THE ROLE OF ALEXITHYMIA IN SUBSTANCE USE DISORDERS

Abstract:

Etymologically meaning “the absence of words to express feelings,” alexithymia contributes to both affective and cognitive disturbances that can predispose individuals to develop, maintain, and exacerbate various psychiatric illnesses. Individuals with alexithymia are generally typified as having poor recognition, differentiation and utilization of emotions. Previous research has elucidated that many core symptoms of substance use disorders (SUDs) can be considered outward manifestations of internal alexithymic impairments and physical expression of undifferentiated emotions. Further research is certainly needed to evaluate the benefits of focusing on alexithymia in SUD populations, particularly with a focus on future clinical applications. The current literature review has attempted to stress the particular role alexithymia plays in the potentiation of substance use disorders as a result of poor emotion regulation.

Etymologically meaning “the absence of words to express feelings,”¹ alexithymia contributes to both affective and cognitive disturbances that can predispose individuals to numerous mental health conditions. Representing a dispositional personality construct, alexithymia was first reported in patients with psychosomatic disturbances who performed poorly in insight-oriented psychotherapy (Sifneos, 1973). Alexithymia consists of four clinically derived constructs: 1) difficulty identifying and describing feelings; (2) difficulty distinguishing feelings from bodily sensations; (3) a reduction or absence of symbolic thought; and (4) an overall thinking style that is concrete and externally focused (Sifneos, 1973). The most salient

¹ (a= lack, lexis = word, and thymos = emotion).
characteristics of individuals with alexithymia are their overall incapacity to verbalize personal emotions (Birt et al., 2008; Louth, Hare, & Linden, 1998; Roedema & Simmons, 1999) and their low levels of emotional expressiveness (Matthews, Zeidner, & Roberts, 2002). High degrees of alexithymia are also often characterized by flattened affect, a preoccupation with somatic sensations, communication through action and other nonverbal behavior, and a lack of interpersonal relationships (Li & Sinha, 2006).

The specific affective disturbance that accounts for these impairments is the individual’s experience of undifferentiated affective responses. Persons with alexithymia are generally typified as having poor recognition and utilization of emotions (Chinet et al., 1998), and have difficulties distinguishing between feelings, resulting in an individual not knowing whether he or she is happy, sad, hungry, ill, etc. Due to this inability to understand and describe what they are truly feeling, alexithymic descriptions of sensations are vague and simplistic in detail. Krystal (1979) has stated that these undifferentiated and unverbalized affective sensations represent a “grey area” of perception, in which a quality of experience is inherently missing. Interestingly, the recognition of an affective disturbance is often unknowing to the individuals with alexithymia; only when questioned and confronted, do these individuals become clearly aware that they lack the ability to describe their emotions elaborately (Berenbaum et al., 2003).

Although not fully aware of the depth of affective responses, alexithymia does not correlate with lack of affect entirely. Expressive aspects of emotion are present and considerably vary regarding the capacity to distinguish, identify, and verbalize emotions among individuals with alexithymia (Gross, 1988). For example, Krystal (1979) reports sudden outbursts of what are assumed to be strong emotions, such as rage, is common in alexithymia. These episodes of intensified emotional expression often do not last long, and represent more of a culmination of
emotional suppression rather than a genuine reaction of anger to a particular environmental stimuli. Outbursts are thus deemed extreme manifestations of emotional build up. Individuals with alexithymia do not deny that emotions are present; they merely suffer from a paucity of emotional expressiveness. Their expressions are hindered and often dead-pan, causing alexithymics to additionally suffer from detachment and indifference in interpersonal relationships (Krystal, 1979).

Aside from the deficiencies in affect response, individuals with alexithymia also endorse a cognitive framework dominated by operational thought. This deficient style of thinking is marked by the incapacity to think imaginatively (Litz, 2003). Thought is rendered concrete and often described in stimulus-bound terms (Krystal, 1979). Operational thought is characterized by banal, fact-based constructions of experience that do not seem to go beyond the trivial, chronological, and mundane aspects of said experience (Marty & M’Uzan, 1963). These cognitive impoverishments in ability become highly evident in the sterility of emotional expression seen in alexithymia. Diminished creative thought additionally causes elaborative simplicity and impaired capacity to think abstractly, often times resulting in cognitive narrowing and potentiation of maladaptive behavior (Speranza et al., 2004).

Neurobiological research has revealed that the deficiencies seen in alexithymic individuals are linked to strong inter-hemisphere blocking of the cerebral commissures in the brain (Li & Sinha, 2006). Similarly, Kano et al. (2003) assessed differences in neural activity of alexithymic and non-alexithymic disordered individuals when presented with facial response stimulation. Individuals with alexithymia displayed deficient cerebral blood flow in the inferior parietal, middle frontal, and right inferior frontal cortices of the brain (Kano et al. 2003).
Furthermore, significant, poor blood flow in these regions of the brain has been negatively correlated with self-report measures of alexithymia.

The 20-item Toronto Alexithymia Scale (TAS) is the most commonly employed self-report assessment of alexithymia. Factor analysis of the TAS provides separate scores on three facets of alexithymia: Difficulty Identifying Feelings, Difficulty Describing Feelings, and Externally Oriented Thinking (TAS; Bagby, Parker, & Taylor, 1994). Reliability and validity of the TAS is well supported (Taylor & Bagby, 1998; Taylor, Bagby, Ryan, & Parker, 1990) yet TAS subscales are scored rather than a global score of alexithymia. Corresponding to theoretical dimensions of the alexithymia construct, subscales of TAS serve to represent the multidimensionality of the emotion regulation deficit. Used widely for clinical purposes, limitations of TAS include the subscale External Oriented Thinking not being deemed psychometrically valid (Lumley et al., 2005), in addition to an overlap of alexithymia with negative affect (Lundh et al., 2002).

Using the TAS, Guilbaud & Corcos (2003) report a 20.7% incidence of alexithymia in the general population. Research with the TAS has also demonstrated high rates of alexithymia in several psychiatric disturbances such as drug use (Krystal & Raskin, 1970), alcoholism (Haviland, Hendryx, Cummings, Shaw & MacMurray 1991; Taylor, Bagby, & Parker, 1991), in addition to eating disorders (Garfinkel & Garner 1982; Speranza et al., 2004; Speranza et al., 2007). The particular nosology of alexithymia becomes immediately apparent in that it can span diagnostic pathologies. Alexithymia represents a tras-diagnostic feature independent of a clinical entity. The display of alexithymic behaviors, however, often coexists with numerous cognitive

2 See Appendix.
and psychological traits clinically correlated to pathologies (Birt, 2008; Corcos & Speranza, 2003; Loas, et al., 1993). It alone never designates the presence of a clinical diagnosis; however, the concept of alexithymia is viewed as contributing to poor emotional regulation, and subsequently to the development, maintenance, and exacerbation of various psychiatric troubles.

Current scholarly work investigating the construct of alexithymia in regards to SUD is quite limited. Yet, research support has provided that alexithymia is frequently associated with the etiology and treatment of SUD (Krystal & Raskin, 1970; Taylor, Bagby, & Parker, 1991). Numerous studies indicate elevated scores on self-report measures of alexithymia among alcoholics (Finn, Martin, & Pihl, 1987; Haviland, MacMurray, & Cummings, 1988; Rybakauski, Ziolkowski, Zasodzka, & Brezezinski, 1988; Taylor, Parker, & Bagby, 1990). Taylor et al. (1997) hypothesizes that heightened alexithymia in addictive pathologies is due to the alexithymic individual’s self-regulation of their disruptive affective state (Speranza et al., 2004). Much like the outbursts of rage, addiction in individuals with alexithymia results from a particular way these patients address the surplus of uncontrollable affective sensations experienced. Addictive behaviors seen in SUD thus represent an outward behavioral expression of internal distress. In a peculiar sense, the addictive properties of substance use would themselves reduce the ability to decide emotions. For instance, as Steele & Josephs (1988) cite, the natural biochemical and disinhibition effects of alcohol severely impair higher-order cognitive processing. Addiction therefore would further freeze the alexithymic individual in a rigid maladaptive behavioral pattern involving addictive use and deficient emotion regulation.

Birt et al. (2008) investigated whether the construct of alexithymia represents a particular risk factor for initiation of alcohol pathology. Longitudinally evaluating 30 alcoholics, Birt and colleagues (2008) addressed alexithymia as a psychobiological vulnerability predisposing
individuals to develop addiction. Using the Obsessive Compulsive Drinking Scale (OCDS), measuring alcohol appetite\(^3\) and abstinence, results indicate that alexithymia was significantly associated with alcohol addiction. With a baseline prevalence of alexithymia reported at 63.33%, results emphasized a positive relationship between low levels of alexithymia and abstinence, in addition to heightened alexithymia and alcohol use (Birt et al., 2008) Specifically, factors I \((t=2.98, p<.01)\) and II \((t=2.75, p<.1)\) of the TAS displayed significant mean differences on total OCDS scores after 48 weeks \((t=15.53, p<.01)\). Interestingly, factor III of the TAS, Externally Oriented Thinking, was found not to be indicative of alcohol use, but rather abstinence \((t=3.25, p<.01)\). Alexithymia thus represents an important aspect in the conceptualization of SUD in that they may initiate problematic use.

Aside from prompting the development of substance use, studies have validated a positive relationship between alexithymia and severity of alcohol use. Cecero & Holmstrom (1997) analyzed 100 outpatient alcoholics submitted for treatment following alcohol-related offenses. After completing weekly sessions of alcohol education, self-report questionnaires were administered finding alcoholics scored higher means on the TAS \((M=55.27, t(12,24)=13.62, p<.05)\) when compared to normal adult males \((M=47.18, t(10,56)=2.68, p<.05)\). TAS scores also were statistically correlated with exacerbating alcohol use symptoms, when measured by the Michigan Alcohol Screening Test (MAST) \((r=.36, p<.01)\). Such findings support the usefulness and applicability of studying alexithymia in understanding affect pathology.

The occurrence of alexithymic characteristics among SUD populations creates serious limitations as to the alexithymic’s capacity to utilize psychotherapy. The clinical setting puts the

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\(^3\) Appetence refers to the automatic components (compulsions to drink, persistent ideas about alcohol) and their effect, and to unsuccessful attempts of fighting them. In context of OCDS, low appetite scores reflect higher abstinence scores.
patient in positions with clinicians that intend to evoke emotional responses. Simply by the nature of alexithymic impairments, individuals with alexithymia represent poor candidates for psychotherapy due to their failure to interact emotionally. By not providing elaborative detail and having a rapport characterized by aloofness and indifference, alexithymic behaviors greatly diminish the chances of treatment success (Krystal, 1979). Concurrently, the reluctance to establish rapport with providers and often indifference to treatment have limited the utilization of pharmacotherapy in SUD populations (Corcos, 2003).

Currently, there exists a paucity of research specifically linking treatment success to addicted populations with alexithymia. However, due to the fact that alexithymia is a non-disorder specific, emotional regulations issue, addressing it with therapeutic interventions can have numerous beneficial behavioral outcomes. Beales & Dolton (2000) indicate the aims of alexithymia-based therapy, consisting of: (1) explaining to the patient that they tend to experience their emotions as physical reactions rather than genuine feelings; (2) encouraging patients to identify and differentiate emotions: (3) building self-esteem and (4) vocabulary to express feelings. By targeting the global emotional and cognitive deficits of alexithymia, a general improvement of functioning should be visible, with individuals with alexithymia becoming more open to engage in affective responses and express emotion. More specifically, increases in affective and cognitive functioning would indirectly diminish SUD pathology. A study conducted by Speranza et al. (2007) targeting alexithymia in treatment was found efficacious in reducing clinical eating pathology. Significant improvements were reported in baseline and follow-up scores for alexithymia (TAS t(100) = -5.65, p<.01) paralleled by a similar improvement in clinical eating disorder severity, measured by the Clinical Global Impression (CGI) (t(100)= -5.42, p<.01). Integrating alexithymia into therapeutic interventions in thus vital
in presenting a clinically utile framework for providing incremental validity beyond diagnostic nosology. Identifying patterns of behavior stemming from alexithymia that lead to substance use can provide further insight targeting strategies for addiction.

Although alexithymia has received ample research attention, controversy still exists as to its appropriate conceptualization. McLean (1949) indicated alexithymia is a biological, predisposing factor for psychiatric disturbances. Whereas McLean (1949) emphasizes the primary nature of alexithymia, Taylor et al. (1997) likens alexithymia to a defense or coping mechanism. Entitled secondary alexithymia, Taylor et al. (1997) stresses how alexithymia represents a protective factor against the impact and severity of traumatic events. Much like escape-motivated behaviors, the expressionless alexithymia creates a form of numbness designed to block or deter aversive affect responses from entering self-awareness. Drinking or substance use itself can thus be viewed as a form of alleviation of negative affect, with the drug effects reinforcing a sense of numbness not allowing negative affect to enter awareness. Researcher Stone (2006) provided specific links between the concept of alexithymia and this avoidant coping framework. Results using a MANOVA indicated avoidance coping, measured by the Emotional Approach Coping Scale, mediated the effects of alexithymia on negative emotional outcomes (p<.01). Among 68 highly alexithymics, less avoidant coping contributed to higher levels of positive affect. Although Taylor et al. (1997) and Stone (2006) may provide preliminary evidence that alexithymia is adaptive; research corresponding alexithymic behavior to pathology does not validate this logic.

Through this analysis, alexithymia becomes elucidated as a trans-dimensional, innate, clinically utile construct. It is essential to look for alexithymic characteristics in SUD patients as it represents a common feature of substance use pathology. Extending previous
conceptualizations of alexithymia, the current literature review has attempted to stress the particular role alexithymia plays in the potentiation, exacerbation and maintenance of pathological behaviors. Specifically, symptoms in SUD are considered outward manifestations of internal alexithymic impairments and physical expression of undifferentiated emotions. Further research is needed to evaluate the benefits of focusing on alexithymia in SUD populations.

Word count: 2111
Appendix 1

Using the scale provided as a guide, indicate how much you agree or disagree with each of the following statements by circling the corresponding number. Give only one answer for each statement.

Circle 1 if you STRONGLY DISAGREE
Circle 2 if you MODERATELY DISAGREE
Circle 3 if you NEITHER DISAGREE NOR AGREE
Circle 4 if you MODERATELY AGREE
Circle 5 if you STRONGLY AGREE

1. I am often confused about what emotion I am feeling. | 1 | 2 | 3 | 4 | 5
2. It is difficult for me to find the right words for my feelings. | 1 | 2 | 3 | 4 | 5
3. I have physical sensations that even doctors don’t understand. | 1 | 2 | 3 | 4 | 5
4. I am able to describe my feelings easily. | 1 | 2 | 3 | 4 | 5
5. I prefer to analyze problems rather than just describe them. | 1 | 2 | 3 | 4 | 5
6. When I am upset, I don’t know if I am sad, frightened, or angry. | 1 | 2 | 3 | 4 | 5
7. I am often puzzled by sensations in my body. | 1 | 2 | 3 | 4 | 5
8. I prefer to just let things happen rather than to understand why they turned out that way. | 1 | 2 | 3 | 4 | 5
9. I have feelings that I can’t quite identify. | 1 | 2 | 3 | 4 | 5
10. Being in touch with emotions is essential. | 1 | 2 | 3 | 4 | 5
<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Moderately Disagree</th>
<th>Neither Disagree/Agree</th>
<th>Moderately Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>11. I find it hard to describe how I feel about people.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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<tr>
<td>12. People tell me to describe my feelings more.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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<td>13. I don't know what's going on inside me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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<td>14. I often don't know why I am angry.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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<tr>
<td>15. I prefer talking to people about their daily activities rather than their feelings.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>16. I prefer to watch “light” entertainment shows rather than psychological dramas</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>17. It is difficult for me to reveal my innermost feelings, even to close friends.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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<tr>
<td>18. I can feel close to someone, even in moments of silence.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>19. I find examination of my feelings useful in solving personal problems.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>20. Looking for hidden meanings in movies or plays distracts from their enjoyment.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

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References


