RESEARCH ARTICLE

Negative coping styles among individuals with cannabis use disorder and non-users - a cross sectional study

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Abstract

Objectives: To investigate the differences in negative coping styles used by individuals with cannabis use disorder and non-users.

Methods: The quantitative cross-sectional study was conducted from November, 2016 to August 2017 at Foundation University, Rawalpindi, Pakistan, and comprised individuals aged 15-34 years. Data was collected from drug rehabilitation and university students of Rawalpindi and Islamabad. The sample was divided into groups of cannabis users and non-users. Data was collected using the brief version of the Coping Orientation to Problems Experienced inventory and the Diagnostic and Statistical Manual of Mental Disorders version 5. Data was analysed using SPSS 21.

Results: Of the 204 participants, 104(51%) were users with a mean age of 27±5.37 years and 100(49%) were non-users with a mean age of 25±5.65 years. The users scored higher at active avoidance coping compared to the non-users ($p<0.05$). The differences were non-significant in case of denial and religious coping ($p>0.05$). Active avoidance coping differed across individuals with mild, moderate and severe cannabis use disorder ($p<0.05$), while religious and denial coping did not ($p>0.05$).

Conclusion: Active avoidance coping was found to be an important characteristic in relation to cannabis use disorder.

Keywords: Cannabis use disorder, Active avoidance coping, Denial coping, Religious coping. (JPMA 71: 1757; 2021)

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Introduction

Cannabis is the most widely ingested psychoactive drug globally as well as in Pakistan.[1] It is used both as a recreational drug and as a medicine. This drug is known with several names, like weed, 'ganja', 'bhang', herb, grass and marijuana. The most common way to consume cannabis is to smoke it in cigarettes. It is also used in water pipes, like 'hookahs' and bongs, or in paper from hollowed-out cigars (blunt). Cannabis is often deeply inhaled and the breath is held for some time to achieve maximum absorption in lungs. Sometimes cannabis may be eaten by mixing it in food.[2,3] The most recent way to use cannabis is through vaporisation.[4]

Persistent use of cannabis can induce the symptoms that form the diagnostic features of cannabis use disorder (CUD).[5] There are many diagnostic features and problems associated with CUD. Firstly, its use is associated with problems in academic, occupational, interpersonal, social or other important areas of functioning.[4] Moreover, individuals with CUD have lower educational achievement.[3] Also, the periodic use of cannabis causes impairment in cognitive and behavioural functioning.[4] This impairment in cognitive functioning places the person at risk when performing physically hazardous activities, like driving.[3] Another significant diagnostic feature of CUD is that despite adverse effects of cannabis use on physical health, like chronic cough etc., as well as on psychological health, like excessive sedation etc., the individual continues to consume it.[4] In addition, daily use of cannabis can lead to the onset of its tolerance symptoms. On the other hand, abrupt cessation of regular cannabis use can develop withdrawal symptoms.[6]

Coping styles are ways in which people try to deal with stress. Coping styles can be of many different types, including emotional-focussed coping (EFC) and problem-focussed coping (PFC). EFC is linked with poor psychological health, whereas PFC is related to better psychological health.[7] Negative coping styles mean EFC, including active avoidance coping (AAC), denial coping (DC) and religious coping (RC).[8-11] AAC involves ignoring the problem,[10] RC can also take the form of unhealthy coping style,[9] such as spiritual discontent.[12] DC involves refusal from acceptance that a problem exists.[8,13] Trait theories of coping styles state that individuals have consistent pattern of response across various stressful situations. For trait theorists, some individuals have inadequate or lack of abilities to deal effectively with

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stressful events. Identification of such individuals will help them to deal effectively with stress. The Coping Orientation to Problems Experienced (COPE) inventory measures coping styles of individuals by asking how they respond when a stressor is faced. Researchers have found that all individual have specific habits or own ways to handle stressful situations or having specific coping traits.[14]

National-level survey in Pakistan showed that cannabis is the most frequently used psychoactive substance in youth and young adults. It is consumed by approximately four million individuals in Pakistani population.[1] However, it is noted that there is scarcity of studies on psychological factors associated with cannabis use or CUD. One study found that in order to deal with stressors, like personal difficulties resulting from bereavement or loss of some other kind, 6% drug users first turned towards drug use in life. The finding could imply that when individuals are unable to deal with stressors, they use poor coping styles which could then lead to use of drugs.[1] However, no research has revealed which particular poor coping style could be linked to drug use in Pakistan's cultural context.

Literature review suggested that it is not a common trend in Pakistan to study particular addiction type, like alcohol, caffeine or opiods, separately. Instead, general addiction, which includes all substances under the domain of addiction, have been studied in past researches.[15] One of the studies in India showed that religious coping was related to cannabis use as cannabis is considered sacred in their culture. However, RC had not been found to be associated with the use of other psycho stimulants. Hence, different psychological traits can have unique relation with different particular drugs.[16,17]

Studies have also attempted to explore negative coping styles among different CUD levels.[18]

Although it is necessary to study negative coping styles in association with drug use in Pakistani context,[19] no study was found in this regard.

The current study was planned to investigate the differences in negative coping styles used by individuals with CUD and non-users.

Subjects and Methods

The quantitative cross-sectional study was conducted from November, 2016 to August 2017 at Foundation University, Rawalpindi, Pakistan. After approval from the institutional ethics review committee, the sample size was calculated using the G-power software.[20] The sample was raised by approaching the subjects individually by visiting rehabilitation centres, offices and universities in Rawalpindi and Islamabad. Purposive sampling technique was used at rehabilitation centres, while snowball sampling was used in other settings. The sample was divided into two age groups: youth aged 15-24 years, and young adults aged 25-34 years.[15]

Only those individuals were selected who fulfilled the Diagnostic and Statistical Manual of Mental Disorders version 5 (DSM-V)[7] diagnostic criteria of CUD and had at least 12 years of formal education. Non-users were individuals without any history of any illicit drug use. Individuals in educational institutions or recreational places who were using cannabis, but did not fulfill the DSM-V diagnostic criteria, were excluded. Similarly, individuals with dual diagnosis of substance use disorder (SUD) were excluded.

Using the DSM-V criteria, subjects with CUD were categorised as mild, moderate and severe cases. Unstructured interviews were conducted based on DSM-V criteria for the diagnosis of a mental disorder.[21]

The shorter Urdu version of COPE scale (Brief COPE) was used which measures the use negative coping styles.[22] The current study used AAC, RC and DC subscales. The scores on each sub-scale were summed up separately. Higher scores on the subscales meant more use of that particular coping style. The AAC subscale consists of 10 items, RC 2 items and DC 2 items. They were all scored on a four-point Likert scale. Factor structure for Brief COPE was employed.[23] The alpha reliability of AAC, RC and DC in the current study were0.60, 0.66 and 0.60 respectively.

The data related to non-users was also collected.

After taking informed consent, the instruments were given to the participants with all the written instructions. They were asked to answer all the statements. After getting responses on the questionnaires, the booklet was carefully checked to see if there was any statement left unanswered.

Data was analysed using SPSS 21. Independent t-test was used to test differences in the use of negative coping styles between non-users and individuals with CUD. Logistic regression was used to see whether AAC was predictive of the probability of a participant being a non-user or an individual with CUD. One-way analysis of variance (ANOVA) was used in order to find differences in the use of negative coping styles among mild, moderate and severe levels of CUD.

Results

Of the 204 participants, 104(51%) were users with a mean age of 27±5.37 years and 100(49%) were non-users with a

Table-1: Differences in active avoidance, religious and denial coping styles between individuals with cannabis use disorder and non-users.

	Individuals with cannabis use disorder (n = 104)		Non-Users (n = 100)				95%CI		Cohens
Variables	M	SD	M	SD	t (202)	P	LL	UL	d
AAC	26.02	5.26	24.10	4.42	2.81	.01	.57	3.26	0.39
RC	6.51	1.66	6.86	1.31	-1.64	.10	-.76	.07	0.23
DC	4.11	1.87	4.26	1.76	-.57	.48	-.64	.35	0.08

CI: Confidence interval; LL: Lower limit; UL: Upper limit; M; Mean; SD: standard deviation; ACC: Active avoidance coping; RC: Religious coping; DC: Denial coping.

Table-2: Univariate logistic regression analysis revealing negative coping styles as predictor of individuals with cannabis use disorder and non-users (n=204).

Variables	B	SE B	B (odds ratio)	95% CI
Constant	-2.00	.76	0.14	.586
AAC	.08*	.03	1.09	[1.02, 1.15]

AAC: Active avoidance coping; SE: Standard error; CI: Confidence interval; $R^2 = 0.03$, *$\rho < 0.00$.

Table-3: Comparison of active avoidance coping (AAC) style on severity levels of cannabis use disorder (n=104).

	Cannabis Use Disorder									
	Mild (n = 32)		Moderate (n = 37)		Severe (n = 35)					
Variables	M	SD	M	SD	M	SD	Df	F	ω	ρ
AAC	23.68	5.66	26.95	4.92	27.16	4.65	2	4.91	.07	.009
RC	6.26	1.84	6.29	1.66	6.97	1.42	2	2.02	.00	.137
DC	4.15	1.37	4.27	2.09	3.91	2.06	2	.325	.00	.723

ACC: Active avoidance coping; RC: Religious coping; DC: Denial coping; M: Mean; SD: Standard deviation.

mean age of 25±5.65 years. Among the users, 32(30%) were categorised as having mild CUD, 37(35.5%) moderate and 35(33.6%) severe. AAC was significantly high in individuals with CUD compared to non-users, while the difference in use of RC and DC was not significant (Table-1).

Univariate binary logistic regression revealed that AAC increased the odds of being an individual with CUD, implying that individuals using AAC had high probability of being individuals with CUD (Table-2).

There was significant difference in use of AAC among individuals with mild, moderate and severe levels of CUD ($p<0.05$). The use of AAC was less in individuals with moderate CUD compared to those with severe CUD ($p>0.05$). There was a non-significant difference related to RC and DC in mild, moderate and severe levels of CUD (Table-3).

Discussion

The study found that individuals with CUD used AAC more compared to the non-users, meaning that individuals who use drugs tend to avoid their problems instead of thinking about solutions. Researchers assert that drug-dependence itself can be viewed as an unhealthy way to escape from stress adopted by those who are unable to adopt healthier way to cope with stress. Various Western researches support the relationship between drug use and unhealthy coping styles.[24] A study showed that individuals with SUD reported more AAC than people in the general population.[25] The findings of the present study are similar.

The current study indicated that individuals with CUD and non-users equally used RC. Hence, RC is not related with drug use in Pakistan. One cultural explanation of this findings can be that RC is equally used by a massive majority of Pakistani population and turning towards religion in stress is considered sacred and a solution to problems.

The individuals with CUD and non-users did not differ in the use of DC in the study, which is a finding not in line with previous studies[15] Further in-depth qualitative or quantitative investigation may give more confirmative conclusions.

The current study indicated that individuals suffering from severe and moderate CUD tended to avoid the problem when they encounter stress instead of dealing or managing the problem effectively. The findings add to the knowledge in the Pakistani context and are in line with the existing Western literature.[26]

RC and DC did not differ among mild, moderate and severe levels of CUD. Literature supports this finding.[17]

The current study has limitations. Limited time duration was one of the major limitations because of which, in addition to the difficulty approaching individuals specifically with CUD, the current study had to employ purposive convenience sampling to make certain easy and quick data-collection. The non-representative sample decreased the external validity of the findings. Also, the small sample size might have impeded the portrayal of a more factual picture. Future studies should employ large sample size and random sampling.

Conclusion

AAC was found to be associated with drug use or CUD, showing that addicts tend to avoid problems more than normal individuals, which increases with an increase in the use of drugs.

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References

1. Government of Pakistan's Ministry of and Interior and Narcotics Control, Pakistan Bureau of Statistics, United Nations Office on Drugs and Crime. Drug use in Pakistan 2013. Islamabad, Pakistan: United Nations Office on Drugs and Crime, 2013.
2. United Nations Office on Drugs and Crime. World Drug Report 2015. Vienna, AUT: United Nations publication, 2015.
3. Hall W. What has research over the past two decades revealed about the adverse health effects of recreational cannabis use? Addiction. 2015; 110:19-35.
4. Castillo RJ, Carlat DJ, Millon T, Millon CM, Meagher S, Grossman S, et al. Diagnostic and statistical manual of mental disorders: Washington, DC: American Psychiatric Association Press, 2015.
5. Gaoni Y, Mechoulam R. Isolation, structure, and partial synthesis of an active constituent of hashish. J Am Chem Soc. 1964; 86:1646-7.
6. Nocon A, Wittchen HU, Pfister H, Zimmermann P, Lieb R. Dependence symptoms in young cannabis users? A prospective epidemiological study. J Psychiatr Res. 2006; 40:394-403.
7. Kaptein A, Weinman J. Health psychology: Some introductory remarks. Blackwell Publishing, 2004.
8. Carver CS, Scheier MF, Weintraub JK. Assessing coping strategies: a theoretically based approach. J Pers Soc Psychol. 1989; 56:267-83.
9. Greenway AP, Phelan M, Turnbull S, Milne LC. Religious coping strategies and spiritual transcendence. Ment Health Religion Cult. 2007; 10:325-33.
10. Dempsey M. Negative coping as mediator in the relation between violence and outcomes: Inner-city African American youth. Am J Orthopsychiatry. 2002; 72:102-9.
11. Nelson NG, Dell'Oliver C, Koch C, Buckler R. Stress, coping, and success among graduate students in clinical psychology. Psychol Rep. 2001; 88:759-67.
12. Pargament KI, Koenig HG, Perez LM. The many methods of religious coping: Development and initial validation of the RCOPE. J Clin Psychol. 2000; 56:519-43.
13. Aldebot S, De Mamani AGW. Denial and acceptance coping styles and medication adherence in schizophrenia. J. Nerv. Ment Dis. 2009; 197:580-4.
14. Carver CS, Scheier MF. Situational coping and coping dispositions in a stressful transaction. J Pers Soc Psychol. 1994; 66:184-95.
15. Amna A, Aslam N. Coping styles and perceived social support among addicts and non-addict [master's thesis]. Islamabad, Pakistan: Quaid e Azam University, National Institute of Psychology, 2013.
16. Osmany M, Ali MS, Rizvi S, Khan W, Gupta G. Perceived social support and coping among alcohol/cannabis dependents and non-dependents. Indian J Psychiatry. 2014; 17:54-71.
17. Giordano AL, Prosek EA, Daly CM, Holm JM, Ramsey ZB, Abernathy MR, et al. Exploring the relationship between religious coping and spirituality among three types of collegiate substance abuse. J Couns Dev. 2015; 93:70-9.
18. Collette T, Pakzad S, Bergheul S.Adolescent criminal acts committed and substance use with a voluntary sample recruited from post-secondary institutions. J Alcohol Drug Educ. 2015; 59:64-9.
19. Sadiq R, Umer S, Ali H. A study of self- reported criminal behaviors among drug abusers. Faisalabad, Pakistan: Drug Free Nation, 2013.
20. Cunningham JB, McCrum-Gardner E. Power, effect and sample size using GPower: practical issues for researchers and members of research ethics committees. Evidence-Based Midwifery. 2007; 5:132-7.
21. American Psychiatric Association. Diagnostic and statistical manual of mental disorders: Washington, DC: American Psychiatric Association Press, 2015.
22. Akhtar M. Coping strategies and its relationship with stress and time demands among university students. Islamabad, Pakistan: Quaid-i-Azam University, 2005.
23. Hastings RP, Kovshoff H, Brown T, Ward NJ, Espinosa FD, Remington B. Coping strategies in mothers and fathers of preschool and school-age children with autism. Autism. 2005; 9:377-91.
24. Belding MA, Iguchi MY, Lamb R, Lakin M, Terry R. Coping strategies and continued drug use among methadone maintenance patients. Addict Behav. 1996; 21:389-401.
25. Kronenberg LM, Goossens PJ, van Busschbach J, van Achterberg T, van den Brink W. Coping styles in substance use disorder (SUD) patients with and without co-occurring attention deficit/hyperactivity disorder (ADHD) or autism spectrum disorder (ASD). BMC Psychiatry. 2015; 15:159.
26. Aldridge-Gerry AA, Roesch SC, Villodas F, McCabe C, Leung QK, Da Costa M. Daily stress and alcohol consumption: modeling between-person and within-person ethnic variation in coping behavior. J Stud Alcohol Drugs. 2011; 72:125-34.