

The relationship between emotional awareness and empathetic response among psychiatric hospital staff

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Abstract: Research seems to indicate that Alexithymia construct (difficult to identify feeling, difficulty to describe feeling, and externally oriented thinking) is negatively related to relationship as well as an individual's happiness and affectionate communication. The concept of Alexithymia itself does not explicitly include deficits in empathy. Alexithymia construct and empathy have been related but very little is known on shared variance between them. So this study aims to investigate the relationship between Alexithymia construct and emotional empathetic response among psychiatric hospital staff. The study conducted at El-Maamoura Hospital for Psychiatric Medicine in Alexandria. A convenient sample of fifty percent psychiatric hospital staff was included in this study. 20-Item Toronto Alexithymia Scale (TAS-20) and Multi-dimensional scale of emotional empathy were used in this study to measure the relationship between the construct of Alexithymia and empathetic response among psychiatric hospital staff. The study found that there was a significant negative correlation between Alexithymia construct (difficult to identify feeling, Difficulty to describe feeling) and empathetic response among psychiatric hospital staff, despite the fact that the concept of Alexithymia was originally used to describe the characteristics of psychosomatic patients, this study revealed that Alexithymia construct can be used to refer to deficits in emotional functioning in normal populations

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1. Introduction

All human beings experience emotions. However, individuals differ in the way they are interested in their emotional life, and the extent to which they are able to differentiate between their feelings and their ability to describe them. The concept of alexithymia or emotional awareness has been proposed to account for this variability. ⁽¹⁾ Alexithymia construct was found to be approximately 13% of the population, with men (17%) almost twice as likely to be affected as women (10%). ⁽²⁾

The therapeutic relationship directed toward enhancing the client's well-being and it depends on the interaction of thoughts, feelings, and actions of each person. In the literature empathy has become widely seen as an essential condition of effective nursing care and at the heart of a therapeutic staff/patient relationship. Alexithymia construct and empathy have been related but very little is known on shared variance between *them* ⁽³⁾

Most of the studies on Alexithymia was conduct on psychosomatic patient and little was done on normal population. This highlights the need for systematic and comprehensive investigation of staff emotional awareness as one aspect of Alexithymia construct and its effect on empathy.

Construct of Alexithymia

The term 'alexithymia was formulated by Nemiah and Sifneos during the early 1970s, the alexithymia construct encompasses the following salient features: (1) difficulty identifying and describing feelings, (2) difficulty distinguishing between feelings and the bodily sensations of emotional arousal, The first two factors (difficulties identifying feelings – DIF; difficulties describing feelings – DDF) refer to emotional awareness and expression and might therefore be considered as "affect-related" (3) constricted imaginal processes as evidenced by a paucity of fantasies, and (4) an externally oriented cognitive style, refers to a specific tendency to deal with superficial themes and to avoid affective thinking. It has been hypothesized that these characteristics reflect deficits in the mental representation of emotions and in the ability to regulate emotions through cognitive processes. ⁽⁴⁻⁸⁾

Alexithymia can be defined as a deficit in experiencing and processing emotions and was observed initially among patients with classic psychosomatic diseases. It has been found that alexithymic individuals are by no means completely unaware of their emotions, and even appear to possess adequate vocabulary for expressing their emotions but lack the ability to label or verbalize them properly. ⁽⁹⁾

Alexithymic individuals are indeed capable of suffering from, for example, depression or anxiety disorders.⁽⁹⁾

The first Finnish study on the prevalence of alexithymia in general population was conducted by Salminen *et al.* In the sample drawn from the general population (n = 1,285), the prevalence of alexithymia was 12.8% with normal distribution. Men were found to be clearly more frequently alexithymic as compared with women.⁽¹⁰⁾

Franz *et al.* studied the prevalence of alexithymia in German general population (n = 1,859) and reported a 10% prevalence of alexithymia in all subjects, 11.1% in males and 8.9% in females. No significant difference between genders was noted in either the prevalence of alexithymia or the TAS-20 total scores.⁽¹¹⁾

Theoretical background

Several theories have been suggested regarding the development of alexithymia, but none of them has been reliably verified. The theories regarding the background and aetiology of alexithymia are mostly based on a psychosocial or neurobiological approach.⁽¹²⁾

The genetic background of alexithymia has been studied surprisingly scarcely. The inheritance of alexithymic characteristics was first suggested in a Norwegian twin-study (Heiberg & Heiberg).⁽¹³⁾ but the method they used to measure alexithymia cannot be considered appropriate according to the current standards. However, only few studies on the subject have been published since. Valera and Berenbaum studied 45 monozygotic and 32 same-gender dizygotic twin pairs and found that of the Alexithymia features, external oriented thinking was associated with genetic factors, whereas the difficulty identifying emotions and difficulty describing them were influenced by shared environmental factors.⁽¹⁴⁾

Modern imaging technology has also increased the knowledge of the neurobiological basis of alexithymia, and certain parts of the central nervous system (CNS), such as amygdala (Kugel *et al.*) and anterior cingulate cortex (ACC)⁽¹⁵⁾

Turesky, 2011 posited that Alexithymia may represent dysregulations in communication networks between limbic brain regions and neo-cortical structures.⁽¹⁶⁾

McDougall developed the psychological explanations of alexithymia, associating it with certain disturbances in the mother-infant-relationship. She stated that, since infants are unable to identify or verbalize their emotions, they have to be comprehended to be alexithymic. She introduced the term "disaffectation" to represent psychogenic alexithymia, developed on the basis of some overwhelming emotion at some point that has attacked

strongly the individual's sense of integrity and identity, and thus, led to rejecting all emotions from consciousness.⁽¹⁷⁾ Accordingly, alexithymic features can be understood as an arrested and infantile psychic structure influenced by early neglect, inadequate bonding, or the incapability of the caretaker to recognize or distinguish the emotional expressions of the child.^(17, 18)

Honkalampi *et al.* reported that alexithymia was associated with childhood adversities, most prominently harsh discipline and unhappiness of the childhood home.⁽¹⁹⁾ Morris *et al.* stated that the development of emotion regulation can be hindered in several ways. Parents may teach the child impractical means of emotional regulation through their own example, or the parents may insufficiently identify and entitle the emotions the child is expressing, or the family's negative emotional atmosphere may alter this by itself. Previous research indicates that the development of emotion regulation may be impaired due to inadequate parenting, thus having an impact on the development of alexithymia.⁽²⁰⁾

De Panfilis *et al.* found an association between altered parental bonding, particularly where the mother was overly intrusive and protective, and the core alexithymic feature of difficulty describing feelings.⁽²¹⁾ In a Turkish study among male substance dependent inpatients, history of childhood emotional abuse was found to be the only determinant for alexithymia (Evren *et al.*)⁽²²⁾ Also, on the basis of self-report material, if one parent is neglecting the child, the other parent's optimal parenting style appears to protect the child from the development of alexithymia.⁽²²⁾

One of the earliest means for an infant to perceive the surrounding environment is to interpret facial expressions of other people. If the parents express their emotions in an abnormal way, the infant is suggested to be exposed to developing a deficiency in recognizing facial expressions. Previous research indicates that the development of emotion regulation may be impaired due to inadequate parenting, thus having an impact on the development of alexithymia (Picardi *et al.*).⁽²³⁾

Some groups have expressed the view that alexithymia is better conceptualized as a coping style to defend against affective distress associated with specific stressful situations such as trauma, recent abstinence from alcohol dependency, and chronic medical illness. It was suggested that alexithymia may be similar to or an aspect of the repressive defensive coping style, in which there is little tendency to experience emotional distress despite increased autonomic nervous system arousal.⁽⁵⁾

Socio-demographics data associated with alexithymia

In population studies, several socio-demographic factors have also been associated with alexithymia. For example, male gender⁽¹¹⁾, low socio-economical status (Salminen *et al.*)⁽¹⁰⁾, rural dwelling area (Horton *et al.*)⁽²⁴⁾, low social support (Fukunishi *et al.*)⁽²⁵⁾, and general psychopathology in the family (Joukamaa *et al.*)⁽²⁶⁻²⁷⁾ have been linked with alexithymia.

Incidence and severity of alexithymia have been observed to be higher in men than in women in several studies.^(18, 28)

Joukamaa *et al.* found that alexithymia in young adulthood was more common in individuals coming from rural dwelling areas and it was also associated with being an unwanted child or being born into a family with many children. It has been shown that there is more psychopathology in families of alexithymic individuals during their childhood, and the mother's alexithymia has been established to be related with a child's alexithymic features.⁽²⁷⁾

Several environmental factors are also connected with alexithymia, such as mother's low educational level, parents' divorce, and living in a rural area (Horton *et al.*)⁽²⁴⁾. It has been shown that there is more psychopathology in families of alexithymic individuals during their childhood, and the mother's alexithymia has been established to be related with a child's alexithymic features (Lumley *et al.*)⁽²⁶⁾.

Alexithymia construct trait or state

The construct of alexithymia is a continuous variable and is normally distributed in the general population. However, there is limited and conflicting evidence regarding the question of whether the construct of alexithymia is a stable trait versus a state dependent phenomenon. In particular, Salminen *et al.* carried out 5-year longitudinal study to examine the temporal stability of alexithymia in the general population in Finland and found that The test-retest correlations of the TAS-20 total and factor-specific scores at the baseline and at the 5-year follow-up ranged from moderate to high in both genders, reflecting a rather high relative stability of the TAS-20 scores over a period of 5 years.⁽²⁹⁾ Alternatively, Hendryx *et al.* conducted a factor analysis on alexithymia (TAS) along with the Beck Depression Inventory and State-Trait Anxiety Inventory among a sample of 110 medical students and reported results consistent with both a state and trait explanation of alexithymia.⁽³⁰⁾ Results revealed that depression was only related to the identifying and communicating feeling components of alexithymia and that state alexithymia may develop in an attempt to counteract negative emotions from stressful events.⁽³⁰⁾

The stability level of alexithymia was investigated with regard to changes in emotional distress levels caused by university exams at four different times, before and after the exams. Alexithymic features and self-reported emotional distress (trait anxiety and physical symptoms) were measured. Whereas emotional distress measures changed significantly during the diverse phases, the level of alexithymia remained unchanged. Therefore it was concluded that alexithymia represents a constant trait.⁽³¹⁾

According to several authors Alexithymia best conceptualized as a stable personality trait reflecting a deficit in the cognitive processing of emotional information. This deficit would result in poor emotional regulation and stress management abilities, thus leading to poor mental health as well as to somatic disorders (indeed, unregulated stress leads to a hyper-activation of the corticotrophin axis, which results in a drop in immune defences, leading to higher somatic vulnerability). Arguments in favour of the view of alexithymia as a stable personality trait, related to one's mental health level but independent of its variations, are mainly based on longitudinal studies on psychiatric outpatients, showing that whereas the level of psychological distress significantly dropped after treatment (even for untreated patients) the level of alexithymia did not change significantly. (Pinard *et al.*; Saarijärvi *et al.*)^(32, 33)

On the other hand, Honkalampi *et al.* suggest that alexithymia must be better considered as a state-dependent phenomenon; that is to say, a consequence of personal distress (i.e. anxiety, depression).⁽³⁴⁾ In such a perspective, alexithymia would be merely a coping mechanism protecting the self against emotional distress associated with situations of intense vulnerability (Corcos&Speranza).⁽³⁵⁾ Arguments in favour of this view are based on longitudinal studies on psychiatric (out)patients, in which mean alexithymia scores remained stable despite a significant drop in psychological distress but in which in-depth analyses revealed that only half of the patients remained in the same alexithymia category at follow-up (Honkalampi *et al.*)⁽³⁶⁾

Recently, Lumley *et al.* have suggested that, alexithymia is a complex manifestation which includes both "trait" and "state" components. The trait-type alexithymia could be explained as a result of deficient psychological development and state-type alexithymia as a reactive regression of emotional development against overwhelming affects in the form of trauma or severe psychiatric illness.⁽³⁶⁾

Researches related to alexithymia

Extensive research has been conducted that assesses the health outcomes associated with alexithymia. These studies have linked alexithymia to:

physical health problems, including an elevated risk for chronic pain. ⁽³⁸⁾ Mental health problems (e.g., depression ⁽³⁹⁾ hormonal arousal ⁽⁴⁰⁾ drinking problems ⁽⁴¹⁾

Research on the interpersonal outcomes related to alexithymia is scant; however, research seems to indicate that alexithymia is negatively related to relationship and sexual satisfaction ⁽⁴²⁾

Study conducted by Vanheule et.al. to examines whether alexithymia relates to specific interpersonal problems, based on data collected in a sample of mental health outpatients (N = 404) and a student sample (N = 157). Linear regression analysis, in which the effects of group, gender, and age were controlled, indicated that two interpersonal problems were significantly and reliably related to alexithymia: cold/distant and nonassertive social functioning. ⁽⁴³⁾ In line with the initial suggestion alexithymia is associated with poor socio-affective skills, and that alexithymic people have difficulties interacting and dealing with their social environment. ⁽⁴⁴⁾

The relationship between self-esteem and alexithymia among mental health nursing students was investigated; the results showed that the lower self-esteem and alexithymia were predictive of psychological problem. Lower self-esteem and alexithymia have some affect on mental health, suggesting that it is important to improve nursing student's psychological health by raising self-esteem and reducing alexithymia. ⁽⁴⁵⁾ Conclusively little was done to assess the effect of Alexithymia on health team members dealing with patients and its related variables

Alexithymia and empathy

The qualities of the therapeutic relationship include: active listening, trust, respect, genuineness, empathy, and responding to client concerns. Most research has focused on the quality of empathy. ⁽⁴⁶⁾

Empathy is multidimensional and encompasses cognitive as well as emotional dimensions: respectively, the ability to take the perspective of others and to correctly identify their subjective reality and the ability to experience appropriate affective responses that follows the perception of the others' emotional states. ⁽⁴⁷⁾

People with Alexithymia do not seem to understand and relate to the emotions of others, nor to their own emotions. Most likely as a result of this difficulty, they seem to exhibit a diminished ability to empathize with others, which exacerbates the problems within their interpersonal relationships ⁽⁴⁸⁾

Emotional processing deficits was examined in those with alexithymia used emotion-provoking films to better understand this psychological problem. At the cognitive-experiential level, individuals who

scored high on the alexithymia scale exhibited lower emotional responses than those who scored low on the alexithymia scale. However, these same individuals exhibited higher emotional responses at the physiological level than those persons who scored low on the alexithymia scale. These results demonstrate the acute difficulty that persons with alexithymia have with describing feelings, as their heart rates increased during an emotion-provoking movie (Luminet *et al.*).⁽⁴⁹⁾ Each of these studies points to some specific emotional processing deficits associated with alexithymia. ^(3, 18, 49)

It was found that alexithymic personality features impair the individuals' capacity to receive and benefit from social support and, on the other hand, make them more vulnerable to interpersonal difficulties at work. ⁽⁵⁰⁾

Aim of the study:

Investigate the relationship between emotional awareness and empathetic response among psychiatric hospital staff.

Research questions:

- What about the level of Alexithymia among psychiatric hospital staff?
- Is there a relationship between emotional awareness and empathetic response among psychiatric hospital staff?

2- Material and Methods:

Material

A- Research design: a descriptive correlational design was used to conduct this study.

B-Setting:

The study was carried out at El-Maamoura Hospital for Psychiatric Medicine in Alexandria. The hospital is affiliated to the Ministry of Health and Population.

It employs 216 nurses (19 Bsc. Degree nurses, 16 technical nurses, 180 diploma nurses, and 1 First aid nurse) and 74 psychiatrists (4consultants, 11 specialists, 19 assistant specialists, 30resident, and 10 assigned physicians). 32 social worker, 10 psychologists.

C-Subjects:

A convenient sample of Fifty percent of the nursing staff, Fifty percent of the medical staff, Fifty percent of social worker and psychologist. Care was taken to represent all the categories

D- Tools of the study

2 tools were used for this study namely;

1- 20-Item Toronto Alexithymia Scale (TAS-20) The TAS-20 is a self-report scale comprised of 20 items. Each item is rated on a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree); five items are negatively keyed. The first factor (F1) in the three-factor model for the TAS-20

consists of seven items assessing the ability to identify feelings and to distinguish them from the somatic sensations that accompany emotional arousal e.g., "I am often confused about what emotion I am feeling" and "I have feelings that I can't quite identify"). Factor 2 (F2) consists of five items assessing the ability to describe feelings to other people (e.g., "I am able to describe my feelings easily" and "It is difficult for me to reveal my innermost feelings, even to close friends"). Factor 3 (F3) consists of eight items assessing externally oriented thinking (e.g., "I prefer to analyze problems rather than just describe them" and "Looking for hidden meanings in movies or plays distracts from their enjoyment"). The total alexithymia score is the sum of responses to all 20 items, while the score for each subscale factor is the sum of the responses to that subscale.

The TAS-20 uses cutoff scoring: equal to or less than 51 = Non-Alexithymia, Scores of 52 to 60 = possible Alexithymia. Scores of equal to or greater than 61 = Alexithymia. ^(50, 52)

2 - Multi-dimensional scale of emotional empathy:

The empathy scale consisted of thirty items such as "The suffering of others deeply disturbs me". Six negatively-worded items were included in the scale in order to reduce response bias (e.g., "I rarely take notice when other people treat each other warmly"). An attempt was made to include positive as well as negative emotional situations (e.g., "Being around happy people makes me feel happy, too"). A five-point response scale was used, where 1 was "Strongly Disagree" and 5 was "Strongly Agree. Take the mean of these sub-scales to compute a General Empathy scale.

Alpha reliabilities for all scale scores were moderate to high, and the scales demonstrate significant relationships to a number of behavioral criteria. ⁽⁵³⁾

In addition to, the socio-demographic data sheet for staff, it included question about (age, sex, years of experience in psychiatric field).

Methods

- 1- Official written permissions to conduct the study was obtained from the responsible authorities; the director of El-Maamoura Hospital for Psychiatric Medicine in Alexandria, and the General Secretariat for Mental Health, Ministry of Health in Cairo.
- 2-Psychiatric staffs were informed about the aim of the study
- 3-Informed oral consent was obtained from the subjects of the study for collecting needed data and confidentiality will be maintained.

- 4- Tools were translated into Arabic and tested for content validity by 5 experts in psychiatric field. Accordingly some items were modified.
- 3- Tools were tested for reliability using the Cronbach's alpha coefficient to measure the internal consistency of items comprising dimensions of each tool. The two tools were reliable.
- 4- A pilot study for the questionnaires was conducted on (10%) of the subject that were not included in the study. In the light of the findings of the pilot study, no changes occurred in the tools.
- 5- Data was collected from the subject through distributing questionnaires on psychiatric hospital staff.
- 6-Researcher stayed with staff during time of data collection, any clarification was explained.
- 7-Data was collected in two months started from 15/11/2012 to 15/1/2013.

Data and Statistical analysis:

- 1- Data coding: Data were coded by the researchers and statistically analyzed using SPSS (Statistical Package for the Social Science) version 20.0.
- 2- Descriptive statistics:
 - Qualitative data were described using number and percent.
 - Quantitative data were described using mean and standard deviation, minimum and maximum.
- 3- Analytical statistics:

Pearson Correlation Coefficient (r):

Used to measure the degree of association between variables. All tests of significance were done at the 5% level.

3. Result

Regarding demographic data of psychiatric hospital staff, (Table 1) revealed that, almost all studied staff was female (67.3%), while 32.7% of them were male. Concerning their age, nearly half of the staff (42.3%) was in the age group of 20 to less than 30 years, while those falling in the age group of 30 to less than 40 years represent 32.1% of the studied subjects, with a mean of age (34.72 ± 12.02). Concerning staff years of experience; (26.2%) had less than five years of experience While 29.2% of the nurses had five to less than ten years of experience. Those who had more than 15 years of experience, represent 15.5%. With a mean of (12.02 ± 9.24). Regarding marital status, three quarter psychiatric hospital staffs were married.

In relation to Descriptive analysis of studied subject according to Multi-Dimensional Emotional Empathy subscales Table (2) reveals that the highest mean percentages of empathy scale was obtained in Suffering subscale, followed by Positive Sharing subscale (86.89 ± 9.98 , 85.36 ± 13.12 respectively).

Concerning distribution of studied subject according to empathy subscale items (Table 3) reveals that, in suffering subscale the highest percent (79.8%) of studied subject was strongly agreeing that they get very upset when they see a young child who is being treated meanly, followed by 74.4% of those who stated that they feel good when they help someone out or do something nice for someone (Table3)

As regard Positive Sharing subscale items, it was revealed that, the highest percent of studied subject (63.1%) was strongly agreeing that they get a warm feeling for someone if they see them helping another person. In relation to responsive Crying (34.5%) was strongly agreeing that they cry easily when watching a sad movie. While (34%) was disagreeing that they don't cry easily. (Table3)

Speaking about Emotional Attention subscale items, Table three shows that (41.1%) were agreeing that too much is made of the suffering of pets or animals. While 36.9% of them were agreeing that they rarely take notice when people treat each other warmly. Furthermore, more than half of them were either agreeing or strongly agreeing that they find it annoying when people cry in public. (35.1%, 30.4% respectively)

As regard feel for others subscale items, it can be noticed that 48.8 % were strongly agreeing that if someone is upset they get upset too. While 42.9% were strongly disagreeing that they feel other people's pain. Lastly Emotional Contagion subscale items shows that 41.7 % were strongly agreeing that when they with other people who are laughing they join in. (Table3)

In relation to distribution of studied subject according to presence or absence of Alexithymia, it was revealed that (41.7%) of studied subject were Non Alexithymic, while more than half of them had Possible Alexithymia and Alexithymia (26.8, 31.5 respectively) (Table 4)

As regard descriptive analysis of studied subject according to Toronto Alexithymia subscales Table (5) shows that the highest mean percentages of studied subject had Difficult Describing Feeling (48.84 ± 20.62) in Alexithymia subscales, Followed by those who had Difficult Identifying Feeling ($.13 \pm 22.51$). While an externally oriented thinking mean percentage was 35.16 ± 13.76 . Concerning distribution of studied subject according to Toronto Alexithymia subscale Items. (table6) reveals that more than half of studied subject were strongly disagreeing or disagreeing that they have physical sensations that even doctors do not understand in difficult Identifying Feeling subscale. Also, more than one third of them

were strongly agreeing that they often confused about what emotion they have been experienced as feeling.

In relation to Difficult Describing Feeling, it was found that more than half of studied subject either were agreeing or strongly agreeing in relation to the following items (It is difficult for me to find the right words for my feelings, It is difficult for me to reveal my innermost feelings, even to close friends) Furthermore, more than one third were agreeing or strongly agreeing that they able to describe their feelings easily (Table 6).

Concerning externally oriented thinking subscale it can be noticed that more than two third of the studied subject either were agreeing or strongly agreeing in the Following items (I can feel close to someone, even in moments of silence, I find examination of my feeling is useful in solving personal problems. (Table 6)

Speaking about correlation between Empathy and Alexithymia (table 7) reveals that general empathy scale was correlated significantly and negatively with Difficult Describing Feeling subscale as well as externally oriented thinking subscale. (Table3) ($r=-0.062$, $r=-0.200$ respectively)

Table (8) shows the Correlation between Toronto Alexithymia Subscales (TAS) and it reveals that Difficult Identifying Feeling was correlated significantly and positively with Difficult Describing Feeling ($r= 0.535$), the same correlation was found in relation to Toronto Alexithymia Scale (TAS) ($r= 0.852$).

Regarding Difficult defining Feeling it was correlated significantly and positively with externally oriented thinking subscale. As well as Toronto Alexithymia Scale ($r=0.319$, $r=0.777$ respectively) (Table 8). While externally oriented thinking subscale was correlated significantly and positively only with Toronto Alexithymia Scale($r= 0.655$).

Concerning correlation between empathy subscales, it was found that Suffering was correlated significantly and positively with Positive Sharing, Responsive Crying as well as general empathy scale ($r= 0.459, 0.177, 0.556$ respectively) while it was correlated significantly and negatively with Emotional Attention and Emotional Contagion ($r= -0.233, -0.025$ respectively). In relation to Positive Sharing it was correlated significantly and positively with general empathy scale($r = 0.490$) while it was correlated significantly and negatively with Emotional Attention ($r = -0.133$), speaking about Emotional Attention it was found that it was correlated significantly and positively with Emotional Contagion as well as general empathy scale ($r= 0.152^*$, 0.675^* respectively) (Table 9)

Table (1) Distribution of studied subject according to demographic data (n= 168)

Empathy Scale Items	Average	% Score	Total
Suffering	3.78 ± 0.30	69.58 ± 7.59	113.49 ± 9.11
Positive Sharing	4.48 ± 0.40	86.89 ± 9.98	35.80 ± 3.19
Responsive Crying	4.41 ± 0.52	85.36 ± 13.12	22.07 ± 2.62
Emotional attention	3.38 ± 1.64	59.62 ± 41.08	10.15 ± 4.93
Feel other	2.58 ± 0.64	39.47 ± 16.10	10.32 ± 2.58
Emotional Contagion	3.17 ± 0.56	54.32 ± 14.08	12.69 ± 2.25
	3.36 ± 0.91	59.0 ± 22.64	6.72 ± 1.81

Table (2) Descriptive analysis of studied subject according to Multi-Dimensional Emotional Empathy subscales

Items	No.	%
Age		
20 – 30	71	42.3
31 – 40	54	32.1
41 - 50	26	15.5
>50	17	10.1
Min – Max	20.0 – 59.0	
Mean ± SD.	34.72 ± 12.02	
Sex		
Male	55	32.7
Female	113	67.3
Experience		
<5	44	26.2
5 – 10	49	29.2
11 -15	26	15.5
15 – 20	23	13.7
>20	26	15.5
Min – Max	0.42 – 40.0	
Mean ± SD.	12.02 ± 9.24	
Marital Status		
Single	42	25.0
Married	126	75.0

Table (3): Distribution of studied subject according to Empathy scale Items (n= 168)

Items	Strongly disagree		Disagree		Neutral		Agree		Strongly agree	
	No.	%	No.	%	No.	%	No.	%	No.	%
1. I cry easily when watching a sad movie.	21	12.5	19	11.3	15	8.9	55	32.7	58	34.5
2. Certain pieces of music can really move me.	11	6.5	8	4.8	11	6.5	72	42.9	66	39.3
3. Seeing a hurt animal by the side of the road is very upsetting	5	3.0	9	5.4	15	8.9	55	32.7	84	50.0
4-R. I don't give others' feelings much thought.	72	42.9	39	23.2	19	11.3	25	14.9	13	7.7
5. It makes me happy when I see people being nice to each other.	0	0.0	0	0.0	11	6.5	30	17.9	127	75.6
6. The suffering of others deeply disturbs me.	0	0.0	2	1.2	15	8.9	60	35.7	91	54.2
7. I always try to tune in to the feelings of those around me.	2	1.2	9	5.4	11	6.5	70	41.7	76	45.2
8 I get very upset when I see a young child who is being treated meanly.	0	0.0	2	1.2	5	3.0	27	16.1	134	79.8
9-R. Too much is made of the suffering of pets or animals.	4	2.4	5	3.0	28	16.7	62	36.9	69	41.1
10. If someone is upset I get upset, too.	3	1.8	10	6.0	35	20.8	82	48.8	38	22.6
11. When I'm with other people who are laughing I join in.	8	4.8	17	10.1	29	17.3	70	41.7	44	26.2
12. It makes me mad to see someone treated unjustly.	5	3.0	5	3.0	12	7.1	46	27.4	100	59.5
13-R. I rarely take notice when people treat each other warmly.	8	4.8	22	13.1	29	17.3	62	36.9	47	28.0

Table (4): Distribution of studied subject according to presence or absence of Alexithymia (n= 168)

	No.	%
Toronto Alexithymia Scale (TAS)		
Non alexithymia (≤ 51)	70	41.7
Possible alexithymia (52 - 60)	45	26.8
Alexithymia (≥ 61)	53	31.5

Table (5): Descriptive analysis of studied subject according to Toronto Alexithymia subscales

	Average	% score	Total
Toronto Alexithymia scales	2.68 ± 0.57	42.07 ± 14.32	53.65 ± 11.46
DIF	2.81 ± 0.90	45.13 ± 22.51	19.64 ± 6.30
DDF	2.95 ± 0.82	48.84 ± 20.62	14.77 ± 4.12
EOT	2.41 ± 0.55	35.16 ± 13.76	19.25 ± 4.40

Table (6): Distribution of studied subject according to Toronto Alexithymia Scale items(TAS) (n= 168)

	Strongly disagree		Disagree		Neutral		Agree		Strongly agree	
	No.	%	No.	%	No.	%	No.	%	No.	%
1- I am often confused about what emotion I am feeling.	33	19.6	38	22.6	30	17.9	46	27.4	21	12.5
2 -It is difficult for me to find the right words for my feelings..	25	14.9	37	22.0	19	11.3	60	35.7	27	16.1
3 -I have physical sensations that even doctors do not understand..	66	39.3	38	22.6	24	14.3	25	14.9	15	8.9
4 -I am able to describe my feelings easily	6	3.6	26	15.5	22	13.1	70	41.7	44	26.2
5 -I prefer to analyze problems rather than just describe them.	4	2.4	7	4.2	42	25.0	56	33.3	59	35.1
6- When I am upset, I do not know if I am sad, frightened or angry.	28	16.7	26	15.5	33	19.6	41	24.4	40	23.8
7 -I am often puzzled by sensations in my body..	49	29.2	46	27.4	24	14.3	30	17.9	19	11.3
8 -I prefer to just let things happen rather than to understand why they turned out that way.	48	28.6	53	31.5	27	16.1	26	15.5	14	8.3
9 -I have feelings that I cannot quite identify.	22	13.1	36	21.4	29	17.3	54	32.1	27	16.1
10- Being in touch with emotions is essential.	3	1.8	7	4.2	17	10.1	52	31.0	89	53.0
11- I find it hard to describe how I feel about people	29	17.3	39	23.2	27	16.1	53	31.5	20	11.9
12- People tell me to describe my feelings more.	37	22.0	45	26.8	36	21.4	40	23.8	10	6.0
13- I do not know what is going on inside me.	52	31.0	36	21.4	35	20.8	30	17.9	15	8.9

Table (6): Distribution of studied subject according to Toronto Alexithymia Scale items (n= 168) "continue"

	Strongly disagree		Disagree		Neutral		Agree		Strongly agree	
	No.	%	No.	%	No.	%	No.	%	No.	%
14 -I often do not know why I am angry.	35	20.8	36	21.4	29	17.3	39	23.2	29	17.3
15- I prefer talking to people about their daily activities rather than their feelings.	23	13.7	45	26.8	39	23.2	42	25.0	19	11.3
16 -I prefer to watch "light" entertainment shows rather than psychological dramas.	18	10.7	30	17.9	28	16.7	59	35.1	33	19.6
17 -It is difficult for me to reveal my innermost feelings, even to close friends.	10	6.0	31	18.5	18	10.7	50	29.8	59	35.1
18 -I can feel close to someone, even in moments of silence.	4	2.4	14	8.3	10	6.0	69	41.1	71	42.3
19 -I find examination of my feelings useful in solving personal problems.	7	4.2	5	3.0	31	18.5	65	38.7	60	35.7
20- Looking for hidden meanings in movies or plays distracts from their enjoyment.	34	20.2	43	25.6	29	17.3	33	19.6	29	17.3

Table (7): Correlation between Empathy and Toronto Alexithymia scales

		DIF	DDF	EOT	Toronto Alexithymia Scale (TAS)
Suffering	r	0.192*	0.107	-0.230*	0.056
	p	0.013	0.166	0.003	0.472
Positive Sharing	r	0.003	0.027	-0.020	0.003
	p	0.973	0.728	0.795	0.965
Emotional Attention	r	0.140	-0.056	-0.131	0.007
	p	0.070	0.471	0.091	0.933
Feel for Others	r	-0.397*	-0.285*	-0.156*	-0.381*
	p	<0.001	<0.001	0.044	<0.001
Positive Sharing	r	-0.102	-0.085	-0.029	-0.098
	p	0.187	0.273	0.709	0.206
Emotional Contagion	r	0.229*	0.047	0.091	0.178*
	p	0.003	0.549	0.239	0.021
Empathy Scale	r	0.089	-0.062	-0.200*	-0.050
	p	0.252	0.425	0.009	0.518

r: Pearson coefficient *: Statistically significant at $p \leq 0.05$

Table (8): Correlation between Toronto Alexithymia Subscales (TAS)

		DIF	DDF	EOT	Toronto Alexithymia Scale (TAS)
DIF	r		0.535*	0.284*	0.852*
	p		<0.001	<0.001	<0.001
DDF	r			0.319*	0.777*
	p			<0.001	<0.001
EOT	r				0.655*
	p				<0.001
Toronto Alexithymia Scale (TAS)	r				
	p				

r: Pearson coefficient *: Statistically significant at $p \leq 0.05$

Table (9): Correlation between Empathy subscales

		Suffering	Positive Sharing	Responsive Crying	Emotional Attention	Feel for Others	Emotional Contagion	Empathy Scale
Suffering	r		0.459*	0.177*	-0.233*	0.033	-0.025	0.556*
	p		<0.001	0.022	0.002	0.670	0.747	<0.001
Positive Sharing	r			0.027	-0.133	0.016	0.074	0.490*
	p			0.725	0.086	0.838	0.343	<0.001
Emotional Attention	r				-0.008	0.049	0.152*	0.675*
	p				0.917	0.532	0.049	<0.001
Feel for Others	r					0.276*	-0.068	0.182*
	p					<0.001	0.379	0.018
Positive Sharing	r						0.059	0.382*
	p						0.445	<0.001
Emotional Contagion	r							0.329*
	p							<0.001
Empathy Scale	r							
	p							

r: Pearson coefficient *: Statistically significant at $p \leq 0.05$

4. Discussion:

The main findings of the present study revealed that almost all nursing psychiatric hospital staff had high score on suffering subscale, followed by positive sharing subscale in Multi-Dimensional Emotional Empathy scale. This could attributed to that suffering plays an important role in a number of religions, regarding matters such as the following: consolation or relief; moral conduct (do no harm, help the afflicted, show compassion); Also, human being had been learned to share socially transmitted beliefs, value, so Egyptian population may be valued that they must share both positive and negative emotional experience with each other. This consistent with defining characteristic of Empathy which involve the capacity to recognize and, to some extent, share feelings (such as sadness or happiness) that are being experienced by another.

Concerning correlation between empathy subscales this study revealed lacks sufficient construct validity of Multi-dimensional Emotional Empathy Scale. This consistent with (Olckers *et al*) who attempted to determine the construct validity of the Multi-dimensional Emotional Empathy Scale within the South African context study found that Multi-dimensional Emotional Empathy Scale lacks sufficient construct validity.⁽⁵⁴⁾

This may be attributed to the neglecting some behavioral and cognitive component of empathy in Multi-dimensional Emotional Empathy Scale construction. In addition the implicit meaning of empathy may need another method to be measured such as observational technique, situational analysis, and so on.

A review of some nursing literature indicates that empathy can be broken into various components and can be conceptualized as behavior, a personality dimension, and an experienced emotion. There seems to be a consensus among nursing scholars that empathy is a very complex, interpersonal phenomenon that has proven difficult to study⁽⁵⁵⁾

Also, the result of the present study revealed that (41.7%) of studied subject were Non Alexithymic, while more than half of them had Possible Alexithymia and Alexithymia (26.8, 31.5 respectively) Results from epidemiological studies on the prevalence and socio-demographic associations of Alexithymia have so far been somewhat contradictory. Moreover, there are no earlier nationally representative studies on the epidemiology of Alexithymia.⁽⁵⁶⁾

There are a few studies on the prevalence of alexithymia on community or population samples indicating prevalence figures between 5.2% (Kokkonen *et al.*)⁽⁵⁷⁾ and 34.5% (Joukamaa *et al*)⁽⁵⁸⁾

Study conducted by Mattila *et. al.* found that every tenth individual in Finland is alexithymic.⁽⁵⁶⁾ The present study finding highlight that Alexithymia is not a mental disorder, but is seen as a trait that differs in severity from person to person. Unfortunately, Alexithymia hasn't been a well publicized issue and most professionals know little or nothing about it. Likely explanation for this may be related to that the term was first coined in a psychosomatic clinical setting.

The present study shows that the highest mean percentages of studied subject in **20-Item Toronto Alexithymia Scale** was Difficult Describing Feeling, Followed by those who had Difficult Identifying Feeling, While an externally oriented thinking represent the lowest percentage.this may explained by the possible relation between externally oriented thinking and neurological basis of primary Alexithymia which may not be the prevailing type among studied subject. This may highlight the need to search this issue and its related factors especially among health team members work with psychotic patients.

This emphasize that Alexythymia not simply either present or does not exist, individuals with alexithymia as the study revealed are not totally unaware of their feelings or completely unable to express them verbally, although, for them, emotions are often poorly differentiated and therefore difficult to identify or verbalize,

The core finding of this study reveals that general empathy scale was correlated significantly and negatively with Difficult Describing Feeling subscale as well as externally oriented thinking subscale. The likely explanations for this may be related to the importance of abstraction in empathy process (external oriented thinking contradicts this). Although all individuals are unique, whose values may differ concretely, the identification of certain concepts such as value and loss play an important role in allowing them to enter the perceptual world of another person, and therefore empathize with each other.

The result of the present study is consistent with Grynberg *et al* who provided additional evidence for a link between alexithymia and poor empathic abilities. Grynberg findings suggest the associations that exist between the cognitive components of alexithymia and empathy are relatively insensitive to dysphoric affects. Conversely, associations between the affective components of both constructs are partly due to shared covariance with anxiety. Moreover, our results call into question the consideration of Empathic Concern as an affective rather than a cognitive dimension.⁽³⁾

Furthermore, Levels of alexithymia were measured with the Toronto Alexithymia Scale (TAS-20) in families of women with borderline personality disorder (BPD), restricting anorexia nervosa (AN) and a nonclinical (NC) group. The study revealed that family members of women with BPD have the highest levels of alexithymia and in these families there seems to be a complementary association between alexithymia in one parent and low levels of empathy in the other.⁽⁵⁹⁾

The result of the present study shows that TAS is correlated significantly and positively with each subscale which reflect its validity. This consistent with several studies results which provided strong support for the reliability and factorial validity of the TAS-20^(51, 60)

Conclusion & recommendation

Based on the findings presented above, several conclusions were drawn from this study. First, difficulties identifying and describing emotions is a significant problem among psychiatric hospital staff. Second, results supported that Alexithymia is strongly related to empathy, which indicates that staff with Alexithymia need to addressing affective responses and discussing way of dealing with it

Future Research Implications

While this investigation served as a preliminary exploration of Alexithymia among the psychiatric hospital staff dealing with psychotic pts. Future research is needed to address some of the shortcomings of the present study and the relevant literature. First, based on the results of this study along with previous investigations, it is apparent that the large and more representative subject must be included to offer more about the prevalence, gender difference. Possible cause and method of reduction.

Based on the previous findings the following are recommended:

- Staff Administrators and educators should plan to increase awareness among psychiatric hospital staff regarding the ways of improves emotional awareness and expression.
- Psychiatric hospital staff should be knowledgeable about the Alexithymia construct and its effect on empathetic as well as relationship quality.
- Emotion Regulation Skills Training should be conducted to Learn healthy emotion regulation Skills and consequently Reduce Emotional Instability.
- Nursing Education should play a positive role in raising awareness through educating students about concepts of Alexithymia and the importance of their emotional regulation as means to achieve

growth and development in their personal life well as the quality of care they will provide.

- Maintain the current level of emotional awareness through conducting workshops to teach how to recognize emotion, don't ignore it.
- Empathy training should be conducted to improve empathy skills among staff members may include the following(role-play to demonstrate, practice suitable tone of voice with different scenario, a training exercise to identify suitable empathic information-gathering questions, training exercise to view patients' situations objectively, and so on.
- Cultivate a keener sense of other people's emotional needs judging by their verbal and physical cues

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