

PROGNOSIS IN MUSIC THERAPY INTERVENTIONS IS ASSOCIATED WITH THE EMOTIONAL INTELLIGENCE-ALEXITHYMIA SPECTRUM

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Emotional processes are critical to understanding and promoting lasting therapeutic change in music therapy interventions (Kerr et.al.2001). Emotional experience is at the heart of many of the problems experienced by the patients attending music therapy sessions, and hence an understanding of these experiences and the corresponding changes in affective states is a prerequisite for successful music medicine interventions. When a person listens to music emanating positive emotions, it activates a set of organizing principles or “schemes” constructed from the individual’s innate response, repertoire and past experience which are collectively encoded in memory, and which later interact with the present situation and generate current experience through a form of associative memory networks (Bower,1981). This is the mechanism by which music modifies the negative affect aroused during anxiety-provoking situations- an affective modification by music.

THE ROLE OF EMOTIONS IN THE ADAPTIVE AND SURVIVAL MECHANISMS OF PRIMITIVE HUMANS:

Emotions served to organize the psychological processes in adaptive ways right from primitive human existence, by activating certain responses and suppressing others. The fear reaction in response to an impending threat (for eg. the threat from a predator) would arouse the physiological systems (i.e. increase in heart rate, respiration), resulting not only in an inability to sleep, but in a focused, goal-directed series of decisions and actions to safeguard oneself. In an emotional state of fear, an individual has a sharpened perception, and decision making and information processing shift to the area involved in reacting to the presumed threat, thus increasing the chances of escape if the threat is real. But in many cases there is a “false alarm” which sets into motion a series of fear-induced reactions, which are physiologically harmful to the organism in the long run. Humans who acted in successfully adapted ways passed on their traits to their off springs through the process of Natural Selection. Primitive human groups underwent several adaptive behaviors to survive in their natural environments, and music and emotion are believed to have served important functions in this adaptive process to the natural world (John Pellitteri,2009). Thus we can understand that emotional traits and tendencies are deeply ingrained in our nature and are less malleable from those that are shaped by individual history, which are more amenable to change.



The emotional state of fear creates the ‘flight response’, while the state of anger creates the ‘fight response’. Anger like fear, also focuses attention, increases adrenaline levels, and enhances goal directedness. Resources are mobilized to destroy the object of threat, and to feel less pain in the process of battle. The ‘fight or flight’ response underscores the notion that emotions are adaptive to the physical environment. The cognitive problem-solving strategies necessary to respond to threats or challenges are often triggered by affect, since affective cues inform us about the benign or problematic nature of the situation, which in turn, tune our thought processes to meet these situational requirements-emotions are placed at the intersection between the person and his or her environment.

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WHAT IS EMOTIONAL INTELLIGENCE?

Emotional Intelligence (EI) is concerned with the understanding of how individuals perceive, understand, utilize and manage emotions in an effort to predict and foster personal effectiveness. According to Salovey and Mayer (1990), individuals vary in their ability to process information of an emotional nature and in their ability to relate emotional processing to a wider cognition. This ability is seen to manifest itself in certain adaptive behaviors. Perceiving emotions, harnessing emotions to facilitate various cognitive activities such as thinking and problem solving, comprehending emotion language, and the ability to regulate emotions in both ourselves and in others are the four types of abilities included in Mayer & Salovey's model.

Bar-On model of Emotional-Social Intelligence: Bar-On Emotional Quotient Inventory (EQ-i) can assess a client's general degree of emotional intelligence, potential for emotional health, and psychological well-being (Bar-On, 1997). Results can evaluate the successfulness of therapeutic interventions and to decide when to terminate therapy. Bar-On hypothesizes that those individuals with higher than average EQs are in general more successful in meeting environmental demands and pressures. Deficiency in Emotional Intelligence can mean a lack of success and the existence of emotional problems.

WHAT IS ALEXITHYMIA?

Alexithymia is a term used to describe people who appear to have deficiencies in understanding, processing, or describing their emotions. It is a complex mixture of personality traits which remains stable over time, even after distress or depression have diminished, and does not belong to any diagnostic category (Taylor & Bagby, 2000). The alexithymia construct is strongly inversely related to Emotional Intelligence, representing its lower range (Schutte et al., 1998). The Online Alexithymia Questionnaire (OAQ-G2) is a valid measure of alexithymia, and has been used in this study for scoring alexithymia.

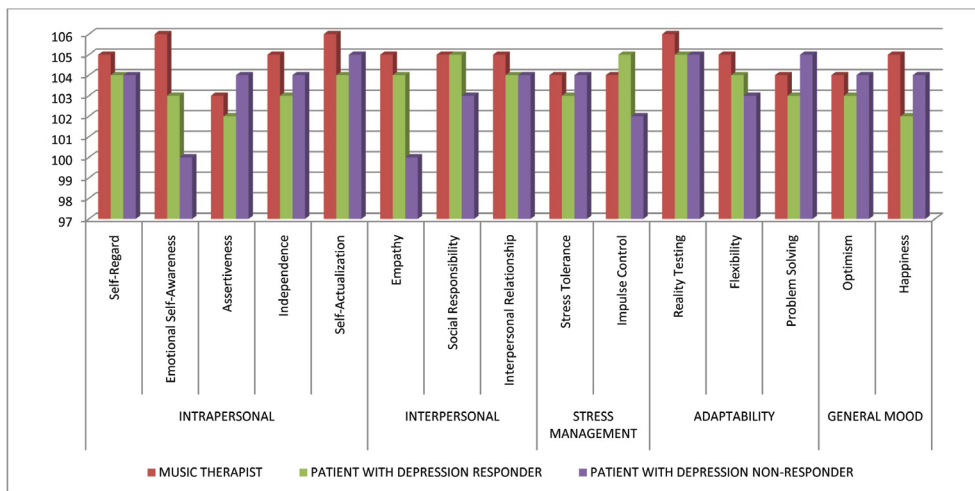
The present case study was designed to compare the Emotional Intelligence of a patient who exhibited good response to music therapy after continuous music listening for 2 months, with that of another patient who refused to show any response at all from the very first session. The Bar-On EQ-i scores of both the responder and non-responder were compared with the EQ-I scores of the music therapist. The level of alexithymia of both the patients were computed using the Observer Alexithymia scale, and compared with the scores of the music therapist (since a music therapist is supposed to be endowed with psychological maturity and balance along with increased Emotional intelligence). The results are summarized graphically in fig.2a. The responder is seen to exhibit less stress tolerance, problem solving, optimism, happiness, independence, and assertiveness when compared to the non-responder, but shows more flexibility, impulse control, empathy, and emotional self-awareness when compared to the non-responder. According to Bar-On, problems in coping with one's environment are thought to be common among those individuals lacking in the subscales of reality testing, problem solving, stress tolerance, and impulse control. Therefore we can presume that music is not used mainly as a coping strategy as stated by some authors (Ballard, 1995; North, 2004), since in the case of the patient who shows a good response, there is no difference in the subscales of reality testing, and he exhibits more impulse control than the non-responder. Factors like emotional self-awareness, flexibility and empathy seem to play important roles in enabling a good prognosis in music therapy interventions.



The responder has a score of 104 (95-112 represents possible alexithymia), in contrast to the non-responder who has a score of 142 (greater than 113 denotes the presence of alexithymia), and the music therapist who has a score of 60 (94 and below- non-alexithymia). The non-responder is found to have difficulty identifying feelings, difficulty describing feelings, externally oriented thinking, restricted imaginative processes, and problematic interpersonal relationships.

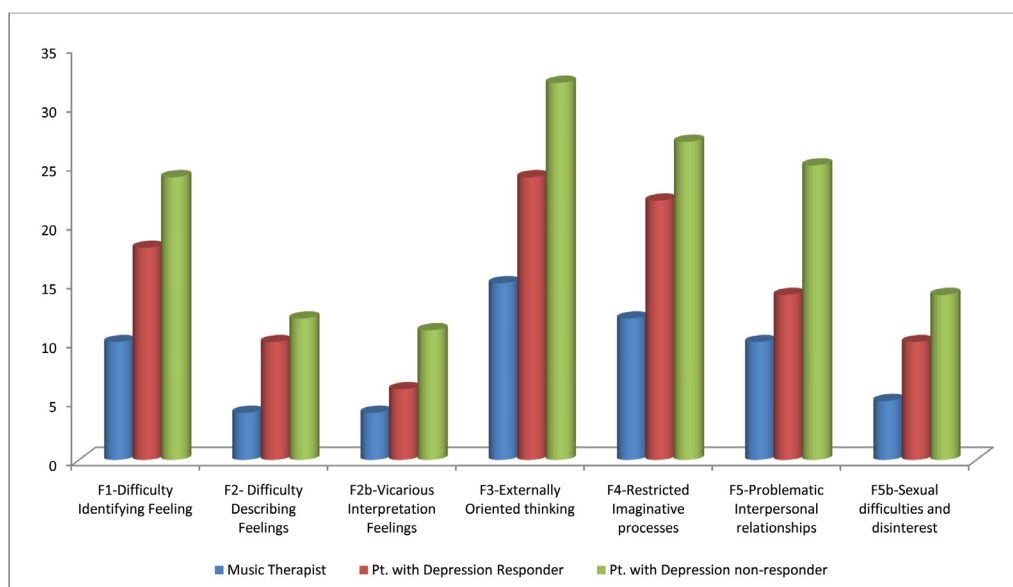
An insight into the probable etiology of alexithymia can throw some light on the reasons behind the emotional unresponsiveness which make these individuals resistant to music interventions. A neuropsychological study has indicated that alexithymia may be due to a disturbance of the right hemisphere of the brain which is largely responsible for processing emotions (Jessimer & Markham,1997), while another neuropsychological model suggests that alexithymia may be related to a dysfunction of the anterior cingulate cortex (Lane et. al.,1997). The French psychoanalyst Joyce McDougall(1985) introduced the alternative term "disaffectation" to stand for psychogenic alexithymia, stating that the

Fig : 2a



The Bar-On Emotional Intelligence scores of a responder and non-responder to music therapy, compared with the scores of the Music Therapist. The responder exhibits less stress tolerance, problem solving, optimism, happiness, independence, and assertiveness when compared to the non-responder, but shows more flexibility, impulse control, empathy, and emotional self-awareness when compared to the non-responder.

Fig : 2b



The OAQ-G2 score of the non-responder is 142, reflecting severe alexithymia(greater than 113 = alexithymia); the score of the responder is 104, bordering on alexithymia (95-112 = possible alexithymia); the score of the music therapist is 60 (94 & below = non-alexithymia).

disaffected individual had at some point “experienced overwhelming emotion that threatened to attack their sense of integrity and identity”, to which they applied psychological defenses to pulverize and eject all emotional representations from consciousness. He also suggested that since all infants are “by reason of their immaturity inevitably alexithymic”, the alexithymic part of an adult personality could be “an extremely arrested and infantile psychic structure”. The above findings make it clear that emotional processes should be taken into account while evaluating the outcome of music therapy interventions. More exploration involving large number of cases is needed to reinforce these findings.

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