Original Article

Men with and without Alcohol Dependence: A Comparative Study of *Triguna*, Nonattachment, Personality and Subjective Well-Being

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Abstract

Context: Indian models of personality are seldom explored in relation to alcohol dependence. *Triguna* is an Indian model of personality originating from the *Sankhya* philosophy, whereby three *gunas*, *Sattva*, *Rajas* and *Tamas* describe personality features. Additionally, the trait of Non attachment which is a concept discussed extensively in *Bhagavad Gita* is also studied along with *Triguna*. **Aims:** The current study discusses these concepts and attempts to explore their relationship with personality and subjective well-being, among men with and without alcohol dependence. **Subjects and Methods:** A cross-sectional survey method was adopted, with a sample of 84 men from the community without alcohol dependence, screened through alcohol use disorders identification test and 30 men diagnosed with alcohol dependence. Informed consent was obtained from all the participants. **Statistical Analysis Used:** The data were analyzed using descriptive statistics, independent sample *t*-test, and Mann–Whitney *U*-test. **Results:** Men without alcohol dependence scored significantly higher on variables such as *Sattva*, extraversion and conscientiousness, positive affect, and life satisfaction, than men in the clinical group. Men who were diagnosed with alcohol dependence, scored significantly higher on *Tamas*, neuroticism, and negative affect. **Conclusions:** This novel understanding of the personality structure of patients with alcohol dependence from the *Triguna* perspective may be helpful in the development of indigenous psychological interventions for alcohol dependence.

Keywords: *Alcohol dependence, India, nonattachment, personality, subjective well-being, Triguna*

Introduction

Personality

Personality has been defined as individual differences in characteristic patterns of thinking, feeling, and behaving.[1] The recent definitions of personality, both internal and interpersonal aspects, are emphasized.[2] Thus, it is described as the specific mental organization and processes that produce an individual's characteristic pattern of behavior and experiences, which are the between-person or inter-personal and within-person or intra-personal senses of "personality."[2]

The "big five" theory of personality

The existing personality models used widely in psychological research, such as the Big Five model, is based on the assumption that all individual personality differences are encoded in the language people use to describe others. Thus, such a lexical approach collates a list of adjectives and all the different words people use to build the theory of personality. The five domains of personality, as described in the five-factor model, are neuroticism, extraversion, agreeableness, openness to experience, and conscientiousness. Extraversion has been described as one's tendency to experience positive emotions such as joy and excitement.[3] While neuroticism is the individual differences in the tendency to experience negative emotions, such as anxiety, depression, irritability, anger, and shame.[3] Conscientiousness reflects orderliness, responsibility, and dependability.[4] Agreeableness describes individual differences in being likeable, pleasant, and harmonious in relation to others.[5] Finally, openness/intellect represents individual differences in cognitive exploration, the tendency to seek, detect, appreciate, understand, and utilize both sensory and abstract information and to engage with it.[3]

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In spite of existing research, it has been suggested that the cross-cultural universality of trait structures needs to be approached with caution, given that the anthropological perspective emphasizes that culture influences personality.[6] Given this background, it is unfortunate that the cultural differences and the unique issues of Indian society have largely been ignored.[7] However, in recent years, there have been some welcome developments in this area. Though empirical research based on Indian concepts is still in its infancy, the potential for applying this knowledge is abundant. In this article, one such concept *Triguna,* has been explored further.

The model of *Triguna* (*i.e., Sattva, Rajas,* and *Tamas*), which is the Indian concept of personality, has been mentioned in the *Chandogya Upanishad* and was described in *Charaka Samhita, Bhagavad Gita,* and *Patanjali Yogasutras*.

Valamheeyathe, vyadhayaaapyayyanthe, yasmaddheena: prannajjahaadi, yadindriyanaamabhigraahakam cha "mana" ithyabhidheeyathe; thannividhamakhyayathe-shudham, rajasam, thamasamithi

(Charaka Samhita, SariraSthana, Chapter 3, Verse 13)[8]

Triguna model primarily pertains to the Samkhya philosophy, which describes two realities such as spiritual and material, known as *Purusha* and *Prakriti,* respectively. *Purusha* is the Supreme Consciousness, and *Prakriti* is the matter. Surprisingly, in this model, along with the physical body, even the mind is considered material, though subtle. The characteristics of the *gunas* are as follows: *Sattva guna* is characterized by balance, peace, equanimity, and qualities such as cleanliness, truthfulness, dutifulness, detachment, discipline, contentment, and staunch determination. Attributes of *Rajas* include intense activity, desire for sense-gratification, little interest in spiritual elevation, the envy of others, and materialistic tendencies. *Tamas guna* is manifested in dullness, lethargy, fatigue, and even depression. Other qualities associated with it include mental imbalance, anger, ignorance, arrogance, and helplessness.[9]

Triguna conceptualizes a holistic understanding of personality in terms of physical, mental, and spiritual dimensions. It is not one *guna* that characterizes the personality but the interactions of the three *gunas*. As per Charaka Samhita, *Triguna* composes the psyche and an individual's predominant *guna* is determined at the time of fertilization itself, which is the first step in the development of a human being. The texts further suggest that the predominance of *guna* varies from person to person as well as from time to time.[10]

Swardhendriyarthasankalpavyabhi charanaanjanekamekasminpurushesattvam, rajastamasattvagunayogyacha; nachaanekathvam, nahyekam, hyekakalamanekeshupravarthathe,; thasmannaikakalasarvendriyapavarthi

Yahunamchabheekshnampurushamanuvar thathesattvamthatsathvamevopde shanthimunayobahulyanusayath

(Charaka Samhita, Sutra Sthana, Chapter 8, Verse 5 and 6).

Triguna in clinical populations

Although there have been many studies on *Triguna*, few studies have been carried out in clinical populations.[11,12] The levels of *Sattva*, *Rajas,* and *Tamas* were compared between 20 patients diagnosed with mild–moderate depression, with a community sample. It was found that the clinical group was higher on *Rajas,* followed by *Tamas,* and *Sattva* was lowest in this group. In the general population, *Sattva* was higher than *Rajas,* followed by *Tamas*.[13] Similarly, another study comparing patients having anxiety disorders with community controls found that the two groups differed significantly on *Triguna.* The clinical group scored higher on *Tamas* and *Rajas* factors, and the community group was high on *Sattva*. The study findings also revealed that *Sattva* was positively correlated, and *Rajas* and *Tamas* were negatively correlated with quality of life.[14] While personality is one of the most studied variables in addiction, no study was found on *Triguna* in substance use.

Nonattachment

Along with *Triguna*, the other indigenous concept studied here is nonattachment, which has also been conceptualized as a personality variable. Nonattachment has been variously described as the subjective quality of ease and balance, along with a lack of fixation on mental representations, objects, ideas, images, and mental independence. It does not imply a lack of connectedness but involves a responsive and caring involvement in the present situation and a genuine interest in other people.[15-17] Earlier studies have reported nonattachment is associated with positive mental health; however, no published research on this aspect was found in the clinical populations.[18]

Subjective well-being

Subjective well-being (SWB) has been defined as people's conscious experiences of happiness, in terms of hedonic feelings and cognitive satisfaction.[19] Thus, SWB measures both cognitive judgments and affective reactions.[20] Affect pertains to the experience of a feeling or an emotion. It is a broad term that is used to cover mood, feeling, attitude, preference, and evaluations.[21] The affective component of SWB refers to pleasure or happiness in terms of frequent positive affect (PA) and infrequent negative affect (NA). PA reflects the extent to which a person feels enthusiastic, active, and alert. In contrast, NA is a general dimension of subjective distress and un pleasurable engagement, that subsumes a variety of aversive mood states, including anger, contempt, disgust, guilt, fear, and nervousness.[22]

Further, the Circumplex model of affect is a dimensional approach that proposes two fundamental neurophysiological systems as the basis of any affect. One system is related to valence, which is a pleasure-displeasure continuum, and the other is arousal or alertness.[23] Thus, both activated and deactivated PA (e.g., feeling excited vs. relaxed), and activated and deactivated NA (e.g., feeling angry vs. exhausted) are part of the affective repertoire. In addition, the cognitive component of SWB refers to life satisfaction, which has been defined as a global assessment of a person's own quality of life, according to his/her chosen criteria.[24] These chosen criteria form a subjectively set standard by the individual with which they compare their level, to make a judgment of their satisfaction.

Alcohol dependence

As per the aims of the study, the clinical population chosen for the study was men with alcohol dependence syndrome. According to the International Classification of Diseases-10, a dependence syndrome is defined as a cluster of physiological, behavioral, and cognitive phenomena, in which the use of a substance or a class of substances takes on a much higher priority for a given individual than other behaviors that once had greater value.[25] The desire to take psychoactive drugs, alcohol, or tobacco is a central descriptive characteristic of dependence. The diagnostic guidelines of the dependence syndrome include: (i) A strong desire to take the substance, (ii) difficulties in controlling the substance-taking behavior, (iii) a physiological withdrawal state, (iv) evidence of tolerance, (v) progressive neglect of alternative pleasures or interests, (vi) persisting with the substance use despite clear evidence of overly harmful consequences.

Aim and rationale of the study

Although the role of personality and emotions in addictive behaviors is comparatively well researched, little research interest has been given to understanding addiction using the Indian models of personality. Assessment of the relationship of *Triguna* with the diagnosis of alcohol dependence will throw more light on the differential relationship of the 3 gunas with mental health and well-being. It will also provide insights for planning innovative indigenous treatment strategies. Currently, different treatment modalities are available for alcohol dependence, such as pharmacological and nonpharmacological. However, the outcome of this study may provide guidance for the development of treatment modalities in this area based on Indian psychology in future. For example, including *Triguna* based strategies in psychological interventions, in terms of Sattva enhancinglife-style, activities etc.

Therefore, we aimed to compare men with and without alcohol dependence on Indian concepts of *Triguna* and nonattachment, along with their personality and SWB.

Subjects and Methods

Participants

A cross-sectional survey method was adopted for the current study, and it was conducted after approval by the institute's ethics committee. The study included a clinical group of men with alcohol dependence, and a community group of men without alcohol dependence. The age group of the sample was between 18 and 50 years, with a minimum of 10 years of formal education and the ability to read, write and comprehend English. Alcohol use disorders identification test (AUDIT) scale was used as a screening tool for alcohol dependence, with AUDIT scores below 8 being the inclusion criteria for the community group of 84 men without alcohol dependence, who were selected from colleges and various organizations. For the clinical group of men with alcohol dependence, a sample of 30 male patients diagnosed with alcohol dependence and admitted at the Centre for Addiction Medicine, NIMHANS, a tertiary mental health care center, were selected. The AUDIT scale was also administered in this group for documentation purposes.

Measures

A sociodemographic datasheet was developed by the researcher to gather basic socio-demographic data such as age, education, occupation, marital status, religion, living arrangement, income and presence of alcohol use, and in the clinical group, the details about alcohol use, such as duration, type and use of other substances, apart from alcohol. For all the standardized measures which are not in the public domain, requisite permission was taken from the authors for using in the study. Informed consent was taken from all the participants.

The alcohol use disorders identification test-alcohol use disorders identification test

AUDIT contains 10 questions with regard to the drinking pattern of the participants.[26] It can be administered as a self-report scale as well as in the form of the interview. For the current study, a self-report version was administered. This scale has been validated in Indian sample with a high internal reliability of 0.92.[27]

Vedic personality inventory

This inventory has 56 items to assess *Vedic* concept of *Gunas,* as related to personality.[9] It gives a standardized score for each *Guna.* The participants were asked to give their agreement to the given statements on a 7-point scale. It has an internal consistency ranging from 0.70 to 0.92 for the *Gunas*. Its reliability coefficient is in the range of 0.74–0.79, and it has been widely used in the Indian context.[9]

Nonattachment scale-7

This is the short version of a 30-statement nonattachment scale developed by Sahdra *et al*.,[16,28] It contains seven

statements rated on a 6-point scale which tries to understand the view of the participant relating to the world, relationships, and feelings. It has been used in the Indian context and has an internal consistency of 0.81.[18]

Big five aspect scale

Big Five Aspect Scale (BFAS), an open-source alternative measure of five major personality traits, was used in this study.[3] It contains 100 statements, which the participant has to rate on a 5-point Likert scale from Strongly Agree to Strongly Disagree. It has five broad domains, namely, neuroticism, extraversion, agreeableness, openness/intellect, and conscientiousness. The test–retest reliability of the scale ranged from 0.82 to 0.89 for the domains.

Satisfaction with life scale

It is a five item Likert type scale, which has to be rated on a 7-point scale and the scores fall in the range of 5 (low satisfaction) to 35 (high satisfaction).[29] It has been widely used in the Indian context. The test-retest correlation coefficient was found to be 0.82, and coefficient alpha was 0.87.[30]

Positive and negative affect schedule revised

The Positive and negative affect schedule revised version was used to assess the SWB of the participants.[31] It contains 26 words describing various emotions and feelings, and the participants were asked to rate each word according to its frequency in their life. It exists in both trait and state versions. For the current study, the trait version of the scale was used. The reliability of the PA scale ranged from 0.86 to 0.90, the NA scale from 0.84 to 0.87. This scale has been used in the Indian setting.[30]

Procedure

During the pilot phase of the study, the data was collected from 2 clinical and 4 community samples, by administering the selected tools to understand the difficulties in collecting data, the time required to complete the test and obtain feedback on the same. Since no published literature was found using BFAS in the Indian context, we established the test-retest reliability of the BFAS in the Indian population. For this purpose, 30 students were recruited from a nursing college. The sample consisted of 24 females and 6 males belonging to the age group of 19–21 years. Informed consent was obtained from the sample before the data collection. It was mentioned in the informed consent that the respondents would be approached after a month for retest of the scale. The test-retest coefficient was found to be satisfactory for neuroticism (0.704), extraversion (0.801), agreeableness (0.822), openness/intellect (0.734), and conscientiousness (0.715). For the ten factors under these five domains, the coefficient ranged between 0.499 and 0.789, suggesting an acceptable level of test–retest reliability. The internal consistency represented by Cronbach's alpha for neuroticism, agreeableness, conscientiousness, extraversion, and openness/intellect is 0.798, 0.661, 0.717, 0.705, and 0.717, respectively. Subsequently, the data was collected for the main phase from the clinical and community sample. Details of the sample are described in the results section.

Statistical analysis

A quantitative analysis was performed using SPSS (IBM Corp. Released 2011. IBM SPSS Statistics for Windows, Version 20.0. Armonk, NY: IBM Corp). Sociodemographic details of the samples were obtained through descriptive statistics such as mean, standard deviation (SD), frequency, and percentage. Correlations were obtained using both parametric and nonparametric measures, and comparison of means was made using *t*-test, for both clinical and community samples. Chi-square, *t*-test and Mann–Whitney *U*-test were used to compare the clinical and the community groups with respect to sociodemographic details and other study variables.

Results

Socio-demographic details of the participants

The study sample in both community and clinical group had a mean age of 33 years (±9.6 years and ± 7.7 years, respectively). Among the clinical sample, most of the participants were educated up to graduation (40%), were employed (66.6%), belonged to the Hindu religion (76.7%), and were unmarried (56.7%). Among the community sample, 71.4% were graduates, and 62% were employed. Further, most of them belonged to the Hindu religion (69%) and were unmarried (47.6%). As mentioned earlier, in the community group AUDIT scores were used as a screening tool, and those above the cut-off (8 and above) were removed from the analysis, leading to a mean score of 1.27. The clinical group had AUDIT scores above 8 (mean score 23.2) and was diagnosed with alcohol dependence by the Centre for Addiction Medicine. Sixty percent of this clinical group also reported using other substances besides alcohol. The clinical and community groups were also compared on sociodemographic variables and using Chi-square test, which only indicated differences with respect to education. Greater number of study participants in the clinical group were educated up to PUC (12th std), while a higher percentage of the community sample had completed graduation. The groups did not show any statistically significant differences on age, employment status, and marital status when compared using *t*-test/Chi-square.

Comparison between clinical and community samples on the study variables

The normalcy of distribution was analyzed, and normal distribution was not attained for AUDIT score, Satisfaction with life scale score, *Rajas*, PA-activated and PA-deactivated, and NA-deactivated. The community and clinical groups were further compared on *Triguna*, nonattachment, personality, satisfaction with life and PA and NA, using independent sample *t*-test or Mann–Whitney

U-test, depending on normalcy results. The mean and SD values, along with the comparison results between the two groups, are given in Table 1.

Comparison on triguna

On *Triguna,* the clinical group scored higher on *Tamas* and lower on *Sattva,* and the two groups were significantly different ($P < 0.001$). Rajas was not significantly different between the two groups.

Comparison on nonattachment

The two groups were not significantly different on nonattachment, although a trend was visible with the clinical sample having slightly lower nonattachment ($P = 0.80$).

Comparison on big five personality traits

Among the big five personality traits, the clinical group was significantly higher on neuroticism ($P < 0.001$) and lower on conscientiousness ($P < 0.005$) and also significantly lower on extraversion ($P < 0.05$). The groups were not significantly different in agreeableness and openness/intellect.

Comparison on subjective well-being

The clinical group was lower on SWB, in terms of significantly lower life satisfaction ($P < 0.001$), total PA ($P < 0.005$), and deactivated PA ($P < 0.001$). The clinical group was also significantly higher on total NA and activated NA (both with $P < 0.001$), as well as deactivated NA ($P < 0.05$). There was a trend on activated PA with the clinical sample being lower on that too ($P = 0.059$).

Correlation of *Sattva* with other study variables

The correlation of Triguna with other variables are given in Table 2. In both the groups, *Sattva* was positively correlated with conscientiousness (clinical group = 0.72; community group = 0.61), satisfaction with life, PA-total, activated and deactivated, and negatively correlated with neuroticism, NA-total, activated and deactivated. In the clinical group, it was also negatively correlated with the AUDIT scores and in the community group, it positively correlated with other personality traits such as agreeableness, extraversion, and openness.

Correlation of rajas with other study variables

In both the groups, *Rajas* was negatively correlated with conscientiousness, PA (total and deactivated). In the clinical group, it was also negatively associated with agreeableness. Further, in the community group, it was also positively associated with neuroticism, NA (total, activated, and deactivated), and negatively associated with life satisfaction and PA total and deactivated.

Correlation of tamas with other study variables

In both the groups, *Tamas* was positively correlated with neuroticism and NA (total and activated), and it was negatively correlated with conscientiousness, life satisfaction, and PA (total, activated, and deactivated). In the community sample, it was also positively associated with deactivated NA, and negatively associated with extraversion and openness.

Table 1: Comparison of scores between clinical and community sample

Scales	Mean (SD)		*t*	*P*	CI	Effect size (Cohen's d)
	Clinical (*n*=30)	Community (*n*=84)				
Alcohol dependence (AUDIT)	23.2 (9.56)	1.27 (2.13)	−19.7	<0.001**	−24.1-−19.7	
Triguna						
Sattva	35.8 (7.11)	43.55 (6.59)	5.2	<0.001**	0.048-0.10	1.13
Rajas#	31.24 (3.87)	30.97 (3.71)	−0.32	0.774	−0.019-0.014	
Tamas	32.96 (4.83)	25.48 (4.37)	−7.63	<0.001**	−0.09-−0.05	
Nonattachment	27.87 (7.64)	30.19 (5.57)	1.76	0.080	−0.28-4.9	
Big five personality traits						
Neuroticism	65.27 (11.88)	55.9 (8.4)	−4.58	<0.001**	−13.4-−5.3	0.9
Agreeableness	68.17 (10.66)	70 (6.1)	1.1	0.271	1.4-5.1	
Extraversion	65.76 (10.33)	69.5 (7.1)	2.96	0.038*	1.76-8.83	
Conscientiousness	63.13 (8.5)	68.43 (8.3)	2.1	0.004**	0.21-7.24	
Openness/intellect	70.33 (11.43)	71.02 (6.5)	0.40	0.690	−2.73-4.1	
Subjective wellbeing						
Satisfaction with life#	19.3 (7.36)	24.82 (5.19)	4.45	<0.001**	3.06-7.97	
Positive affect - total	41 (10.02)	47.24 (8.6)	3.2	0.002**	2.39-10.08	
Positive affect - activated#	26.4 (6.66)	29.17 (5.59)	2.03	0.059	0.02-5.5	
Positive affect - deactivated#	14.6 (4.54)	17.96 (3.76)	3.6	<0.001**	1.4-5.2	
Negative affect - total	37.1 (11.17)	27.94 (8.9)	−4.41	<0.001**	−13.2-−5.07	0.9
Negative affect - activated	24.1 (7.56)	17 (5.74)	−5.25	<0.001**	−9.75-−4.41	1.06
Negative affect - deactivated#	13 (4.33)	10.81 (3.60)	−2.4	0.026*	−3.9-−0.41	0.5

Comparison using independent sample *t*-test, #Mann–Whitney *U*-test, *P<0.05, **P<0.01. CI=Confidence interval, AUDIT=Alcohol Use Disorders Identification Test, SD: Standard deviation

Correlation of nonattachment with other study variables

In both the groups, nonattachment was negatively correlated with neuroticism. In the community group, it was also positively correlated with agreeableness, extraversion, and openness, PA (total, activated, and deactivated), as well as negatively associated with NA (total, activated, and deactivated). Other correlations were not statistically significant at 0.05/0.01 level, in both clinical as well as community samples.

Discussion

The current study aimed to compare men with and without alcohol dependence on Indian concepts of *Triguna* and nonattachment, along with their personality and SWB. It was found that among people with alcohol dependence, there is a predominance of *Tamas guna. Tamas* supposedly leads to a need to be inactive and a feeling of exhaustion along with anger, depression, helplessness, fear, sorrow, and uncertainty.[9] In our study, *Tamas* was also related to neuroticism, a tendency to be sensitive to negative emotions, and negatively associated with conscientiousness, all of which may explain dependence on substances. In the past, similar findings were reported where a group of patients with anxiety disorder were higher on *Tamas,* compared with a community sample.[14] Past literature has also suggested that depression and anxiety could be causal factors for dependence on substances, including alcohol.[32] Alcohol-dependent individuals show significantly high neuroticism, extraversion, anxiety, and depression.[33] Therefore, it is possible that *Tamas* leads to negative emotions, thus making one vulnerable to alcohol dependence. However, such an analysis could not be done due to the small sample size.

On the other hand, *Sattva* was relatively lower in the clinical participants. The community group was higher in *Sattva*, a trait associated with higher conscientiousness, satisfaction with life, PA, agreeableness, extraversion, openness, and lower NA. This goes with the theory that *Sattva* is associated with mental equilibrium and contentment and may incorporate a range of desirable qualities.[9] Some of the Vedic Personality Inventory items also captured qualities such as contentment, cleanliness, and dutifulness.

Rajas was not significantly different between the two groups. Probably modern lifestyle pushes people in general toward higher *Rajas,* in terms of materialistic attitudes, action orientation, passion, high energy, and drive. Thus, *Rajas* did not emerge as a differentiating factor between the community sample and those diagnosed with alcohol dependence. More empirical research is required to understand the consequences of dominant *Rajas* on mental health in modern times. While it may be suggested that such increased activity, enthusiasm, passion, and movement are essential for goal achievement, the negative consequences of it will be attachment towards materialistic needs, poor regulation of emotions, dissatisfaction, and desire for need gratification. All of these negative consequences may affect the well-being of a person and make them vulnerable to episodes of depression.[13] Current study results also support this, where *Rajas* was associated with lower life-satisfaction, lower positive affect and higher NA. *Rajas* was also associated with lower conscientiousness and agreeableness and higher neuroticism. In another interesting cross-cultural study, higher levels of *Rajas* was reported in the Indian sample, as compared to Americans and Czechs.[11] However, the generalizability of this particular study results may be limited. Thus, overall, *Sattva* seems to be associated with well-being, while *Rajas* and *Tamas* are associated with mental illnesses such as anxiety, depression and alcohol dependence.[14,13]

Counter intuitively, nonattachment was not significantly different between the two groups, and only a trend level difference was found. It has been reported that people consider attachments and possessions as the normal state of functioning.[15] Probably, the kinds of attachments differed in both groups, but they still had similar levels of *Asakti*/attachments. Since a trend of lower nonattachment was present in the clinical group, future studies may explore this association with a larger sample size. Additionally, nonattachment was positively associated with agreeableness, extraversion and openness, along with PA and negatively with neuroticism and NA.

Examining the SWB of the participants, PA and NA were significantly different between the two groups. In the clinical participants, the affect was predominantly negative in nature. While PA and life satisfaction were significantly higher in the community group. As mentioned earlier, *Triguna* also influences affect, and vice versa. The need to experience PA more frequently and intensely can be one reason for substance use.

Approach and avoidance of alcohol are related to negative and PA, respectively. Elevated NAs showed a significantly higher approach rate for alcohol, and elevated PA showed a higher avoidance rate for alcohol.[34] The clinical group also had lower life satisfaction. Alcohol dependence can lead to a decreased repertoire of activities, leading to lost opportunities since some of these activities might have enhanced the individual's well-being. On the other hand, low life satisfaction may also lead to more alcohol consumption, thus accounting for the comparatively lower life satisfaction in the clinical group.[35]

Specifically, while conceptualizing alcohol dependence, it can be understood that increased *Tamas*, decreased *Sattva*, lower PA and life satisfaction, and high NA, together may lead to vulnerability for dependence. However, our study findings are not conclusive of the influence of *Rajasic* characteristics and nonattachment, on alcohol dependence.

Limitations

The Indian psychological concepts explored in the study (*Triguna* and nonattachment) are abstract, and available

Table 2: Correlation of *Triguna* and nonattachment with other scales

Scales	*Sattva*		*Rajas*[#]		*Tamas*		Nonattachment	
	Clinical	Community	Clinical	Community	Clinical	Community	Clinical	Community
Alcohol dependence (AUDIT)[#]	−0.37*	−0.13	0.37	−0.11	0.26	0.21	−0.24	−0.10
Big five personality traits								
Neuroticism	−0.57**	−0.72**	0.26	0.58**	0.56**	0.56**	−0.48**	−0.33**
Agreeableness	0.12	0.46**	−0.43*	−0.22	0.14	−0.43**	−0.24	0.33**
Conscientiousness	0.72**	0.61**	−0.67**	−0.38**	−0.52**	−0.59**	0.29	0.13
Extraversion	0.09	0.36**	0.001	−0.22	−0.14	−0.39**	−0.25	0.31**
Openness/intellect	0.34	0.32**	−0.33	−0.15	−0.19	−0.38**	−0.30	0.33**
Subjective wellbeing								
Life satisfaction[#]	0.47**	0.37**	−0.29	−0.43**	−0.46*	−0.26*	0.18	−0.03
Positive affect - total	0.54**	0.46**	−0.37*	−0.20*	−0.53**	−0.53**	0.18	0.55**
Positive affect - activated[#]	0.45*	0.42**	−0.28	−0.16	−0.45*	−0.46**	0.12	0.49**
Positive affect - deactivated[#]	0.52**	0.48**	−0.45*	−0.29**	−0.49**	−0.47**	0.23	0.63**
Negative affect - total	−0.52**	−0.71**	0.24	0.50**	0.49**	0.65**	−0.25	−0.48**
Negative affect - activated	−0.52**	−0.67**	0.23	0.47**	0.53**	0.59**	−0.31	−0.46**
Negative affect- deactivated[#]	−0.42*	−0.64**	0.27	0.43**	0.32	0.59**	−0.11	−0.42**

[#]Correlation by spearman, *Correlation significant at the 0.05 level (two-tailed), **Correlation significant at the 0.05 level (two-tailed). Correlation by Pearson method. AUDIT=Alcohol Use Disorders Identification Test

tools may not fully capture the exact construct. This might also explain the results associated with *Rajas*, and nonattachment, some of which did not emerge significant as expected from the theoretical underpinnings. Cross-sectional design and purposive sampling were used, and quantitative analysis was done, which has limitations when it comes to gaining in-depth insight. The sample was selected only from urban Bengaluru, and due to language constraints, there was a requirement to include only an educated population with fluency in English; hence, the study may not represent a population who differ in education or life in a rural area. Due to the nature of the study, and the alcohol-dependent sample being in treatment for addiction, the details of alcohol consumption were not assessed. Due to the need for screening as per inclusion and exclusion criteria and the availability of samples, the clinical and community sample size differs. Similar limitation of clinical sample size is present in other studies with the Triguna. Although this may not have any major implication on the analysis using *t*-test, it may lower the power of the *t*-test.

Furthermore, considering the relationship of *Sattva guna* with life satisfaction and affect, it can also be presented as an indigenous concept whose characteristics can be explained by referring to both, personality and affect. Also, the scope of conceptualizing *Triguna* as a trans-diagnostic model, using it for early detection, and planning for the prevention of alcohol and other substance use, or preventing other mental health problems, can be studied further. Since this was a correlational study, future studies can use appropriate methodology to establish causation. Theoretically, all three *gunas* are considered essential for the existence of the individual. However, the predominance of *Sattvikaguna* at, a trait level, is considered essential to one's well-being and psycho-spiritual growth. This does not mean that the other *gunas* must be destroyed; they have their utility at the state level, but it is the harmony among the three, and overall higher *Sattva*, that leads to well-being. The findings are in line with *Charaka Samhita*, an Ayurvedic text which suggests life-styles that lead to the development of *Sattva guna* are important for well-being.[36] Since mental health is holistic, influenced by biological and social correlates, and cannot be confined just to the psychological aspects of a person, integrative treatment approaches suitable to this model maybe popularized.

Conclusions

The study aimed to compare men with and without alcohol dependence on Indian concepts of *Triguna* and nonattachment, along with their personality and SWB. It was found that compared to the community sample of men without alcohol dependence, the clinical sample of men with alcohol dependence had higher scores of *Tamasic guna,* neuroticism and NA. They also have lower levels of *Sattva*, conscientiousness, extraversion, PA, and life satisfaction. The two groups were not significantly different on nonattachment, although a trend was visible with the clinical sample having slightly lower nonattachment. The findings need further research on other kinds of addictions, including behavioral addictions.

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Ethical clearance

The study was recommended and approved by the Institutional Ethics Committee of National Institute of

Mental health and Neurosciences, Bengaluru and it was communicated through the letter NO.NIMH/DO/IEC (BEH. Sc. DIV)/2016 dated 16.05.2017.

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Conflicts of interest

There are no conflicts of interest.

References

1. Kazdin AE. Encyclopedia of Psychology. Washington, D.C.: American Psychological Association; 2000.
2. Deyoung CG. Openness/intellect: A dimension of personality reflecting cognitive exploration. In: APA Handbook of Personality and Social Psychology: Personality Processes and Individual Differences. Vol. 4. Washington DC: American Psychological Association; 2015. p. 369-99.
3. DeYoung CG, Quilty LC, Peterson JB. Between facets and domains: 10 aspects of the Big Five. J Pers Soc Psychol 2007;93:880-96.
4. Oliver P. John Sanjay Srivastava – University of Oregon. Available from: https://pages.uoregon.edu/sanjay/pubs/bigfive .pdf. [Last accessed on 2022 Nov 16].
5. Graziano WG, Tobin RM. Agreeableness. New York, US: American Psychological Association, The Guilford Press; 2009. Available from: https://psycnet.apa.org/record/2009-12071 -004. [Last accessed on 2022 Nov 16].
6. Triandis HC, Suh EM. Cultural influences on personality. Annu Rev Psychol 2002;53:133-60.
7. Dalal AK, Cornelissen RM, Misra G, Varma S. A journey back to the roots: Psychology in India. In: Foundations and Applications of Indian Psychology. Noida:DorlingKindersley (India);2011. p. 27-56.
8. Kumar A. "Sharira Sthana-Preamble," Charak Samhita New Edition; 2020. p. 51. Available from: https://doi.org/10.47468/ csne0.2020.e01.s04.001. [Last accessed on 2022 Nov 16].
9. Wolf DB. A psychometric analysis of the three gunas. Psychol Rep 1999;84:1379-90.
10. Dwivedi RB. Sutra Sthana, Charak Samhita. Charak Samhita; 2022. Available from: https://www.carakasamhitaonline.com/ index.php?title=Sutra_Sthana&oldid=41252. [Last accessed on 2022 Nov 16].
11. Singh K, Jain A, Kaur J, Junnarkar M, Slezackova A. Cross-cultural differences on Gunas and other well-being dimensions. Asian J Psychiatr 2016;24:139-46.
12. Khanna P, Singh K, Singla S, Verma V. Relationship between Triguna theory and well-being indicators. Int J Yoga Philos Psychol Parapsychol 2013;1:69.
13. Kumar KV, Balodhi JP. Sattwa, Rajas & Tamas (SRT) factors in depression. Int J Indian Psychol 2016;3:2016.
14. Sharma MP, Salvi D, Sharma MK. Sattva, Rajas and Tamas factors and quality of life in patients with anxiety disorders: A preliminary investigation. Psychol Stud 2012;57:388-91.
15. Gupta K, Agrawal J. Lay meanings and associated experiences of non-attachment *(*Anasakti): A study from India. J Humanist Psychol 2020. [Doi: 10.1177/0022167820977563].
16. Sahdra BK, Shaver PR, Brown KW. A scale to measure nonattachment: A Buddhist complement to Western research on attachment and adaptive functioning. J Pers Assess 2010;92:116-27.
17. Codato M, Armenti A, Testoni I, Guglielmin MS. Overcoming female subordination. An educational experiment changes the levels of non-attachment and objectification in a group of female undergraduates. Interdiscip J Fam Stud 2012;17:2012.
18. Banth S, Talwar C. Anasakti, the Hindu ideal, and its relationship to well-being and orientations to happiness. J Relig Health 2012;51:934-46.
19. Diener E, Suh ME. Subjective well-being and age: An international analysis. Annu Rev Gerontol Geriatr 1997;17:304-24.
20. Oishi S, Schimmack U, Diener E. Pleasures and subjective well-being. Eur J Pers 2001;15:153-67.
21. Oyebode F. Sims' Symptoms in the Mind: An Introduction to Descriptive Psychopathology. Edinburgh: Saunders/Elsevier; 2015.
22. Watson D, Clark LA, Tellegen A. Development and validation of brief measures of positive and negative affect: The PANAS scales. J Pers Soc Psychol 1988;54:1063-70.
23. Russell JA. A circumplex model of affect. J Pers Soc Psychol 1980;39:1161-78.
24. Shin DC, Johnson DM. Avowed happiness as an overall assessment of the quality of life. Soc Indic Res 1978;5:475-92.
25. WHO. The ICD-10 Classification of Mental and Behavioural Disorders: Diagnostic Criteria for Research. Geneva: WHO; 1993.
26. Saunders JB, Aasland OG, Babor TF, de la Fuente JR, Grant M. Development of the Alcohol Use Disorders Identification Test (AUDIT): WHO collaborative project on early detection of persons with harmful alcohol consumption-II. Addiction 1993;88:791-804.
27. Pal HR, Jena R, Yadav D. Validation of the Alcohol Use Disorders Identification Test (AUDIT) in urban community outreach and de-addiction center samples in north India. J Stud Alcohol 2004;65:794-800.
28. Elphinstone B, Sahdra BK, Ciarrochi J. Living well by letting go: Reliability and validity of a brief measure of non-attachment. Unpublished manuscript,preprintavailable; 2015.
29. Diener E, Emmons RA, Larsen RJ, Griffin S. The satisfaction with life scale. J Pers Assess 1985;49:71-5.
30. Agrawal J, Murthy P, Philip M, Mehrotra S, Thennarasu K, John JP, *et al*. Socio-demographic correlates of subjective well-being in urban India. Soc Indic Res 2010;101:419-34.
31. Rao D, Mehrotra S. Negotiation of life-tasks and subjective well being in young adults pursuing professional courses. Psychol Stud 2005;51:144–52.
32. Caldwell TM, Rodgers B, Jorm AF, Christensen H, Jacomb PA, Korten AE, *et al.* Patterns of association between alcohol consumption and symptoms of depression and anxiety in young adults. Addiction 2002;97:583-94.
33. Chaudhury S, Das SK, Ukil B. Psychological assessment of alcoholism in males. Indian J Psychiatry 2006;48:114-7.
34. Schlauch RC, Gwynn-Shapiro D, Stasiewicz PR, Molnar DS, Lang AR. Affect and craving: Positive and negative affect are differentially associated with approach and avoidance inclinations. Addict Behav 2013;38:1970-9.
35. Koivumaa-Honkanen H, Kaprio J, Korhonen T, Honkanen RJ, Heikkilä K, Koskenvuo M. Self-reported life satisfaction and alcohol use: A 15-year follow-up of healthy adult twins. Alcohol Alcohol 2012;47:160-8.
36. Acharya VY. Charaka Samhita-Chakrapani Teeka Chikitsa Sthana. Edition-2006. Ch. 1. Varanasi: Chowkhamba Krishnadas Academy;2006.