group comprising more proportion of younger participants aged 25–34 years (70.0%) as compared to the other clinical ADS group (46.7%), and lastly healthy controls (30.0%). It was also found that participants aged 45–54 years (43.3%) were greater in the healthy controls as compared to the ADS group (33.3%) and ODS group (10.0%). Educational status also showed significant difference among groups and healthy control group was observed to comprise of a higher proportion of graduates (46.7%) as compared to the ADS (20.0%) and ODS groups (23.3%), on the other hand participants with higher secondary education were mostly found in the clinical groups i.e ADS (53.3%) and ODS (46.7%). Occupational status showed the most dynamic group differences in which the highest number of employed participants (86.7%) belonged to the healthy control group followed by ADS group (33.3%) and then ODS group (16.7%). Likewise, the greatest number of unemployed participants was noted in the ODS group (40.0%) and then the ADS group (23.3%) and lastly the healthy controls (3.3%). It was also observed that daily wage employment and self-employment were more prominent among the substance dependent participants. In terms of family structure across groups significant differences were noted in which healthy control group predominantly belonged to nuclear families (76.7%), and in this particular study joint family structures were more common among both ADS and ODS groups (56.7% each). The effect of habitat was also analysed and findings reflect that more healthy group participants (86.7%) resided in the urban area whereas rural residence was more common among the ADS (53.3%) and ODS (63.3%) groups. Family history of psychiatric illness was also investigated and significant differences among groups were noted such as prevalence of psychiatric illness among family members most common in the ODS group (40.0%) as compared to the ADS participants (13.3%) and healthy control participants (6.7%). However, it was also found that marital status, family history of substance use, and history of major life events did not differ significantly among the three groups in the present study even though previous literature has pointed towards these as important risk factors for substance related issues.

Correlation analysis was done with the objective of investigating the bivariate relationships among alexithymia, adaptive coping strategies, maladaptive coping strategies and perceived social support within the sample ($N = 90$). The observed correlation matrix in Table 2 reveals statistically significant associations across all measured constructs ($p < .01$), thereby providing strong support for hypothesis H₁ that was significant relationships among alexithymia, adaptive coping, maladaptive coping, and perceived social support across the study sample. A strong negative relationship was observed between TAS-20 and adaptive coping ($r = .783, p < .01$), and a strong positive relationship with maladaptive coping ($r = .783, p < .01$) and these findings are consistent with studies that found that difficulty in emotion processing and expression impair an individual's capacity to employ adaptive coping responses in stressful events (Tominaga et al., 2014). When individuals cannot accurately process their emotional states, they are less likely to utilize active coping and more likely to adopt maladaptive coping mechanisms—such as denial, substance use or behavioural disengagement—to alleviate psychological distress (Lazarus & Folkman, 1984; Khantzian, 1997). Alexithymia demonstrated a strong negative correlation with perceived social support ($r = .878, p < .01$) which fall in line with studies of alexithymia demonstrating that emotional processing and expression deficits interfere with emotional recognition and communication and hence affecting interpersonal relationships (Vanheule et al., 2007) and since individuals with high levels of alexithymia struggle to verbalize their affective states, they may perceive their social circle to be less supportive of them (Zimet et al., 1988). A strong

negative correlation was observed between adaptive coping strategies and maladaptive coping strategies ($r = -.713, p < .01$). This strong inverse relationship indicates that individuals who frequently employ adaptive coping responses are significantly less likely to use maladaptive coping strategies (Lazarus & Folkman, 1984). Perceived social support exhibited a strong positive association with adaptive coping strategies ($r = .878, p < .01$), moreover, negative association was also demonstrated with maladaptive coping strategies ($r = -.622, p < .01$), hence it may be reported that these results are supported by stress-buffering frameworks which highlights that subjective confidence in the availability of social aid enhances psychological resilience. When individuals perceive immense support from family, friends, and significant others, they are able to generate greater psychosocial resources to use adaptive coping strategies, thereby decreasing the need to rely on maladaptive coping responses (Barwa, 2024; Özsoy et al., 2026).

The present study revealed a statistically significant difference in alexithymia among healthy controls, individuals with ADS, and individuals with ODS, $F(2, 87) = 356.88, p < .001$. Descriptive statistics indicated that the ODS group had the highest TAS-20 scores ($M = 78.43, SD = 6.73$), followed by the ADS group ($M = 70.20, SD = 4.72$), whereas healthy controls had the lowest scores ($M = 47.30, SD = 5.21$). These findings support the hypothesis H₂ that significant difference was observed in alexithymia scores among healthy controls, individuals ADS and individuals with ODS.

The comparatively low alexithymia scores observed among healthy controls are consistent with theoretical models describing alexithymia as a deficit in emotional awareness characterized by difficulty identifying feelings, difficulty describing feelings, and an externally oriented thinking style (Taylor et al., 1997). The significantly elevated alexithymia observed among individuals with ADS is consistent with evidence linking alcohol dependence to impaired emotional processing. A systematic review by Cruise et al., (2018) found that alexithymia is highly prevalent among individuals with alcohol use disorders and is associated as an independent risk factor for alcohol-related difficulties in clinical populations. The relationship between alexithymia and alcohol-related problems is mediated by emotion regulation difficulties and psychological distress, suggesting that individuals who find difficulty in identifying and expressing emotions may use alcohol as a maladaptive strategy for regulating negative affect (Linn et al., 2021). The present study demonstrated that individuals with ODS reported significantly greater alexithymia than individuals with ADS and studies have consistently reported higher alexithymia scores for alcohol and opioid dependents (Honkalampi et al., Kun et al., 2023). However direct comparisons between these two clinical populations remain extremely limited therefore, the present finding extend the existing literature by suggesting that alexithymia may be more strongly associated with opioid dependents than with alcohol dependents.

The present study revealed a highly significant difference in adaptive coping among healthy controls, individuals with ADS and individuals with ODS, $F(2, 87) = 352.65, p < .001$. Descriptive statistics indicate that participants in the healthy control group had the highest mean score for adaptive coping ($M = 54.87, SD = 3.82$), followed by the ADS group ($M = 42.07, SD = 2.50$), while the ODS group had the lowest adaptive coping scores ($M = 31.17, SD = 3.88$). These findings support the hypothesis H_{3.1} that significant difference was observed in adaptive coping scores among healthy controls, individuals with ADS and individuals with ODS.

The greater adaptive coping mean scores observed among healthy controls is consistent with the transactional model of stress and coping, which proposes that effective cognitive appraisal and constructive coping responses facilitate fruitful stress management and psychological adjustment (Lazarus & Folkman, 1984). Adaptive coping strategies, including active coping style, positive reappraisal and using emotional or instrumental assistance, enable individuals to manage stressful situations effectively while reducing dependence on maladaptive behaviours. Consequently, individuals who frequently employ adaptive coping strategies are less likely to engage in substance use as a means of addressing emotional distress (Carver, 1997). The lower adaptive coping observed among individuals with ADS

in the present study is supported by previous research indicating that alcohol-dependent patients exhibit less use of adaptive coping strategies compared with healthy individuals. Mahajan et al. (2024) reported that alcohol-dependent patients who maintained abstinence showed significantly greater use of adaptive coping strategies, such as active coping, planning, use of emotional and instrumental support and acceptance, whereas those who relapsed relied significantly less on these constructive coping mechanisms. These findings are also implying that impairment in the implementation of adaptive coping may, to certain extent, influence the maintenance of alcohol use and increase vulnerability to relapse. The present study further demonstrated that individuals with ODS reported significantly lower adaptive coping than individuals with ADS and this finding is in line with results from Hyman et al. (2009) reporting that opioid-dependent patients entering treatment showed significantly compromised adaptive coping and higher perceived stress than healthy controls, reflecting limited capacity to employ adaptive coping strategies in stressful situation. Mattoo et al. (2009) also reported that in terms of adaptive coping strategies, participants with opioid dependence exhibited significantly lesser use when compared with alcohol dependents in their study.

The present study demonstrated a significant difference in maladaptive coping among healthy controls, individuals with ADS and individuals with ODS, $F(2, 87) = 96.78, p < .001$. Descriptive statistics also revealed that the healthy control group demonstrated the lowest maladaptive coping mean scores ($M = 27.03, SD = 3.58$), followed by the ADS group ($M = 37.13, SD = 4.26$) and consequently, the ODS group ($M = 38.50, SD = 2.35$) reported highest maladaptive coping scores. These findings support the hypothesis H3.2 as there was a significant difference in maladaptive coping mean scores among healthy controls, individuals with ADS and, and individuals with ODS.

Data analysis demonstrated an increase in maladaptive coping among both substance-dependent participants which is supported by the transactional model of stress and coping proposed by Lazarus and Folkman (1984) therefore, individuals who rely on maladaptive coping responses, such as self-distraction, denial, behavioural disengagement and self-blame are proposed to be less likely to successfully manage stressful situations, in fact they may instead resort to psychoactive substances as a way to modulate negative emotions. The present study also found that individuals with ODS reported significantly greater maladaptive coping than individuals with ADS and this is supported by available literature which suggests that opioid-dependent individuals experience greater psychosocial challenges, including employment disruption, stigma, legal issues, chronic stress etc which may lead to greater reliance on maladaptive coping strategies (Mattoo et al., 2009).

The present study found a highly significant difference in perceived social support among healthy controls, individuals with ADS, and individuals with ODS, $F(2, 87) = 214.87, p < .001$. Descriptive statistics also revealed that the mean score of MSPSS for healthy controls is the highest ($M = 6.11, SD = 0.50$), followed by individuals in ADS group ($M = 4.60, SD = 0.76$), and individuals with ODS had the lowest scores ($M = 2.38, SD = 0.80$). These findings support the hypothesis H4 that there was difference in perceived social support scores among healthy controls, individuals with ADS and individuals with ODS.

The higher perceived social support observed among healthy controls is consistent with studies that found that individuals who subjectively perceive better support from family, friends and significant others reflect more healthier ways of coping, thereby lowering vulnerability to maladaptive coping behaviours such as substance dependence. (Cohen & Wills, 1985; Zimet et al., 1988). In contrast, chronic substance dependence often disrupts interpersonal relationships through increased conflict, mistrust, financial difficulties, and social withdrawal, thereby reducing the availability and perception of supportive relationships (Daley, 2013). The lower perceived social support among individuals with ADS is consistent with studies demonstrating that alcohol dependence is strongly associated with deterioration in family dynamics, quality of interpersonal relationships, and social networks and chronic alcohol use often leads to conflicts in relationships and impaired emotional processing, resulting in lower perceived support from significant others (Beattie & Longabaugh, 1999; Murali & Rao, 2018). The

present finding that individuals with ODS reported significantly lower perceived social support than those with ADS is also supported by previous literature in which opioid dependence is frequently associated with legal troubles, occupational instability, disrupted interpersonal relationships as compared to those with alcohol dependence (Kadam et al., 2017). These psychosocial adversities may often lead individuals with ODS to perceive lower support from their social environment. The present findings indicate an association between higher scores on alexithymia and lower scores on use of adaptive coping strategies, furthermore, higher scores on use of maladaptive coping strategies was also found to have an association with lower perceived social support scores hinting that people experiencing greater problem in identifying and describing their emotional state might be unlikely to employ constructive coping mechanisms and may perceive less support from family, friends, and significant others.

Limitations

1. The cross-sectional design of the study causes limitation in terms of establishing cause-and-effect relationship between the study variables.
2. The relatively small sample size and limited diversity in sample in terms of gender may hamper generalizability of findings to larger population.
3. The use of self-report questionnaires alone may influence social desirability bias in responses.

Conclusion

The present study examined differences in alexithymia, adaptive and maladaptive coping strategies, and perceived social support among individuals with Alcohol Dependence Syndrome (ADS), Opioid Dependence Syndrome (ODS), and healthy controls. The findings demonstrated significant group differences across all study variables, with individuals with ODS exhibiting the highest levels of alexithymia and maladaptive coping, the lowest levels of adaptive coping and perceived social support, followed by individuals with ADS, while healthy controls displayed the most favourable psychological profile. These findings underscore the role of emotional processing deficits, ineffective coping mechanisms, and inadequate social support in substance dependence and suggest that these psychosocial factors may be more pronounced among individuals with opioid dependence than those with alcohol dependence. The present study contributes to the existing literature by providing a comparison of three key psychosocial variables across ADS, ODS, and healthy controls thereby addressing the scarcity of clinical research within the Indian context, and particularly among the Mizo population. The findings highlight the importance of incorporating interventions aimed at improving emotional insight, enhancing adaptive coping mechanisms, and strengthening social support network into routine addiction treatment, in addition to pharmacotherapy, which may improve treatment and recovery process. Future studies which may be longitudinal and composing of a diverse population with a larger samples size may be warranted in clarifying the cause-and-effect relationship and evaluate the effectiveness of targeted psychosocial interventions across different clinical cohorts with substance dependence.

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