

## Relationship between alexithymia and depression: A narrative review

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### ABSTRACT

Alexithymia has been described as difficulty in expressing as well as experiencing feelings. It has been studied in relation with medical as well as psychological conditions and has been seen to impact treatment outcomes. The current review focuses on the relationship of alexithymia with depression and the role of culture in this relationship. The keywords for literature included terms such as depression, alexithymia, depression and alexithymia, Toronto Alexithymia Scale, assessing alexithymia and depression, and alexithymia as a trait. The main findings of the review were that alexithymia and depression are highly correlated, and severity of depression and gender are independently associated with alexithymia and may interfere with treatment outcomes.

**Key words:** Alexithymia, depression, Indian culture, review, trait

### INTRODUCTION

Individuals with any medical or psychological illness may struggle with not feeling the “feeling.” It came into focus in the 1970s when MacLean in his work with individuals with psychosomatic illnesses inferred that such patients are not able to verbalize their emotions as efficiently as others.<sup>[1]</sup> In the same period, Sifneos came up with the term “alexithymia” as an inability of patients in expressing how they feel.<sup>[1]</sup> It is a type of difficulty in emotion regulation.

Since then, the presence of alexithymia as a trait and as a symptom in varied medical and psychiatric illnesses has been studied, frequently along with the assessment of severity of depression. This article reviews the literature


in the last two decades to present a perspective on the relationship between alexithymia and depression and the role of culture in this relationship.

According to Freyberger, alexithymia can be understood in two ways: one as a stable personality trait and the other as a defense mechanism, i.e., primary and secondary alexithymia. Since the trait aspect cannot be altered, psychotherapists work on it as a defense mechanism, and so secondary alexithymia is manageable.<sup>[1]</sup> It can be said to be a difficulty in identifying emotions, naming them, expressing them, and experiencing them,<sup>[1]</sup> and eventually, an inability to identify others' emotions correctly. Such individuals, inevitably, face difficulties in socializing and maintaining emotional ties. This inability to identify physical sensations representing emotions leads to incorrect interpretations and hence seeking medical care for nonexistent problems.<sup>[2]</sup>

Alexithymia as a stable personality or otherwise is seen to be present in a wide variety of psychological disorders,

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namely depression, anxiety, and schizophrenia.<sup>[3]</sup> In itself, alexithymia and its association with these problems can be unidirectional or bidirectional. It can be an outcome of the symptoms of the illness, exacerbating the symptoms or, as a stable personality trait, leading to the symptoms. The literature suggests that alexithymia, depression, and anxiety are strongly related. Alexithymia is also present in other pathologies such as substance abuse and dependence, eating disorders, and borderline personality disorder. The most common scale that is used to measure alexithymia is Toronto Alexithymia Scale (TAS-20),<sup>[4]</sup> which is a 20-item self-report measure consisting of three subscales, namely, difficulty identifying feelings, difficulty describing feelings, and externally oriented thinking.<sup>[5,6]</sup>

Depression as a disease state has been seen to be studied widely in association with alexithymia. In the 1970s, when it was suggested by Freyberger that alexithymia can be secondary as a defense mechanism, researchers became interested in studying association between alexithymia and depression. These studies were mostly cross-sectional.<sup>[7]</sup>

## MATERIALS AND METHODS

An electronic search of literature in the last two decades (1999 to October 2019) highlighting alexithymia, depression, and their relationship with each other was conducted using the following databases: Google Scholar, PubMed, ResearchGate, and JSTOR. The inclusion criteria of the study involved (1) abstracts/full articles published in journals and (2) studies involving patients with different illnesses but reporting either primary depression and alexithymia or physical illness with comorbid depression and alexithymia. For avoiding variations in definitions of the illnesses, we relied on the understanding of the concepts by the authors of the papers. The abstracts, original articles, and review articles published in languages other than English and with incomplete data were excluded. The keywords used for literature search included depression, alexithymia, depression and alexithymia, TAS, assessing alexithymia and depression, and alexithymia as a trait. Overall, 75 relevant articles were utilized for this review. The review describes alexithymia as a personality feature followed by relationship of alexithymia and depression, specifically in the Indian culture. A summary of the articles has been listed in Table 1.

## DISCUSSION

### Alexithymia as a personality feature

In a study on 46 patients with major depression, it was found that alexithymia is a stable personality trait and is not a state-dependent construct.<sup>[8]</sup> Alexithymia has been suggested to be a part of personality with cognitive and affective deficits.<sup>[9]</sup> Alexithymia is a personality style commonly found in those seeking psychotherapeutic

management and is seen with depression.<sup>[10]</sup> A study on college students ( $n = 199$ ) on alexithymia and its relationship with personality disorders as well as psychopathological dimensions concluded that alexithymia was associated with schizoid, avoidant, paranoid, and depressive traits.<sup>[11]</sup>

Alexithymia is a personality characteristic. Studies on nonclinical population also found approximately 10% of them dealing with alexithymia, more commonly among males.<sup>[12]</sup> A review also suggested family and environment as risk factors for having alexithymic features. Maternal psychopathology and inefficient parenting can lead to alexithymia. Adverse events in childhood or inadequate parenting can lead to emotional dysregulation in the person, leading to a stable alexithymia feature, making it a dimension of personality.<sup>[12]</sup> However, this personality dimension is still questioned by some authors. This review proposed that since alexithymia diminishes as the person improves, it cannot be a stable feature.<sup>[12]</sup>

A study by Gavazzi *et al.* concluded that alexithymia as a trait was responsible for response inhibition.<sup>[13]</sup> It is beyond emotional dysregulation. It manages the inhibitory processes in the brain, and so, it does not cause impulsivity or aggression. As a matter of fact, it enhances impulse control.

Alexithymia is a personality dimension in which there is increased sensitivity to intrinsic bodily arousal, which leads to the enhancement of the emotional component of the arousal and not the cognitive one.<sup>[14]</sup> They studied participants with high and low alexithymia on decision-making tasks. The results suggested that the higher the alexithymia, more impulsive was the decision. They perceive their bodily arousal with interoceptive sensitivity.

In a study on university students in the United States, it was found that alexithymia was associated with a hostile interpersonal style and goals. Those with alexithymia features had attachment insecurity with romantic partners and a higher power, like God.<sup>[15]</sup>

The subtype B has higher alexithymia, which becomes a risk factor for a psychiatric illness. This subtype moves through adverse life events.<sup>[16]</sup> In fact, it is a psychoemotional trait present in psychological disorders.<sup>[17]</sup>

### Alexithymia and depression

In a study on the factors associated with depression in 137 depressed patients, almost half of the patients were alexithymic as measured using TAS-20.<sup>[18]</sup> Four factors were reported to be independently associated with alexithymia, which included male gender, low level of education, low life satisfaction, and severe depression.<sup>[18]</sup> In 24 patients with social phobia, alexithymia was found to be independent of depression and anxiety.<sup>[19]</sup> In a study

**Table 1: Summary of articles reviewed**

Author, years	Population (sample size)	Measures	Results
Honkalampi <i>et al.</i> , 1999	Depression (137)	TAS-20, BDI-21	Alexithymia common in depression
Solmaz <i>et al.</i> , 2000	Social phobia (77)		Alexithymia independent of depression, anxiety
Corcos <i>et al.</i> , 2000	Eating disorders (138)	HAD, TAS-20	Depression, alexithymia highly positively correlated
Marchesi, Brusamonti and Maggini, 2000	Depression, anxiety (226)	HAD, TAS-20	Alexithymia and depression different but highly related
Saarijarvi <i>et al.</i> , 2002	Depression (54)	HAM-D, BDI-21	As depression improved, alexithymia decreased
Honkalampi <i>et al.</i> , 2001	General population, 2018	TAS-20, BDI-21	Depression, alexithymia highly positively correlated
Hintikka <i>et al.</i> , 2001	General population (1888)	TAS-20, BDI-21	Depression, alexithymia highly positively correlated
Honkalampi <i>et al.</i> , 2001	Depression, cluster C PD, 121	SCID-I, SCID-II, TAS-20	No significant improvement in depression if alexithymia did not improve
Honkalampi <i>et al.</i> , 2001	Depression (656)	TAS-20, BDI-21	Depression significantly associated with alexithymia
Kang <i>et al.</i> , 2002	Functional dyspepsia	TAS-20, BDI-21, STAI, STAXI	Depressive symptoms related to alexithymia, anxiety, and anger
Mazzeo and Espelage, 2002	Eating disorders (820)	TAS-20, childhood trauma questionnaire	Alexithymia and depression as mediating factors in eating disorders
Lumley, Smith and Longo, 2002	Chronic myofascial pain (80)	TAS-20	Emotion regulation difficulties in alexithymia are related to depression
Muller, Buhner and Ellgring, 2003	Psychosomatic and alcoholic patients (373)	TAS-20, SDS	Alexithymia and depression different but moderately correlated
Friedman <i>et al.</i> , 2003	Diabetes mellitus (69)	TAS-26, BDI-13	Alexithymia, depression positively correlated
Kojima <i>et al.</i> , 2003	Workers (120)	TAS-20, BDI-II, JCQ	Depression associated with low support and high alexithymia
Duddu, Isaac and Chaturvedi, 2003	Somatoform disorders and depression (90)	TAS-20, ICD-10 DCR	No difference in depression and somatoform groups in alexithymia; depression group had more difficulty in expressing feelings
Farges <i>et al.</i> , 2004	Drug addiction (256)	TAS-20, BDI-21	Alexithymia, depression positively associated
Honkalampi <i>et al.</i> , 2004	General population (1339)	TAS-20, BDI-21	Alexithymia rare without depressive symptoms
Eizaguirre <i>et al.</i> , 2004	Eating disorder (194)	TAS-20, BDI, SRAS	Alexithymia positively correlated with depression and anxiety
Wheeler <i>et al.</i> , 2005	Eating disorder (65)	TAS-20, APRQ, BDI-21	Alexithymia, binge eating, depression positively correlated
Speranza <i>et al.</i> , 2005	Eating disorder (531)	TAS-20, BDI, DEQ	Alexithymia, depression positively correlated
Grabowska <i>et al.</i> , 2005	Smokers (46)	TAS-20, BDI	No significant correlation between alexithymia and depression
Saarijarvi <i>et al.</i> , 2006	Depression (116)	TAS-20, BDI-21	Alexithymia, depression correlated
Le, Ramos and Munoz, 2007	Pregnant women (77)	TAS-20, CESDS	Alexithymia, depression positively related
Bodini <i>et al.</i> , 2008	Multiple sclerosis (58)	TAS-20, BDI, FSS	Depression, fatigues higher in alexithymia
Marchesi <i>et al.</i> , 2008	Depression (149)	TAS-20, HADS	Alexithymia, depression positively related
Ali, 2008	General population (students)	Farsi TAS-20, BDI	Alexithymia, depression positively correlated
Matilla <i>et al.</i> , 2008	General population (389)	M-CIDI, ICD-10, DSM-IV, TAS-20	High alexithymia score to be treated as depressive symptom
Bratis <i>et al.</i> , 2009	Nurses (95)	TAS-20, BDI	Alexithymia positively correlated with depression and personal achievement
Chakraborty <i>et al.</i> , 2010	Depression (50)	BDI, BSI, SSAS, Hindi TAS	Functional somatic complaints prevalent with high depression, somatosensory amplification, and low alexithymia
Celikel <i>et al.</i> , 2010	Depression (132)	TAS-20, BDI	Alexithymia, depression positively correlated
Tuzer <i>et al.</i> , 2010	Fibromyalgia, chronic low back pain (198)	TAS-20, BSI and SIQ	Alexithymia related to depression, anxiety, somatization
Mazaheri <i>et al.</i> , 2010	Functional gastrointestinal disorders (129)	TAS-20, HADS, GISRS	Difficulty in identifying feelings associated with depression, anxiety, GI symptoms
Bamonti <i>et al.</i> , 2010	Depression (134)	TAS-20, BDI	Alexithymia, depression positively correlated
Poletti <i>et al.</i> , 2011	Parkinson's disease (72)	TAS-20, GDSSF	Alexithymia, depression positively correlated
Picardi <i>et al.</i> , 2011	General population (twins) (729)	TAS-20	Genetic correlation between alexithymia and depression
Paplos <i>et al.</i> , 2012	Suicide attempters	SSPS-R, MADRS	Alexithymia, depression positively correlated
Ros <i>et al.</i> , 2013	Severely obese (98)	TAS-20, BDI	Difficulty in recognizing emotions positively associated with depression
Li <i>et al.</i> , 2015	Depression, (3572)		Alexithymia positively associated with depression
Barbasio <i>et al.</i> , 2015	Systemic lupus erythematosus (100)	TAS-20, BDI	No association between alexithymia, depression, illness perception
Marino <i>et al.</i> , 2015	Burning mouth syndrome (118)	TAS-20, MADRS	Alexithymia positively associated with depression
Ho, Wong and Lee, 2016	Depression (43)	Chinese TAS-20	Cognitive alexithymia could predispose depression
Quilty <i>et al.</i> , 2017	Depression (75)		Pretreatment alexithymia directly affected the change in depression positively
Ghiggia <i>et al.</i> , 2017	Fibromyalgia (362)	HADS, TAS-20	Alexithymia, depression positively correlated

Contd...

**Table 1: Contd...**

Author, years	Population (sample size)	Measures	Results
Saariaho <i>et al.</i> , 2017	Chronic pain (154)	TAS-20, BDI-II	Alexithymia effect mediated by depression
Banzhaf <i>et al.</i> , 2018	Depression (89)	IRI, MET	Empathy problems due to alexithymia
Crujisen <i>et al.</i> , 2019	Adolescents (140)	TAS-20, RCADS	Alexithymia associated with depression, anxiety

TAS – Toronto Alexithymia Scale; BDI – Beck depression inventory; HADS – Hospital Anxiety and Depression Scale; SCID I – Structured clinical interview for DSM-IV axis I disorders; SCID-II – Structured clinical interview for DSM-IV axis II disorders; SDS – Self-Rating Depression Scales; ICD – International statistical classification of diseases; DSM-IV – Diagnostic and statistical manual of mental disorders, 4<sup>th</sup> edition; M-CIDI – Munich version of the composite international diagnostic interview; BSI – Bradford somatic inventory; MADRS – Montgomery and Asberg Depression Rating Scale; HAM-D – Hamilton Rating Scale for Depression; STAI – State-trait anxiety inventory; STAXI – State-trait anger expression inventory; JCQ – Job content questionnaire; DCR – Diagnostic criteria for research; DEQ – Depressive experiences questionnaire; RCADS – Revised Child Anxiety and Depression Scale; SSPS-R – Shalling-Sifneos Personality Scale Revised; CESDS – Center for Epidemiological Studies Depression Scale; FSS – Fatigue Severity Scale; APRQ – Alexithymia-provoked response questionnaire; SIQ – Symptom interpretation questionnaire; GI – Gastrointestinal; GISRS – GI Symptom Rating Scale; GDSSF – Geriatric Depression Scale short form; IRI – Interpersonal-reactivity-index; MET – Multifaceted-empathy-test; SRAS – Self-Rating Anxiety Scale; SSAS – Somatosensory Amplification Scale

on patients with anorexia ( $n = 32$ ) and bulimia ( $n = 32$ ), it was found that their depression (Hospital Anxiety and Depression Scale, HADS) and alexithymia (TAS-20) scores were highly positively correlated.<sup>[20]</sup> While assessing the relationship between alexithymia (TAS-20) and anxiety and depression (HADS) in 113 patients diagnosed with depression or anxiety in comparison to a control group, it was concluded that alexithymia was higher in patients as compared to the control group participants. It was also found that depression and alexithymia are different but highly related constructs.<sup>[21]</sup>

Alexithymia and depression in general Finnish population ( $n = 2018$ ) using TAS-20 and Beck Depression Inventory (BDI-21), respectively, suggested that they were highly positively correlated.<sup>[7]</sup> A study on 121 patients with major depressive disorders found that alexithymia features (TAS-20) were common in persons with depression and cluster C Personality Disorders (Structured Clinical Interview for DSM-IV Axis I Disorders-SCID-I and Structured Clinical Interview for DSM-IV Axis II Disorders-SCID-II); further, if alexithymia features did not improve, there was no significant improvement in depression and personality problems.<sup>[22]</sup> Further, to assess the association between alexithymia (TAS-20) and depression (BDI) in 116 patients with depression and 540 healthy controls, it was concluded that the severity of depression was significantly associated with alexithymia.<sup>[23]</sup> Most of the patients who did not improve (92%) were alexithymic.<sup>[23]</sup> Alexithymia (TAS-20) and depression (BDI-21) tested in the general population ( $n = 1888$ ) found that those participants with high scores on both the scales had highly overlapping factor loadings, suggesting that the two factors may be highly correlated.<sup>[24]</sup>

In studying alexithymia in 120 patients with major depression (using HAM-D, BDI-21), it was found that it was significantly associated with alexithymia (using TAS-20) and as depression improved, alexithymic features decreased.<sup>[25]</sup> Patients with functional dyspepsia ( $n = 30$ ) were found to have depressive symptoms (BDI-21) related to alexithymia (TAS-20), anxiety (Spielberger State-Trait Anxiety Inventory), and anger (Spielberger State-Trait

Anger Expression Scale).<sup>[26]</sup> Alexithymia and depression are mediating factors of eating disorders in college women.<sup>[27]</sup> Eighty patients with chronic myofascial pain were tested for alexithymia and found that the emotion regulation difficulties in alexithymia (TAS-20) are related to depression.<sup>[28]</sup>

Alexithymia and depression studied among psychosomatic and alcoholic patients ( $n = 199$ ) and healthy controls ( $n = 74$ ) showed that alexithymia (TAS-20) and depression (Self-Rating Depression Scales) were moderately correlated but different constructs.<sup>[29]</sup> In 69 diabetic mellitus patients, it was found that alexithymia (TAS-26) and depression (BDI-13) were positively correlated.<sup>[30]</sup> Depression (BDI-II) was associated with low support (Job Content Questionnaire) and high alexithymia (TAS-20) in Japanese workers ( $n = 120$ ).<sup>[31]</sup> A study comparing alexithymia (TAS-20) in patients with somatoform disorders and depression (International Statistical Classification of Disease-10 [ICD-10] DCR) using TAS did not report significant difference in the scores on alexithymia.<sup>[32]</sup>

A study was conducted on persons with drug addiction ( $n = 128$ ) and healthy controls ( $n = 128$ ) to assess alexithymia (TAS-20) and depression (BDI-21, BDI-13), and they found that they were positively associated, especially for the factor of difficulty identifying feelings; moreover, the participants from the drug addiction group with no depressive symptomatology were no more alexithymic than the control group participants.<sup>[33]</sup> Alexithymia (TAS-20) is rare in the general population without depressive symptomatology (BDI-21).<sup>[34]</sup> In a study on 151 patients with eating disorder, it was concluded that alexithymia (TAS-20) was positively correlated with depression (BDI) and anxiety (Self-Rating Anxiety Scale).<sup>[35]</sup>

A study on affect regulation in eating disorder patients ( $n = 35$ ) and healthy controls ( $n = 30$ ) found that alexithymia (TAS 20, Alexithymia Provoked Response Questionnaire) positively correlated with binge eating and depression (BDI 21).<sup>[36]</sup> In a study on alexithymia features (TAS-20) and depressive experiences (BDI, Depressive Experiences Questionnaire) in patients with eating disorder ( $n = 252$ ) and healthy controls ( $n = 279$ ), it was found that in



restricting anorexia and bulimia, the two phenomena are positively associated.<sup>[37]</sup> There was no significant correlation between alexithymia (TAS-20) and depression (BDI) scores in persons who smoke ( $n = 24$ ).<sup>[38]</sup> One hundred and sixteen patients with major depression were studied and found that alexithymia (TAS-20) and depression (BDI-21) were highly correlated.<sup>[39]</sup>

Alexithymia (TAS-20) was seen to be positively related to depression (Center for Epidemiological Studies Depression Scale) in 77 pregnant women.<sup>[40]</sup> A study on 58 patients with multiple sclerosis found that depression (BDI) and fatigue (Fatigue Severity Scale) were higher in those with high scores on TAS-20.<sup>[41]</sup> In a study, depression ( $n = 16$ ), subthreshold depression ( $n = 21$ ), and no depression ( $n = 112$ ) groups were compared for alexithymia (TAS-20) and depression (HADS), and it was found that alexithymia is a state-dependent phenomena in pregnant depressed women and were positively associated.<sup>[42]</sup> Three hundred and six university students were assessed, and it was found that alexithymia (Farsi TAS-20) and depression (BDI) were significantly positively correlated.<sup>[43]</sup> Alexithymia (TAS-20) in those without depression (M-CIDI = Munich version of the Composite International Diagnostic Interview; ICD-10 = International Statistical Classification of Diseases and Related Health Problems, 10<sup>th</sup> Revision; DSM-IV = Diagnostic and Statistical Manual of Mental Disorders, 4<sup>th</sup> edition) may be treated as a depressive symptom.<sup>[44]</sup>

A study on 95 nurses concluded that alexithymia (TAS-20) positively correlated with depression (BDI) and personal achievement.<sup>[45]</sup> Fifty patients with depression (BDI) were studied, and it was found that functional somatic complaints (Bradford Somatic Inventory) were common among those patients who had high depression, somatosensory amplification (Somatosensory Amplification Scale) scores, and low alexithymia score (Hindi TAS).<sup>[46]</sup> In 81 depressed patients and 51 healthy persons, a strong positive association between alexithymia (TAS-20) and depression (BDI) was found.<sup>[47]</sup> In a study on 70 fibromyalgia (FM) patients, 56 chronic low back pain patients, and 72 healthy controls, high scores on alexithymia (TAS 20) were related to high scores on depression, anxiety and somatization (Brief Symptom Inventory and Symptom Interpretation Questionnaire).<sup>[2]</sup> In a study on 129 patients with functional gastrointestinal disorders, difficulty in identifying feelings (TAS-20) was strongly associated with depression and anxiety (HADS) and severity of gastrointestinal symptoms (Gastrointestinal symptom Rating Scale).<sup>[48]</sup> Relationship between alexithymia and depression in older adults (50 years and above) diagnosed with depression ( $n = 134$ ) was examined, and the total scores on TAS-20 correlated with depression severity measured by BDI.<sup>[49]</sup>

In a study on *de novo* Parkinson's disease patients ( $n = 42$ ) and healthy persons ( $n = 30$ ), alexithymia (TAS-20) and

depression (Geriatric Depression Scale Short Form) were found to be positively associated.<sup>[50]</sup> A study on 729 twins found genetic correlation between alexithymia and depression.<sup>[51]</sup> There was a strong relationship between alexithymia (Shalling-Sifneos Personality Scale Revised) and depression (Montgomery-Asberg Depression Rating Scale) in 50 suicide attempters.<sup>[52]</sup> In a study on severe obese patients ( $n = 49$ ), it was found that they have more difficulty in recognizing emotions (TAS-20) as compared to healthy controls and this was positively associated with depression (BDI).<sup>[53]</sup>

A meta-analysis suggested that alexithymia measured using TAS-20 is highly associated with depression.<sup>[54]</sup> One hundred systemic lupus erythematosus patients were assessed, and they did not have any association between alexithymia (TAS-20), depression (BDI), and illness perception.<sup>[55]</sup> A study on fifty-eight participants diagnosed as having burning mouth syndrome found higher scores on TAS-20, and these correlated with depression scores on Montgomery and Asberg Depression Rating Scale.<sup>[56]</sup>

Cognitive alexithymia could predispose depression.<sup>[57]</sup> Seventy five patients with depression were randomized into manualized cognitive behavioral therapy (CBT) and interpersonal therapy (IPT) groups for 4 months and it was found that pretreatment alexithymia has a direct positive correlation with depression and had an effect on psychotherapy process and outcome.<sup>[58]</sup> They found that pretreatment alexithymia directly affected the change in depression positively and had an effect on psychotherapy process and outcome. Depression and alexithymia in a sample of 181 females with FM and 181 healthy controls were studied. A strong correlation between depression (HADS) and alexithymia (TAS-20) in FM group was noted and this was different in the healthy control group.<sup>[59]</sup> A study was carried out in chronic pain patients ( $n = 154$ ) to assess alexithymia (TAS-20) and depression (BDI-II). The effect of alexithymia on pain disability was mediated by depression. Their cooccurrence with a medical condition exacerbated the symptoms of the illness.<sup>[60]</sup>

Empathy problems (Interpersonal Reactivity Index questionnaire for trait cognitive and emotional empathy and the Multifaceted Empathy Test for state cognitive and emotional empathy) in depression are due to the presence of alexithymia.<sup>[61]</sup> A study in which depression and anxiety in adolescent males ( $n = 63$ ) and females ( $n = 77$ ) in relation to alexithymia (TAS-20) were assessed found that alexithymia was associated with depression and anxiety (Revised Child Anxiety and Depression Scale) and this relationship was more pronounced in females.<sup>[62]</sup>

### Culture, alexithymia, and depression

In a retrospective study on Australian college students with alexithymia, it was concluded that family expressiveness was related to alexithymia.<sup>[63]</sup> The effect of culture, gender, and

parental socialization on alexithymia was studied and they found that all the three factors directly or indirectly affect alexithymia.<sup>[64]</sup> Expression and experience of emotions is culturally defined<sup>[65]</sup> with East Asian cultures focusing on restarting in emotional expression.<sup>[66,67]</sup>

It has been seen that in South Asian cultures, positive emotions are readily expressed and negative emotions are inhibited.<sup>[68]</sup> Children are taught by adults how to react in social situations either directly or through observation. They are also taught how to smile and to control themselves if they feel like crying, especially boys.<sup>[69]</sup>

### Alexithymia in Indian culture

In a study conducted on twenty nonpsychotic patients with one medically unexplained somatic complaint in Bengaluru using Diagnostic Criteria for Psychosomatic Research, it was found that 45% of the patients reported alexithymia.<sup>[70]</sup> The social construction of emotions is culturally defined, and so in Indian culture, there is emphasis on emotional control, with different norms for males and females. In a study on Indian and American students regarding expression of emotions and control, it was found that Indians' expression of emotions was modulated by others' expectations and maintaining group harmony and avoiding situations in which there is possibility of devaluation of self and family.<sup>[71]</sup>

According to Indian scriptures, emotions arise out of desire; the stronger the desire, the more intense the emotion.<sup>[72]</sup> In fact, Indians have been seen to have alexithymia in psychiatric as well as medical disorders.<sup>[73]</sup>

Chaturvedi's earlier work on alexithymia in 1988 saw that physical illness was frequently noticed with alexithymia.<sup>[74]</sup> Alexithymia, as one of the four criteria, was seen as clinically useful in the diagnosis of medically unexplained somatic symptoms.<sup>[75]</sup> Such somatic symptoms are often reported in a depressive episode.

### CONCLUSION

The review suggests that there is, in fact, a significant relationship between alexithymia and depression and this relationship is more common among females. Alexithymia, when occurring in nonclinical population, is also related to a higher score on depression scales. Furthermore, it was found that alexithymia could be trait based as well as state based. In the Indian context, the picture of alexithymia may be dominated by our cultural norms which encompass the Indian population with control over expression of emotions. Social construction of emotions according to the culture has a great impact on alexithymia and conclusively, on depression. These constructions differ for males and females. Therefore, further research in the picture of alexithymia and its association with depression in the Indian population is relevant.

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There are no conflicts of interest.

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