EFFECT OF ALEXITHYMIA ON SELF TALK AND SOMATIZATION AMONG PSYCHIATRIC PATIENTS

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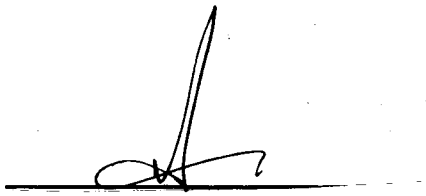

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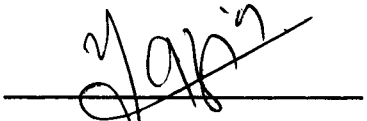

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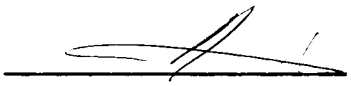

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DECLARATION

I, **Ms. SUMBEL MALIK**, Registration No. **246-FSS/MSCP/F-16** student of **MS** in the subject of clinical Psychology, session **2016-2018**, hereby declare that the matter printed in the thesis titled: Effect of alexithymia on self talk and somatization among psychiatric patients is my own work and has not been printed, published and submitted as research work, thesis or publication in any form in any University, Research Institution etc in Pakistan or abroad.

Sumbel Malik

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10-12-2020

Dated:

RESEARCH COMPLETION CERTIFICATE

Certified that the research work contained in this thesis titled: Effect of alexithymia on self talk and somatization among psychiatric patients has been carried out and completed by Ms. SUMBEL MALIK, Registration No. 246-FSS/MSCP/F-16 under my supervision.

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Assistant Professor

Department of Psychology

International Islamic University

Islamabad

I dedicate this work to

My loving parents

Respected teachers

And

Some good friends

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List of Abbreviations

APA	American Psychological Association
DSM	Diagnostic and Statistical Manual of Mental Disorders
SPSS	Statistical Package for Social Sciences
NIMH	National institute of mental health
EQ-i	Emotional Quotient inventory
HMO	Health maintenance organization
PET	Positron emission tomography

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Abstract

This dissertation was devoted to find the effect of alexithymia on self talk and somatization. Psychiatric patients were the sample of current study. In order to make them understand the instructions and statements of the instruments the first and foremost objective was to translate the instruments into native (Urdu) language. Two scales that were not present in Urdu language were translated. These scales include the self talk scale (STS) (Brinthaupt, Hein, & Kramer. 2009) and the Clinical global impression scale for severity (CGI-S) (Guy, national institute of mental health (NIMH), 1976). These were translated by using forward and backward translation method. These scales were also validated using translation equivalence method. One Pilot study was conducted to get some ideas about the reliabilities of the translated questionnaires and another pilot study was conducted to get some preliminary information regarding all the variables of the main study. After getting satisfactory results of pilot studies main study was conducted. Data was obtained from psychiatric patients (N=200) that were seeking treatment in different hospitals of Rawalpindi. Along with informed consent and demographic sheet four instruments were used in a main study including the above mentioned scales. The other instruments were Toronto Alexithymia questionnaire (TAS-20) and (Taylor, Bagby,& Parker, 2003), The Four-Dimensional Symptom Questionnaire (4DSQ) (Terluin, 1996) all scales used were in Urdu language. After following the basic protocols data was obtained and then analyzed using SPSS 25. Results revealed that there is a negative relationship ($-.52^{**}$) between alexithymia and self talk and positive relationship ($.34^{**}$) between alexithymia and somatisation. Alexithymia is also positively (0.21^{**}) related with severity of illness. There were no significant gender differences but significant differences exist among other demographic variables (childhood trauma, relapse, birth order). There is a difference in prevalence of alexithymia and alexithymia also predicts somatisation ($R^2=0.11$). It is concluded that current study can help in highlighting importance

of knowing alexithymia especially for treatment and relapse prevention among psychiatric patients.

Keywords: forward and backward translation, translation equivalence method, pilot study, main study, relationship, predictor.

INTRODUCTION

Chapter I

Introduction

Introduction/Background

Emotions are the vital essence of the human life they enable humans to convey meanings to other fellow beings about how they are feeling and what they want to do. Sometimes individuals are aware of the exact nature of these emotions and sometimes they are not. Some individuals do not face difficulty in identification and expression of these emotions according to the demands of the situation. This can be a result of any physiological, psychological or social influences as both nature and nurture contributes in the development of a person.

There are some traits of personality that inhibit the individuals to express their emotions along with that they face some difficulties in clearly identifying these emotions this personality type is known as alexithymia. Alexithymia is of concern as it is considered as a risk factor for the development of number of physical and psychological illnesses. These illnesses might have psychological basis. Self talk is one of the new coping strategies introduced by cognitive school of thought.

Self-talk is talking with one's own self (giving oneself some time). Self-talk is one of the easiest and approachable strategies if a person is sitting silently and talking with himself without being noticed by someone and in this way a person can plan and regulate emotions easily. This lack of ability to identify and express emotions (alexithymia) become associated with how frequent a person talks with himself, and in turn this lead to the decreased self awareness and a person become more prone to the number of mental disorders.

Alexithymia

The term alexithymia was introduced by Sifneos (1973). He was a Psychotherapist. It is simply defined as an inability to find appropriate words to describe one's feelings. Alexithymia is derived from the Greek word that literally means rebuffing emotions, it is basically a failure or difficulty to identify, recognize, communicate, describe or explain emotions and feelings (Sifneos, 1973). Alexithymia is a term that used to refer to a phenomenon of "lacking words for emotions" along with difficulty in expression and identification of feelings and emotions. Individual with alexithymia also exhibits limited abilities for imagination and creativity and they usually focus on the events that are happening externally and not to their internal emotional state (Nemiah, 1977). Other core features include limited creativity or creative thinking, apathy, cold hearted, impassive, detached and impersonal (Gunzelmann, Kupfer, & Brahler, 2002).

Expressions and understanding of emotions and feelings are crucial for every individual. All individuals experience emotions in their lives and try to describe their feelings but some individuals have difficulty in understanding and identifying their emotions along with this they also had difficulty in expression and regulation of emotions. Some individuals also find it difficult to express themselves in front of others and have difficulty in finding some appropriate words for their feelings, all these difficulties were referred as alexithymia, which is considered as a construct of a personality. (Thorberg, Young, Sullivan, & Lyvers, 2009).

Individuals with alexithymia often express their distress in the form of physical complaints and have problems with interpersonal relationships and they are also at risk for development of various physiological, behavioral and psychiatric problems (Taylor, Bagby, & Parker, 1997). There are number of problems that are thought to be associated with

alexithymia such as they have difficulty in managing stress, poor dealing capacity, limited expression, difficulty in regulating emotions along with these difficulties they are also at risk of development of number of illnesses (Taylor & Bagby, 2004).

Psychological and physical health of individuals with alexithymia is affected badly because of their maladaptive regulation strategies (Pandey, Saxena, & Dubey, 2011) and they also have poor imaginative and creativity skills that is possibly due to their externally oriented thinking (Swart, Kortekaas, & Aleman, 2009). Those who score high on alexithymia also show less sympathy, more distress, negative effect, less empathy and poor recognition of other's emotions too (Marchesi, Ossola, Tonna, & Panfilis, 2014).

Alexithymia can also cause number of interpersonal problems along with decreased perceived social support (Lumley, Ovies, Stettner, Wehmer, & Lakey, 1996). Along with difficulty in emotion regulation individual with alexithymia also have difficulty in number of cognitive processes (Taylor, Bagby, Ryan, & Parker, 1990). Emotion regulation is a result of interaction of 3 systems first is a neuro-physiological system that involve nervous system specifically autonomic along with endocrine system. Second system is of cognitive-experiential it involve emotional awareness, awareness of words and expressions regarding feelings and emotions. Third system is motor-expressive that include facial movements, expressions, posture, style of talking, tone and pitch of voice etc. (Dodge & Garber, 1991). Other than these three systems social interaction, play, smile, dream, fantasy, wishes, language, knowledge, desires, communication, defense mechanisms and speech are also important for an individual to help them regulate their emotions (Thompson, 1994).

Emotional responses to any stimuli have two components, physiological and subjective; they are usually present in a combined form but in alexithymia these components are decoupled (Papciak, Feuerstein, & Spiegel, 1985). According to Hashemi, Khalilzade and

Mashinchi et al., (2012) some of the main issues that are associated with alexithymia are problems in their understanding of their own and others emotional and mental state, problematic relationship with others and they also show little empathy towards others and they are also not able to easily relate themselves to others.

Alexithymia is somewhat also related to low emotional intelligence along with poor stress reaction so it act as a risk factor for drug abuse (Riley & Schutte, 2003). Number of displacement behaviors were also shown by individuals with alexithymia, these behaviors include grooming, eating, drinking etc (Troisi et al., 2000). They also have difficulty in dealing with everyday tasks because of poor executive functioning which is basically a conductor for all cognitive skills and it helps in planning and organizing things. Inhibition is also there which in turn increases cravings (Koven & Thomas, 2010).

Alexithymia is associated with number of pathologies and mental disorders because of their difficulty in identifying and expressing emotions along with poor cognitive and affective regulation strategies (Stone & Nielson, 2001). Due to all these difficulties and lack of emotional awareness they had hard time dealing with negative emotions thus elevate stress response chronically (Martin & Pihl, 1985). Numbers of mental disorders that are associated with alexithymia include depression, anxiety, personality, somatic symptom disorders and substance use disorder (Conrad, Wegener, Imbierowicz, Liedtke, & Geiser, 2009; Honkalampi, Hintikka, Tanskanen, Lehtonen, & Vinamaki, 2000). Among drug users a difficulty regarding expression and identification of emotion is attributed to alexithymia and they also have poor emotion regulation strategies (Taylor, 1984).

Basic information regarding the construct of alexithymia was established in 1973 but only few investigations were made regarding its relation with other somatic and

psychological disorders, strong relationship is suggested with hypertension almost among 55% of patients in Italy as investigated by Todarello, Taylor, Parker, and Fanelli (1995).

Alexithymia is not directly related with different eating behaviors such as a need to eat, a desire to be skinny or a satisfaction with one's body but it is related to some psychological aspects and emotional regulation (Taylor, Parker, Bagby, & Bourke, 1996). Behaviors related with eating disorders are a result of overcoming emotional stress and an attempt to regulate emotions; these compensatory eating behaviors include staying hungry, binge eating and vomiting (Goodsitt, 1983).

Kirmayer (1987), Loiselle and Cossette (2001), Taylor, Bagby, and Taylor (2003) found out that alexithymia is a culturally bound construct, the manner in which persons describe and express their emotions differ across cultures and this difference may be attributed to their different living styles, language, principles and traditions (Fatima, Ghayas, & Khawar, 2016). Alexithymia is studied across different cultures and 18 different ethnic groups (Parker, Shaughnessy, Wood, Majeski, & Eastabrook, 2005; Taylor, Bagby, & Parker, 2003).

Alexithymia can be divided into two major types depending upon the factors and the deficits it deals with. Freyberger (1977) proposed that the type that deals with psychological issues is secondary alexithymia while the other that deals with neurological or anatomy related deficits are primary alexithymia.

The concept and thought patterns related to feelings and emotions along with regulatory mechanisms differ from individual to individual because of differences in their experiences of attachment (Bucci, 1997). Schaffer (1993) conducted a study using a self report scale among both clinical and non clinical samples and concluded that alexithymia is related to insecure attachment style. Individuals with high score on alexithymia are expected

to have insecure style of attachment along with maladaptive emotional regulation strategies. A strong link is found between externally oriented thinking with different categories of insecure attachment style especially avoidant dismissing (Scheidt et al., 1999).

Substance abusers with family history of substance abuse scores higher on alexithymia as compared to those without family history (Lyvers, Onuoha, Thorberg, & Samios, 2012). Craving is an urge to involve in an act such as substance abuse or eating. Alexithymia is also related with craving though direction is not clear (Junghanns et al., 2005).

The concept of alexithymia is somewhat related to emotional intelligence and resilience, higher the alexithymia lower will be the resilience (Frewen, Pain, Dozois, & Lanius, 2006). Some of the cognitive abilities that are helpful in regulating emotions to effectively deal with emotions are recently included in the concept of emotional intelligence (Grewal, Brackett, & Salovey, 2006). Identification, recognition and naming of one's own emotional conditions as well as skills to express emotions in a truthful manner are also a part of concept of emotional intelligence. Other concepts include showing empathetic responses, skills to imitate others responses and utilize emotional reactions in a useful manner are also included in the construct of emotional intelligence (Mayer & Salovey, 1990). All these concepts are derived from the interpersonal and intrapersonal concepts of the Gardner's theory (Gardner, 2011).

Alexithymia scale (TAS-20) is correlated with emotional intelligence scale of BarOn (EQ-i) in a study and it was concluded that there is a strong negative correlation between these two (BarOn, 1997). Though alexithymia is not present among recognized categories of psychiatric disorders like schizophrenia or depression but it is persistent and usually considered as an emotional or cognitive pattern where a person faces difficulties in managing emotions and less ability to fantasize. Alexithymia and negative symptoms of schizophrenia

may appear similar but they are different as they have symptoms of different intensity (Krystal, 1982). This discussion becomes the basis for further exploration regarding whether alexithymia is a permanent trait (personality) or a temporary condition (reaction of any physical or mental illness) (Freyberger, 1977).

Studies related to whether depression and alexithymia are same or totally different or overlapping are important as these studies opens the doors for further investigations related to whether alexithymia is a personality trait or it is a secondary condition developed due to some underlying reasons (Freyberger, 1977).

Alexithymia is considered as an enduring trait that acts as a pre disposing factor for various pathologies and it can result in mood problems (Lundh & Simonsson, 2001). To test that alexithymia is a stable trait a study was conducted by Tolmunen et al. (2011) on a large sample of general population for 11 years and it was concluded that alexithymia is a stable personality trait. One study was carried out by Keller, Carroll, Nich, and Rousasville (1995) and another by Rosenblum et al., (2005) among drug users and found similar results. Among poly substance users who were also receiving treatment from last 6 weeks it was concluded that alexithymia scores almost remain stable (Pinard, Negrete, Annable, & Audet, 1996). Some contradictory data also exist suggesting that alexithymia can be susceptible to change (De et al., 2012).

Alexithymia is hypothesized to be present among individuals with different disorders but it's also present among general population. Among general population 9 to 17% of male and 5 to 10% of female have alexithymia. (Mattila, Ahola, Honkonen, Salminen, Huhtala, & Joukamaa, 2007). Some studies reported the estimate that alexithymia is present in almost 70% of individuals with disorders, (Bourke, Taylor, Parker, & Bagby, 1992) especially among substance abusers (Taylor, Bagby, & Parker, 1997). Frequency of alexithymia among

substance users is high estimated to be about 78% mostly among alcohol users (Rybakowski, Ziolkowski, Zasadzka, & Brzezinski, 1988). Estimates among other drug users are as high as 42 to 50% (Haviland, Shaw, MacMurray, & Cummings, 1988). The use of substances among alexithymic individuals can be linked with their effort to reduce their anxiety and depression (Stewart, Zvolensky, & Eifert, 2002).

In a research among newly diagnosed hypertensive patients of Finland it was found that 57% of males and 46% of females have alexithymia (Jula, Salminen, & Saarijarvi, 1999). In another research in Italy among patients of gastrointestinal disorder about 66% have alexithymia as emotions are related with gastrointestinal disorders (Porcelli, Taylor, Bagby, & Carne, 1999). In a study by Jimerson, Wolfe, Franko, Covino, and Sifneos (1994) it was expounded that 40 to 60 % of patients with eating disorder have alexithymia. Among psychiatric population 47 to 67 percent patients of panic disorder have alexithymia and rate of alexithymia among phobic and obsessive compulsive patients was about 12 to 13 percent (Zeitlin & McNally, 1993).

Alexithymia is considered to be one of the features of the personality that increases the chances of a person to develop psychiatric issues most specifically somatic symptoms and substance abuse (Morrison & Pihl, 1990). Some of the reasons that alexithymia makes the persons more vulnerable to the number of physical and psychiatric issues are that there is a poor stress management and along with that they face difficulties to regulate their emotions properly (Taylor & Bagby, 2004).

Brain study of individuals with alexithymia suggests that there are some changes in neural connections of these individuals and response differently to emotional stimulus. Some of the regions of the brain that are more specifically assumed to be associated with responses to number of emotional stimulus, identification of emotions, emotional awareness, describing

emotions and externally oriented thinking are Anterior Cingulate Cortex (ACC), Striatum, Insula and Amygdala (Craig, 2009). Neurobiological examination of individual with alexithymia were conducted, a task more specifically of the emotional nature were given to them without any definite valance it was observed that dorsal anterior cingulated cortex was involved. In case of negative emotional valance pre-motor areas, amygdala and dorso-medial prefrontal cortex were identified to be involved in responses. In a positive emotional valance stimuli precuneus insula was identified to be involved (Van et al., 2013).

In order to understand neural response differences among individuals who score high and low on alexithymia, they were shown a painful picture which is supposed to elicit emotions. Those with high and low alexithymia show different neural patterns in response to exposure to that picture. Individuals with low alexithymia showed more activation in dorsal pons, insula, left dorso lateral pre-frontal cortex, left caudal anterior cingulated cortex and cerebellum and lower activation in inferior frontal gyrus and insula as compare to those individuals who score high on alexithymia (Moriguchi et al., 2007). Alexithymics also show less empathy scores and poor emotional regulation. One of the reasons of this poor regulation strategies and poor empathy was difference in neural responses (Berthoz et al., 2002).

When exposed to the stressful situation individuals with alexithymia may or may not show any change in their sympathetic activity, the link is not clear though (Friedlander, Lumley, Farchione, & Doyal, 1997). Corpus callosum is the medium through which sensory information transfers from one hemisphere to the other using test of tactile finger localization it was concluded that there are some difficulties in transfer of information between two hemispheres (Hoppe, 1977). Among alexithymic individuals as tested in both clinical (Zeitlin, Lane, O'Leary, & Schrift, 1989) and non clinical (Parker, Keightley, Smith, & Taylor, 1999) populations.

One of the difficulty faced by individual with alexithymia is poor regulation along with difficulty in identifying, communicating and interpreting their emotions this can lead to poor treatment adherence, they show difficulty in recovering along with greater relapse rate (Loas, Fremaux, Otmani, Lecercle, & Delahousse, 1997).

In a study by Celand, Magura, Foote, Rosenblum, and Kosanke (2005) among 230 outpatients who had received treatment for drug abuse it was concluded that those who have high alexithymia show poor treatment success and were more susceptible to relapse following treatment. Ziolkowski, Gruss, and Rybakowski (1995) conducted a study among alcoholics, sample consist of 60 males and it was reported that from last 21 years those with high scores on alexithymia had more relapses as compared to those with low alexithymia scores

As proposed by Beck (1976) the basis of all the cognitive and emotional problems are cognitive schemas. Young, Klosko and Weishaar (2003) also agreed with Beck and theorized the Young's early maladaptive schema theory. According to that theory all the memories, feelings, emotions and cognitions are deeply rooted in one's early life experiences. If these life experiences were not pleasurable or satisfactory it can lead to maladaptive schemas which will lead to different problems in the future. Alexithymia can be a result of these maladaptive schemas (Thimm, 2010).

Problematic mental state and emotional issues can be regulated through use of different regulation strategies, these comprise of number of behavioral and cognitive processes. Engaging in these activities depend upon the signals that are often provided by different emotions. So a person who had a difficulty in recognizing emotions will also has a difficulty in regulating these emotions (Larsen, 2000). So one of the difficulties an alexithymic individual face is to affectively recognize and regulate emotions (Taylor, Bagby & Parker 1997; Ciarrochi, Heaven, & Supavadeeprasit, 2008). A person often misinterprets

these emotions as signs and symptoms of sickness (Taylor & Bagby 2004) and uses maladaptive strategies (Taylor 2000).

The basic purpose of the process of emotion regulation is to regulate the components (behavior and feelings) that makes an emotion this can be done at a conscious or unconscious level (Gross, 1995). This process can be beneficial (adaptive) or harmful (maladaptive) for the individual depending upon the strategies used (Bonanno, Papa, Lalande, Westphal, & Coifman, 2004). These strategies can differ depending upon their major focus. They can be antecedent focused or response focused. The first one is considered as an adaptive strategy as its main emphasis is on changing the situation effectively the second type is considered maladaptive as its main focus is on suppression of emotions (Gross, 1998).

Alexithymia and regulation of emotions are inter-related. In order to inquire two experimental studies were conducted. It was expounded that those who have higher level of alexithymia have difficulty in recognizing facial expressions as compared to those with lower level of alexithymia (Mann, Wise, Trinidad, & Kohanski, 1994). Lane and his colleagues conducted a research using emotional stimuli and responses both verbal and non verbal. A negative association between matching emotional stimuli and responses with level of alexithymia was explored (Lane, Lee, Reidel, Weldon, Kaszniak, & Schwartz, 1996).

A link between alexithymia and emotion regulation was also established by Schaffer in one of the experimental studies. A scale (Affect Regulation Scale, ARS) was also constructed to identify different coping strategies individual used in different emotional situations (Schaffer, 1993). Schaffer found that alexithymia was related to different maladaptive emotional responses such as binge eating, reckless activities, aggressive behavior and drinking alcohol. Similar results were demonstrated in another study by Beckendam among sample of male parolees (Beckendam, 1997). Emotion regulation skills

are helpful for one self as well as they help others to adopt effective regulation skills (Taylor, Parker, & Bagby, 1999).

Alexithymia can also interrupt the course of treatment and affectivity of a therapy (Lumley, Downey, Stettner, Wehmer, & Pomerleau, 1994). There are some particular therapeutic techniques which can help in decreasing symptoms of alexithymia thus in return help in improving mental as well as physical health of the individual. It is generally considered that characteristics of alexithymia are stable as it is a trait and changing or modifying them is not an easy task (Taylor, Bagby, & Parker, 1997). Individual with alexithymia may get benefit from supportive type of therapies instead of interpretive therapies that focus on dynamic conflicts and traumas as suggested by Nemiah, Freyberger, and Sifneos (1976). Swiller (1988) suggests that modifying a therapy or techniques for the individual person will benefit the person with alexithymia.

A research was conducted with patients of eating disorder having alexithymia patients undergo psychotherapeutic treatment of 9-10 sessions. This treatment included group therapy. This was supportive to improve interpersonal and intrapersonal communication and support regarding management of one's symptoms. The results revealed that treatment group reflected reduction in scores of alexithymia (de Groot, Rodin, & Olmstead, 1995). Researchers have identified some therapeutic techniques which can help people with alexithymia by changing their focus toward emotions. The basic concern was to make individual realize that there are number of verbal and non verbal cues associated with each emotion. Therefore clients should also focus on these cues in order to become aware of their emotions (de Groot & Rodin, 1998).

Beresnevaite (2000) investigated that treating alexithymia is also beneficial for treating some other disorders such as somatization among post-MI patients. Researcher

divided patients into an experimental and a control group. Experimental group received different therapies for about 4 weeks. Post therapeutic scores reflected a significant improvement among patients. These scores were calculated on different occasions like after month, 2 months and after 2 years. The experimental group had a significant decrease in scores of alexithymia and less somatic symptoms as compared to the control group. This indicated that techniques used were effective in reducing scores of alexithymia. These techniques included some relaxation exercises (such as deep breathing, mediation, yoga), role-play, techniques to improve communications both verbal and non-verbal (paraphrasing, active listening, empathy, self disclosure), training regarding focusing on internal emotional cues and exercise related to fantasies and dreams (here and now, free association, locating emotions in the body).

Knowing that whether individual has alexithymia or not is important for the type of treatment to be provided. One of the effective and most helpful therapies for the individuals with high alexithymia is computerized cognitive behavioral therapy (Morie, Nich, Hunkele, Potenza, & Carroll, 2015).

Relationship between Alexithymia and Self Talk

Girbau (2007) studied neurophysiologic aspect of a private speech using neurophysiological and neuro-imaging techniques and established a relationship between alexithymia and private speech (self talk). It was further concluded that there are some physiological changes in individuals with alexithymia that in turn leads to the possibility of less self talk among them.

Runco and Richard (1997) published a study in a book titled "Eminent creativity, everyday creativity and health". In a split brain study it was explored that in individuals with alexithymia there is relative alpha abundance of left frontal and temporal channels that can

cause a possible decrease in self talk. Another possibility of decreased self talk in an individuals with alexithymia is that there left hemisphere is less active specifically language area.

Self Talk

Self talk is defined as an act or a practice of talking with oneself. Self talk is helpful in stopping the individual to act in a reckless manner, holds them back from taking quick decisions, dealing with number of situations, planning and helps them to monitor their progress. Act of self talk also serves as a Meta-Monitoring as it helps in monitoring one's course of action. One of the mean through which one can have an internal conversation with one self is self-talking. It is one of the types of internal monologue as there is a constant flow of thoughts about different life situations whether something already happened or going to be happened in a near future (Carver & Scheier, 1998).

From decade's psychologists were interested in the phenomenon of self-talk, and their interest is increasing day by day because of its applications in therapies. Self-talk is basically defined as an experience of having a conversation with one's own self or simply internal conversation (Fields, 2002; Jaynes, 2000). A number of terms usually refer to this experience of self-talk such as inner speech, private speech, self statements, internal dialogue and self conversation. Some theorists differentiate among these terms as having loud or silent conversation while others do not (Fields, 2002). In current study a more simpler and general term (self talk) will be used.

Self-talk is basically based on what people say to themselves and how this affects their behavior and other activities related to planning and decision making. In other words it can be described as thinking which is verbal (McGuire et al., 1995). It indicated that thinking is not just a combination of mental images it involves language and words (Wiley, 2006).

An individual's personality or self is a result of what person tell himself in a form of self talk or inner speech and number of researches have used self-talk in their models such as in Honos-Webb and Stiles (1998) model. It mainly concerns about the use of self-narratives while experiencing and coping with any difficult situation (Hardy, 2006). Internal conversation is a result of stream of consciousness during various circumstances (Burton & Readeke, 2008). This internal conversation or self talking can occur at any time whether the person is busy, alone or in a company of others, whether the person is thinking about something that is already happened or happening right now or will happen in the future (Cousins & Gillis, 2005).

Self-talk can be defined in a combined perspective of cognitive and behavior or purely as an act of cognitions. Bunker, Williams, and Zinsser (1993) defined self talk as a pure cognitive act by defining it as a thought which a person have while doing anything. There are various dimensions along which self-talk can be defined such as verbal statements for one self, dynamic with multiple dimensions and its major theme may differ. It can be motivational, instructional, inspirational and educational.

Different philosophers emphasize that thoughts are important to shape the behavior and emotions of an individual (Reardon, 1993). Plato (1987) also extended this view by defining conversation as something a soul or a person do with one's own self. Glass and Arnkoff (1997) refer to this phenomenon as self statements, internal talk and self-talk. It is defined as something which has multiple dimensions specially for athletes it is those statement that individuals used to address themselves (Hardy, Hall, & Hardy, 2005). It is not an easy task to examine and investigate about self-talk or inner speech (Vygotsky, 1987).

Self-talk or internal conversation helps the individual in forming their understanding, perception, awareness, learning, decision making and number of other regulatory functions,

as suggested by some theorist and researchers. Despite all these views it's unexpected that there is very little literature on the topic of self-talk and little concerns were shown toward evaluation of self-talk especially in field of social psychology and personality. A single satisfactory tool that can measure self talk frequency as well as other concern mechanisms such as learning, perception, regulatory functions does not exist because of little attention paid to that area (Diaz, Berk, & Diaz, 2014; Hardy, 2006).

In order to be clearer about the self talk it is important to know about the nature of the self talk. It is not as simple as it seems to be, there are various aspects associated with self-talk. Positive and negative self talks are considered as two major types of self talk. Other types can include loud self talk, in head or silent self talk, motivational self-talk, instructional self-talk etc (LeUnes, 2008). Positive and negative self talk has an important role in one's life as it affects their thinking pattern, self efficacy, performance, actions, attitude, self awareness, attention, concentration, mental health, level of anxiety etc. (Weinberg & Gould, 1999).

For cognitive processes and other emotional and behavioral issues self-talk is as important as thought process (Bunker, Williams, & Zinsser, 1993). Cognitive behavior model of Beck highlighted the importance of self narration or inner speech by suggesting that there is a connection between one's thoughts and their mental health along with that the content of one's self talk is also linked with development and treatment of affective disorders (Beck, 1976). There is a huge impact of one's self talk on their thoughts and vice versa. Kendall (1984) suggested a new phenomenon that when one's negative self talk reduces, their negative thinking also reduces simultaneously and when one's positive self talk increases, their negative thoughts are replaced with the positive ones. This phenomenon is named as "the power of non-negative thinking" and it is important for emotions of a person.

The impact of self- talk on psycho pathologies can be viewed through different perspectives. The cognitive perspective presents that there is a connection between self-talk and mental state of a person and this connection can be explored through different cognitive evaluation techniques (Haaga, 1997). Due to the influence of self-talk on behavior and thoughts it can be used as an effective way to reduce the stress (Kross et. al., 2014).

To change one's patterns of thoughts, their thinking, attitude, mental processes, opinions, beliefs and mind-set toward anything, cognitive therapist use self talk as one of the strategy because when a person gives instructions to him/herself the chances of occurrence of a change increases (Theodorakis, Weinberg, Natsis, Douma, & Kazakas, 2000). Self talk strategies include number of instructions that are mostly task specified (Gammage, Hardy, & Hall, 2001)

When a person focuses on any idea their thoughts, actions, activities and behavior also become a reflection of that idea. Self talk becomes beneficial as it helps individual to gain their worth, help in taking decisions, help in preparing oneself for any situation and in enhancing their performance (I eUnes, 2008). This internal communication can be helpful in modifying ones believes (Burton & Readeke, 2008). It is acknowledged through different researches that self talking is useful in increasing ones performance and capabilities (Hardy, 2006).

As mentioned earlier self-talk is one of the techniques that is helpful in managing stress. With self-talk one can improve and maintain control on their lives especially cognitive control. It is an opportunity to be successful in managing stress and other issues (Weinberg, Smith, Jackson, & Gould, 1984). It aids and promotes behaviors that are helpful in polishing their skills, talents, learning, expertise, training and performance (Miller, 2006).

The basic function of self-talk is regulation of emotions and thoughts. One can use self-talk for various purposes such as motivation, incentives, instructions, punishment, encouragement, criticism, reinforcement, assessment and evaluation. There is no limit for the number of possibilities in which a person can use self-talk (Cousins & Gillis, 2005).

There are number of different ways in which a person especially an athlete can use self-talk as reported by Zinnser, Bunker, and William (2001). These ways facilitate in managing attention and focus, also helps to overcome anxiety, to get relaxed and in assessing performance. It can also improve expression of emotions, communication of ideas, and adaptability to new situations. It also promotes their skills and abilities.

All forms of self-talk have some influences on the behavior and the emotions of the individual. According to cognitive and behavioral perspective the behavior and emotions are greatly affected by the person's perception, thinking patterns and the way they are evaluating the situations and events (Beck, 1976).

State of mind (SOM) model of self talk is based on the ratios; these ratios are concerns with the balance of cognitions. Schwartz and Garamoni (1986) proposed that a specific ratio of a positive to negative statements about one's self determines the psychological and emotional regulation of a person and any changes in these proportions can cause mal adaptation.

There are several techniques to identify self talk. These techniques involve different evaluation procedures that can be structured, unstructured, planned, unplanned, controlled, simultaneous or retrospective. Each procedure such as thinking out loud, monitoring of one's own self, tape recording, self-statements, interviews etc have some weaknesses as well as some strength (Blankstein & Segal, 2003). For observation of some internal cognitive processes that are also involved with self-talk only observation and external examination is

not enough, there must be some self reported documentation to help clearly understand one's own ideas, thoughts, perception, insight, inspirations and cognitions (Guerrero, 2006).

Relationship between Alexithymia and Somatization

While treating some patient's Sifneos (1973) observed that some patients demonstrate different patterns of emotions. They are less expressive regarding their feelings and they are more concerned about their surroundings rather than on their internal environment such as in their feelings and emotions. They also have some difficulty while fantasizing and imagining and have difficulty in finding appropriate words to express their feelings. He also noted that most of these patients have been suffering from different psychosomatic disorders thus it can be concluded that there is some link between somatic disorders and inability to express emotions (alexithymia).

In an attempt to investigate predictors of somatic symptoms among patients of depression Sayar, Kirmayer, and Taillefer (2003) studied 100 patients in Turkey. Significant differences between males and females were interpreted that is women and less educated patients reported more somatic symptoms, along with that a positive relationship existed among somatization, anxiety and alexithymia. Alexithymia is also positively related to the severity of depression and anxiety. Hence it is concluded that alexithymia can independently contributes to somatic symptoms and acts as a predictor of somatization.

In a study among anxiety and somatoform patients, diagnosed according to DSM-III-R, 30 individuals were selected. It was observed that scores on the alexithymia were predicting the persistency of the somatization (Bach & Bach, 1995).

Mostly if there is a slight physical disturbance or a symptom of any illness then individuals with alexithymia considered this as a dangerous situation. They respond badly to

this situation and arouse different disturbed patterns of emotions. They indulge their selves in a distress and rush to seek medical help (Besharat, Zebardast, Nadali, & Salehi, 2008).

Somatization

Somatization is basically the manifestation of distress that is psychological in nature in the form of symptoms that are physical in nature. This distress is a result of any psychological illness most commonly a mood disturbance. Individuals who encounter somatization mostly seek medical help for physical symptoms as they attribute their illness to the physical reasons and ignore the underlying psychological reasons (Lipowski, 1988).

The term somatization is broad and it covers a wide range of clinical conditions. The conditions can vary from patient to patient; some only show physical symptoms despite obvious psychological stressors and emotional issues; others who show out of proportion concern and worry regarding a minor physical issue or illness with or without proper medical evidence regarding that illness. There is one common thing among these situations that lie in domain of somatization; it is to express psychological, social or emotional distress in a physical form (Kellner, 1990).

Different theorists that belong to psychodynamic perspective made an effort to find the link between somatic symptoms, various illnesses, different psychological stressors and personality traits. Though they establish some links between personality type with less expression of emotions and somatic symptoms but results did not produce the expected impact among clinicians instead it promotes the existence of some diseases that are specifically psychosomatic in nature. Some existing researches of psycho physiologists suggest that there is no specific direction in which stress can affect the health of the individual. These effects can vary from individual to individual; these variations suggest that there is some underlying personality trait that makes the individual more vulnerable to

diseases. Researches related to symptoms and diseases most commonly revolves around psychological and social components as they are believed to play an important role.

Different perspectives have different concerns. Psychosomatic perspective places their emphasis on the process and the cause of the disease while the somatic perspective emphasize on the manifestation, emotional sensation, experience, expression and explanation of the disease. Previous definitions lack verification and are based on the assumptions related to causes and origin. Lipowski (1988) also refined the definition of somatization to make it more descriptive and expressive by adding about the tendency of the person to communicate somatic symptoms as a result of psychological distress and seeks the help of the medical professionals. This definition raises the empirical questions related to relationship of somatic symptoms and psychiatric illnesses (Lipowski, 1988).

Somatization is usually considered as an illness behavior that can be defined in terms of manifestation of different patterns of somatic symptoms. Mechanic (1962) has been credited for the introduction of term of illness behavior, he emphasized on the individual differences in perception, evaluation and manifestation of similar kind of symptoms in different ways; depending upon the differences in terms of personality and other prior experiences of the individual. Three perspectives are covered in this definition including the apprehension or cognition, mental attribution and observable acts. Pilowsky (1990) also extended this concept and termed it as an "abnormal illness behavior" as this behavior includes number of clinically significant situations, denial, disaffirmation and some time exaggeration of the symptoms. In simple words it is defined as deviation from the normal behavior.

If the above definition is considered the problem arises regarding norms that what is to be considered as normal and abnormal. In that way the attention is shifted toward the

social context. There were some methodological issues and problems that become associated with the definition of "abnormal illness behavior" so the preferred term are somatization (Costa & McCrae, 1985).

Present day researches define somatization as an unconscious process or a defense mechanism that involves different directions and perspectives. A person experience any stress or a situation (experiential) than think about the situation (cognitive) and some symptoms may appear such as headache etc and then a person seek the medical help (behavioral). Lipowski (1988) combined all these perspectives and formulate the definition stating somatization as a predisposition of the person to seek help for the somatic symptoms that arises when exposed to any stress or conflicting situation.

Somatization is a common condition that is usually not well managed. Despite being common there is little agreement on the accepted definition of the somatization, it is usually substituted for the symptoms that are functional in nature or the symptoms without any known medical reasons. It is considered as a common yet unique process as it combines physiological and psychological aspects of the stress (Bass, 1990).

Somatization can be considered as one of the defense mechanisms as it involves the intensification of the distress that is usually of the non specific nature. It is the inclination of the person to seek for the medical help (Turkat & Pettigrew, 1983). When a person is facing any issue and going through the struggle it is absolutely normal to link psychological tension with the circumstances a person is going through. In somatization a person tries to suppress that tension and exhibit in the form of exaggerated somatic signs (Kirmayer, 1988).

If somatization is considered as an illness behavior then exploration of social and interpersonal conflicts is considered as a first priority but as far as the clinicians are

concerned. Their first priority is the line of the treatment and help of the patients. Along with accurate diagnosis and knowledge of stressors (Scheper-Hughes & lock, 1987).

Other than psychological illness there are other factors that can lead to somatization. Some of these causes include brain sensitivity toward body sensation that is interpreting any change in a body in an exaggerated manner and there can be any physical abnormality especially in nervous system or neurotransmitters (Eriksen & Ursin, 2002). It is observed that individuals with somatization gave an extra importance to their body sensations along with that they have some false believes regarding illness. Normally under tension or any stressful condition individuals experience some physicals symptoms (e.g stomach pain) with or without any underlying medical condition, but if individual experiences number of physical symptoms (e.g stomach pain, sweating, weakness, body pain) without any prominent medical condition that are exaggerated and for longer period this shows somatization (Sharpe & Carson, 2001).

Somatization is said to be used as an excuse to avoid attention toward psychological symptoms. The basic reason is that the manifestation of physical complains and seeking help for them is more common and acceptable in any culture as compare to seeking help for emotional problems (Kirmayer, 1984).

The act of attributing somatic complaints depends upon individual's understanding, analysis and interpretation of external stimulus and sensations. So individual can attribute these sensations to any condition such as any stressor, sleep disturbances, environmental conditions, fatigue and climate. It can be attributed in a normal and rational way to any causing factors or it can be attributed in a negative or pathological way (Gulec, Sayar, & Ozkorumak, 2005).

Somatization is subjective and perceptual as it is personal and varies from person to person and from situation to situation (Pennebaker, 1982). Here the psychophysiology is important as its major concern is with the effect or result of the distress rather than the emergence of the distress. It unites and combines different psychological and social perspectives (Kellner, 1990).

Somatic symptoms and stress are related to each other as stress is the underlying reason of the somatization. There are number of situations that can evoke distress leading to somatization it can be related to situation, acute disorder or chronic disorder and any change is life (Kleinman, 1986). In simple words somatization means assigning the stress a somatic role, despite the fact that the origin of stress is psychological or social in nature. The reason of this attribution is social stigmatization of the psychological disorders (Bass, 1990).

There are some advantages for adopting or coping through somatization as described by Goldberg and Bridges (1988) but they are short termed. It helps the person to see himself as a mentally healthy individual and also such person don't involves himself in self pity. Such persons avoid blames thus they are less depressive initially but with time they also get depressed so it is not a suggested coping for the distress. Somatization is problematic and of concern as functionality of an individual is compromised. They face difficulties in performing daily life activities.

Among somatic symptoms interpersonal as well as intrapersonal differences exists as reported by Health maintenance organization (HMO) members that patients symptoms can change every week or every five days (Demers, Altamore, & Mustin, 1980).

For the understanding of somatization mostly pain related studies were conducted but they actually mislead the concepts of somatization. They create an image of somatization as a

non treatable disorder that is independent and can exist without underlying reasons because patients have difficulty in probing and inquiring their underlying reasons (Dworkin, Von Korff, & LeResche, 1990).

Literature Review

Present study investigates a relationship and effect of alexithymia on self talk and somatization among psychiatric patients. For that purpose previous literature is studied and reviewed to establish the relationship among these variables.

Alexithymia is found to be a culturally bound construct. A research was conducted on a student population (ethnically heterogeneous) studying in Canada and they found significant differences on scores of alexithymia among students of different cultures (Dion, 1996). Another study among parents (N=300) who belong to Asian and Western culture was conducted and found that Asians have more difficulty in expression of emotions these studies illustrate that cultural differences do exists (Le, Berenbaum, & Raghavan, 2002)

Bem (1974) explained that expression of emotions is important for both genders. Literature regarding differences among gender is not clear as different studies report different results. A study was conducted to investigate the relation of depression and anxiety symptoms with alexithymia. For that purpose students from the university (N=317) were selected. It was concluded that women were more anxious and depressed as compare to men. They also showed more alexithymia traits especially in domain of difficulty identifying emotions. It is also concluded that alexithymia is involved with the severity of affective disorders (anxiety, depression) (Bonnet, Brejard, Pasquier, & Pedinielli, 2012).

In another study among obese individuals (N=413) of age 18-60 by Larsen, Strien, Eisinga, and Engelss (2006) found alexithymia effect emotional eating among males and

females. It was concluded that males score high on overall alexithymia score as well as on externally oriented thinking subscale however very little difference was found on difficulty identifying and describing feelings. Levant, Hall, Williams, and Hasan (2009) published a meta-analysis(32 non-clinical studies, 13 clinical studies) regarding gender differences in alexithymia and found that however there is a bit difference but males have higher level of alexithymia as compared to females at least with a non-clinical sample.

In an attempt to find gender differences in Pakistani population regarding alexithymia Zaidi, Arshad, and Yaqoob (2015) selected 300 students who are doing graduation and it was concluded that males have higher level of alexithymia. In another finding among university teachers (N=120) of Pakistan, a significant positive relation was found between anxiety and alexithymia along with that male teachers were found to have higher alexithymia as compared to their female colleagues. (Mohsin, Buzdar, Mohsin, & Salee, 2016).

Tselebis et al. (2010) conducted a research on chronic pulmonary patients (N=167) to find prevalence of alexithymia among them and it is concluded that females have higher level of depression, anxiety and alexithymia and prevalence of alexithymia is more among females though not much evident. In this study individuals of age 80 and more are excluded as well as individuals with other co-morbid conditions were also excluded. Khan (2017) conducted a study among general adult population of Quetta, sample of 400 healthy individuals were selected results shows that alexithymia is more prevalent among males and males have higher level of alexithymia though there is a little difference between males (93%) and females (87%). Alexithymia is found to be associated with somatic complaints, anxiety and depression.

A longitudinal study was conducted for the period of 1 year on the patients of major depressive disorder (n=116) and healthy individuals (n=540) were taken as a control group to

investigate a relation of alexithymia and severity of depression, it was concluded that there is a positive relation between these two and any increase in score of alexithymia is proportionate to the increase in scores of depression (Honkalampi, Hintikka, Laukkanen, & Vinamaki, 2001). Similar findings were reported by Serafini et al. (2016) among patients (N=281) of affective disorders (depression, bipolar, uni-polar depression, mania, hypomania) and a significant positive relation was found between alexithymia and depression.

A study was conducted by researchers of Italy regarding depression and anxiety (affective disorders) with alexithymia. 113 patients of anxiety and depression and 113 healthy individuals were selected as a control group. Results show that there was a significant relation between scores on alexithymia and level of depression and anxiety (Marchesi, Brusamonti, & Maggini, 2000).

TenHouten (2006) explain the relationship between alexithymia and somatization that alexithymia can contribute to the development of psychosomatic diseases. Alexithymia is linked with the somatization whether the individual is suffering from the somatic diseases or not (Mattila et al., 2008).

The study was conducted in a Finland to find the relation between alexithymia and somatization in a non-clinical population (N=5129), for that purpose sample is selected from the non-clinical population and it was concluded that there is a significant relation between these two constructs in a non-clinical population too (Mattila et al., 2008).

Jo et al. (2012) conducted a comparative study among patients (N=388) of different disorders such as depression, anxiety, somatoform and other psychiatric disorders. Prevalence of alexithymia is found to be highest in depression (42.4%), a little difference was found between somatoform (35.9%) psychiatric disorder (35.3%) and anxiety (35.3%) patients. Exclusion criteria include age under 18 years, any co morbid condition, mental retardation

and any neurological condition. In Pakistan Farooq and Yousaf, (2016) studied female patients (N=80) of conversion disorder and find a positive relation between child hood trauma and alexithymia.

Ahmed, Naeem, and Zainulabdin (1991) conducted a study in Karachi, Pakistan. Individuals with headache (n=30) were taken as an experimental group and others (n=30) as a control group and it is concluded that alexithymia is more common among control group (36.7%) than experimental (33.3%). This indicates that alexithymia is present among Pakistani population independent of any physiological symptoms.

Taycan, Ozdemir, and Taycan (2017) studies a major depressive patients (N=90) both males (n=35) and females (n=55) patients were the part of the study, 60 percent of these subjects were married, 36 (40%) patients were identified as alexithymic, 75 % of these alexithymic patients were females. Results revealed that there is a significant positive relation between alexithymia, somatizaton and severity of depression (psychiatric illness). No significant differences were found in socio-demographic characteristics.

A research was carried out among patients (N=20) of the conversion disorder. More than half of the patients (n=12) have high scores of alexithymia and alexithymia scores were also related positively to the severity of depression and anxiety among conversion patients (Celikel & Saatcioglu, 2006).

In a study among somatoform patients (N=30) who were discharged approximately 2 years ago, it was concluded that those who still have somatic symptoms have higher scores of alexithymia thus it was concluded that alexithymia can predict somatization (Bach & Bach, 1995). Similar results were reported in a study related to predictors of somatization. This study include patients of depression (N=100) and it concluded that a positive relation exists

between alexithymia and somatization. Regression analysis shows that alexithymia is one of the predictor of somatization (Sayar, Kirmayer, & Taillefer, 2003).

Rationale

Emotions and their expressions are really important for any individual; a person without expressions and emotions is more like a machine. Most of the individuals talk with themselves; it helps them to prepare mentally for difficult situations and increases their awareness. Almost 10% of the general population is found to have difficulty expressing and identifying emotions (alexithymia), it will increase their risk to have number of mental illnesses (Taylor, Bagby, & Parker, 2003). Psychological problems are increasing day by day in Pakistan. In Pakistani culture people are afraid of reporting about psychological or mental issues as it is still considered as a taboo to some extent. In order to be accepted culturally they try not to report them and try to suppress them but in turn these psychological distresses are manifested in a form of physical or somatic symptoms.

The frequency of psychiatric patients is increasing in Pakistan at rapid rate (Gadit, 2005; Khalily, 2011). Depressive and anxiety disorders appear to have highest frequency (Mumford, Minhas, Akhtar, Akhter, & Mubbashar, 2000; Husain, Chaudhry, Afridi, Tommenson, & Creed, 2007) followed by bipolar, schizophrenia psychosomatic disorders and substance use disorders (Gadit, 2007).

It is important to study about relationship of alexithymia and somatization as alexithymia is usually present as a co-morbid condition without being acknowledged. It also acts as a risk for development of psychological issues. Patients mostly ignore psychological stressors and underlying emotional issues and present themselves with somatization in clinics in order to be accepted culturally. For example in clinics the patients with depression mostly

report about their headache and other pains while ignoring their psychological and emotional conditions.

Individuals with depression and anxiety have difficulty interpreting theirs and others emotions and difficulty in expressions of emotions, it is also considered that alexithymia is associated with the development and severity of depression (Mattile, Salminen, Nummi, & joukamma, 2006) and anxiety (Saarijarvi, Salminen, & Toikka, 2001; Bonnet, Brejard, Pasquier, & Pedinielli, 2012).

The present study aimed to contribute in the literature regarding a relationship of alexithymia and self talk, there are some studies explaining this relationship but these studies uses neurophysiologic and neuroimaging techniques such as MRI, fMRI, PET and MEG (Girbau, 2007; TenHouten, Walter, Hopper, & Bogen, 1988) current study will be helpful in filling a literature gap regarding any quantitative research exploring this relationship and also explore the type of self talk in individuals with alexithymia. Some researchers study the percentage or a frequency of individuals with alexithymia presence in different disorders (Demartini et al., 2014) but a relation between alexithymia and severity level of disorder is under studied domain and this research will be helpful in bridging that literature gap.

Self talk literature is mostly in the non-clinical population such as students and adolescents there is a little work on a clinical population, so this research will be helpful. There are some studies regarding relation of alexithymia with medically unexplained somatic symptoms in different disorders (Mattila et al., 2008) but a comparison regarding scores of alexithymia, self talk and somatization among depression, anxiety and other categorize of psychiatric disorders is under explored area.

This research is important in producing insight regarding alexithymia, self talk, somatization and their importance in understanding various disorders and help therapist in

formulation of a therapy, as individuals with alexithymia have difficulty in imagination so therapeutic techniques involving extensive imagination should be avoided with alexithymia. It will also highlight the aspect that unexpressed emotions can lead to the development of physical symptoms along with psychological problems, and improving self talk of the individual will help them increase awareness and regulate their emotions (Morin, 1993; Moser, 2017)

The study will help the future therapists in setting therapeutic model and plan for the individuals with alexithymia. As mentioned earlier the supportive therapies will be more helpful with such individuals. Swiller (1988) also reported that it is important to modify the therapies according to the condition of the individual. It is also reported that treating alexithymia can also helps in improving other psychological conditions (Beresnevaite, 2000). Current research will be helpful in creating awareness regarding modification and use of therapies for individuals with alexithymia. It will also helps in highlighting one of the reason of relapse and medical adherence issues among psychiatric patients.

Some of the previous researches with alexithymia and clinical population were based on the diagnosis of DSM IV and DSM IV-TR but current research will be based on the diagnosis according to DSM V. This research is important as it will explore the relationship of alexithymia, self talk and medically unexplained somatic symptoms among patients of depression and anxiety in Pakistani culture.

In Pakistan there is a limited literature on this topic and alexithymia among clinical population is only explored among females in a study by Farooq and Yousaf (2016) but current study will involve both males and females. Another rationale of studying these constructs was that they are not previously studied together and if studied this literature is not in published form and not in a public domain. It will help in highlighting that investigators

need to embrace the new methods and techniques for the field of research to further increase understanding of the alexithymia construct and its association with physical and mental illness.

Objectives

The objectives of present study are to:

- Investigate the relationship between alexithymia and self talk among psychiatric patients
- Study the relationship between alexithymia and somatization among psychiatric patients.
- Find difference of alexithymia in males and females psychiatric patients.
- Investigate relationship between alexithymia and severity of psychiatric illness.
- Examine the differences in prevalence of alexithymia and demographic areas with respect to study variables among psychiatric patients.
- Translation and adaptation of two scales in native language, the self- talk scale (Brinthaupt, Hein, & Kramer, 2009) and clinical global impression scale for severity (NIMH, 1976) for Pakistani population.

Hypotheses

Following are the hypotheses of present study

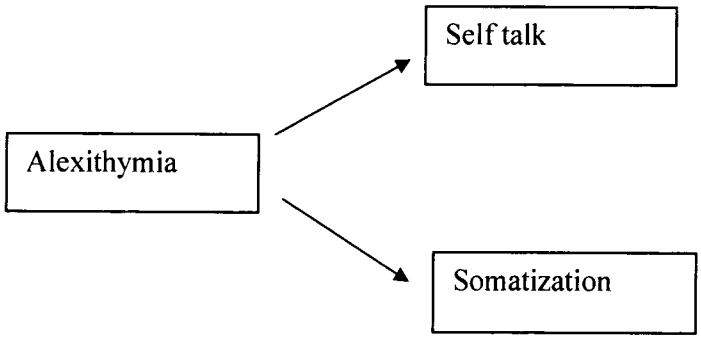
- Alexithymia contributes negatively toward self talk among psychiatric patients.
- Male psychiatric patients have higher level of alexithymia as compared to female psychiatric patients.
- Alexithymia is positively related with severity of psychiatric illness.
- Alexithymia predicts somatization among psychiatric patients.

- Female psychiatric patients report more somatic symptoms as compared to male psychiatric patients.
- A significant difference exists between prevalence of alexithymia among psychiatric patients.

Conceptual Framework

Figure 1

Conceptual Framework of the Study



METHOD

Chapter II

Method

The present research was carried out to explore about the effect of alexithymia on self talk and somatization among psychiatric patients. One of the purposes of this research was to find that alexithymia is a predictor of somatization and there is a negative relationship between alexithymia and self talk as shown by some neurological studies (Girbau, 2007).

This research was done among psychiatric patients and in order to increase effectiveness of the current research all the questionnaires should be in same language that should be easy to understand for the target population and it is also important as it helps to diminish the danger of language biasness and language barrier (Tsang, Royse, & Terkawi, 2017). The research design is quantitative in nature. This design comprises of three phases with different steps in each phase.

Phase I: Translation and adaptation of instruments

Phase II: Pilot study

Phase III: Main study

Phase I: Translation and adaptation of instruments

Present study comprises of different phases according to the requirement of the study. The very first phase of the study requires translation of the instruments that are not presently available in the native language and also looking for the items that are not suitable for Pakistani culture and society. This step is important because any item that is not culturally appropriate will not yield the similar response among participants. Translation of questionnaire is necessary as in order to get response it is necessary that participants should be first able to understand what is asked or what is required from them. If all the

questionnaires used in a study are not in the same language then any difference in responses can be attributed to the language and differences in understanding.

Phase II: Pilot study

After completing all the necessary steps of translation and adaptation of questionnaire, pilot study was conducted initially to find the psychometric properties of translated questionnaire. For this purpose questionnaire was administered on bilinguals. After finding psychometric properties of translated questionnaire the next step was to administer all the questionnaires along with the translated questionnaire on same sample as of the main study. Pilot study is also known as a pre testing phase to get some preparatory data regarding relationship of all the variables.

Phase III: Main study

Last phase of this research was main study. In this phase all the questionnaires including demographic sheet was administered on sample. There are number of objectives that are aimed in this phase such as finding psychometric properties of all the questionnaires, relationship between the entire study variable and to find any difference in scores depending upon demographic variables.

Phase I: Translation and Adaptation of Instruments

Present study aimed at finding the relationship of alexithymia, self talk and somatization among psychiatric patients. In Pakistan there are number of different local languages and a huge number of people are not able to understand English and not comfortable in freely communicating in any foreign language. Considering this language barrier first step was to translate questionnaires into national language that is Urdu.

The main purposes of this section were

1. To translate the self- talk scale (Brinthaupt, Hein, & Kramer, 2009) and clinical global impression scale for severity (National Institute of Mental health [NIMH], 1976) into Urdu language for later use in the current research.

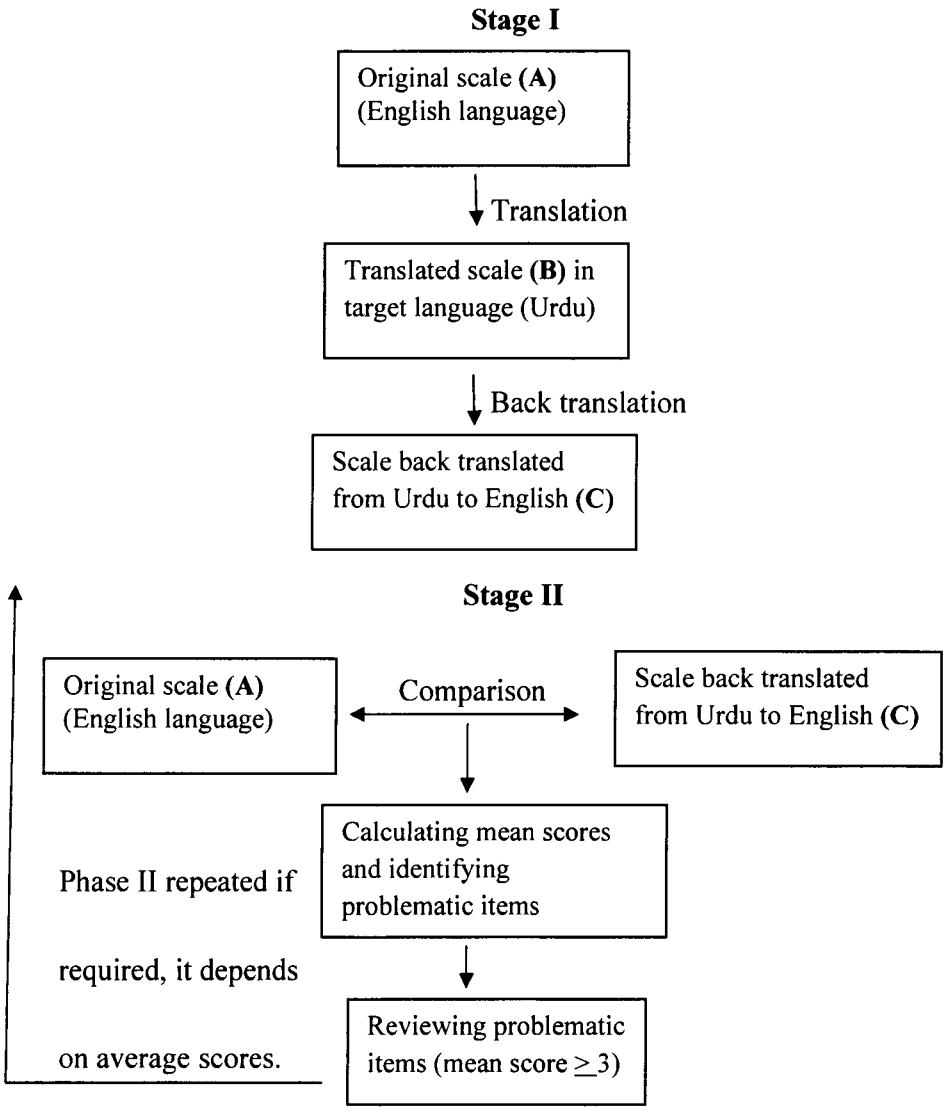
2. Along with translation of scales the content of items should be adopted in a manner that it is equivalent to original scale in conceptual manner and also appropriate in cultural sense.

3. Validation of the translated questionnaires.

For the measurement of alexithymia, self talk and somatization along with severity of illness of psychiatric patients, after taking permission from respective authors following scales were applied on participants. Toronto Alexithymia Scale (TAS-20) by Taylor, Bagby, and Parker (2003), the self-talk scale by Brinthaupt, Hein, and Kramer (2009), The Four-Dimensional Symptom Questionnaire (4DSQ) by Terluin (1996) and Clinical Global Impression Scale for Severity (CGIS) developed by National institute of mental health (NIMH) (Guy, 1976). Two of these questionnaires (TAS-20 and 4DSQ) are available in our national language, namely Urdu so there is no need to translate these questionnaires. The self talk scale (Brinthaupt, Hein, & Kramer, 2009) and Clinical Global Impression Scale for Severity (CGIS) (National Institute of Mental health [NIMH], 1976) were not available in Urdu language so these questionnaires were translated into Urdu after obtaining permission from the respective author and institution. One of the concerns during the translation, adjustment and adaptation of the scales was to maintain the conceptual equivalence of the items and it should not be lost during the process to yield good response from the research participants.

Figure 2

Flow Diagram Reflecting the Procedure of Translation, Adaptation (Part I) and Validation (Part II).



Part I: The Translation and Adaptation Process

In the preset study the method of translation and adaptation developed by Brislin (1976) were followed, this method is also known as forward and backward translation method. The ultimate aim or purpose of this adaptation and translation process was to

establish an instrument systematically in an acceptable and natural way that should be practical and work fine in both the target (Urdu) and source (English) languages. The major concern of the researcher should be to develop translation that is equal in both the concept and meaning. Theoretical and intercultural equality should be the main concern (Voracek, fisher, loible, tan, & Sonneck, 2008). Researcher contacted with the authors and respective institutes of both scales in order to obtain the permission for using these scales in current study, permission was also seek to translate and adopt these scales according to the culture of Pakistan. They approved the request of the researcher and also mailed the scales.

The procedure of translation and adaptation of scales is divided into different steps. These steps are mentioned below

Step 1: Forward translation

Step 2: Committee approach

Step 3: Back translation

Step 4: Committee approach

Step 1: Forward Translation

In order to guarantee better development of Urdu translation version that is equivalent to original self talk scale and the clinical global impression scale for severity (CGI-S) present research inspects and illustrates each area or domain of these scales for forward translation. In this process some bilingual professionals or experts translate the questionnaires. Bilingual experts are those who have expertise, experience and skills in both

the target and the source language, there should be 5 to 6 translators at least. Some principles and instructions are provided by Brislin (1980) for bilingual professionals to translate an item freely and independently

The criteria include following points or instructions

1. They should be familiar and have clear understanding and knowledge of the source language.

2. They should be able to find easy and common words of the target language that are equal in meaning to the words of source language.

3. They should be able to construct scales in words that should be understood by respondents of the study that is to keep population of the study in mind while doing translation.

For the forward translation of these scales seven bilinguals were contacted, they were requested for the translation. All of these bilingual experts are teaching in reputed institutes and have experience of more than 5 years. Three of these bilingual experts have degrees in English language and three of them have their degrees in Urdu language one expert is a lecturer of Psychology and have good skills of English language.

All of these bilingual experts were provided with the scales along with the consent form. The key points to be considered during translation and adaptation of the questionnaires were also discussed. Brislin (1980) gave some instructions or guidelines for the translators, the key points discussed with translators were based on these instructions or guidelines. These points were:

1. Translation should be in accordance to the concept, content and similarity of the original scale. The main idea or essence of the items should not be changed during translation.

2. Words used during translation should be easy, simple and understandable. There should be no use of unusual technical terms, idioms, dialects, jargons etc.

3. Culture and environment of Pakistan should be kept in mind and translation should be compatible with the circumstances and culture of Pakistan. Any phrase, terminology or word that is not according to culture of Pakistan should be pointed out by translators and they are also requested to advice on the best suitable alternatives.

After receiving forms of forward translation by expert bilinguals the next step was to approach expert panel or committee for consultation.

Step 2: Committee Approach

One of the most suitable, easy and applicable process to review and evaluate translations is committee approach. This process is useful as it quickly, easily reviews and highlights the mistakes of translators and also gives suitable alternatives where needed (Brislin, 1970). One of the purposes of this approach was to identify and highlight any inadequacy regarding expression, idea and concept of the translations and also to finalize the translation that is most appropriate. Usually the panel of 3-5 members or participants is advisable other than the researcher and the supervisor.

Before consulting expert panel all the translations provided by bilingual experts were arranged and assembled in a form of single document or a file in such a way that there is a first sentence of original (English) scale and below that all the translations (Urdu) of that particular sentence of translated by bilingual experts were mentioned. This procedure was repeated for each sentence of instructions and items.

The committee or a panel of experts consist of two M.S scholars, two PhD scholars that are lecturers as well and two PhD Assistant professors including supervisor of the study, the researcher was also a member of a panel because researcher herself did not participated in the translation process of the scales. All the members were given compiled files of translations that were assembled after receiving translations back from the bilingual experts. All the sentences and statements of translations were carefully observed, analyzed, discussed and evaluated by members of panel/committee to finalize the Urdu version of both scales. It was kept in mind that these statements should convey the similar information as conveyed by the statements of original scales. This finalized copy of Urdu version of scales was reviewed once again to find if there is any mistake or if there is any difficult item or term according to Pakistani culture and society. This was completed in one sitting. After obtaining Urdu version of both scales the next step was back translating these Urdu versions into English language.

Step 3: Back Translation

The procedure of back translation was carried out to check and confirm the initial translation process and to find out any point of difference and equality between the two versions. This method is

included in Brislin (1970) translation model according to this model this procedure is important as it is an excellent approach towards verification and validation of translation and adaptation of scales in different cultures (Cha, Kim, & Erlen, 2007). This step requires the back translation of Urdu (target language) version of both scales that were approved by panel they are now translated back into English (source language). The scales that were translated through forward translation only show less reliability as compared to those that were translated through both forward and backward translations (Tsang, Royse, & Terkawi, 2017). For the purpose of back translation six bilingual experts were approached who should work independently and they all were unfamiliar to the original version of these scales they were also not a part of panel or forward translation procedure. Same instructions were repeated for the back translation. All of these bilingual experts are teaching in different reputed institutes and have experience of more than 5 years, three experts belong to Urdu department and other three belongs to English department.

Step 4: Committee Approach

After receiving all the back translations from the bilingual experts, these translations were compiled again in a document form as mentioned before for forward translation. Panel was arranged again with same members to observe, analyze, evaluate and review these back translations to select those items that are similar in meaning and words to the original items. It was concluded that back translation had similarities with original scale in concept, meaning and in wording also. No problem was reported by panel regarding translation.

Part II: Validation of the Translated Questionnaires

When doing a research, it is important to have an instrument or a tool that is understandable by the target population. If any such scale is not available in the target language then it is necessary to translate the available scale into the target language so it can be used among target population. A method use for the translation has been explained earlier but there are some concerns regarding methodology of these translations. And in most of the cases researcher starts collecting data using these translated scales without further investigations. In order to overcome these issues and concern and also to improve the quality of these translated questionnaires it is important to validate them. If researcher neglects the importance of validation of these translations it can result in any technical flaw and can yield different responses (Brislin & Lonner, 1973).

Only the literal or word to word translation of a questionnaire is not sufficient to make it valid, it is also important to carefully analyze the translation and adjust it according to the requirement of the target population and it is also important to not lose the real essence of the scale. A simple approach toward translation of a questionnaire is using forward and backward translation, even if these questionnaires were translated by some professional translators it simply does not ensure the validity of the scale and further examination is still required to improve these translations (Brislin & Lonner, 1973).

There are number of methods that can be used to validate the translations of the questionnaire one of these validation method include consulting expert panel. It is also noted that none of these method is fail-safe, flawless or perfect. There are chances of any imperfections.

To overcome these flaws to some extent Sperber, DeVellis, and Boehlecke (1994) introduced a novel method that can be used to validate the translated questionnaire. This method can facilitate in highlighting any issue and mistakes related to the translation so that it can be corrected. This procedure helps in reassessing problematic items and to be sure and confident about translation before going into field. This method is also called *translation equivalence testing,* (Wang, Lee, & Fetzer, 2006) it involves comparing two versions of the scale, the original one and the back translated one. Each sentence, line and item of these two versions are compared, ranked and rate for their language comparability and interpretation similarity. This procedure is completed by some raters their number can be changed but it is suggested to have at least 25-30 raters these raters should have some qualities as mentioned earlier (Brislin, 1980). It is also suggestible that these raters should not be the part of any earlier translation procedure.

In this method there are two measures or scales one of these measure is used for the comparison and evaluation of comparability of language and the other one is used for similarity of interpretability among two versions (original and back translated). Each version is looked for their explicit similarities such as their wordings, types of phrases and idioms used and the overall structure of the sentences, this comparison is made on the measure of comparability of language. On the other hand measure of similarity of interpretability is used when the items of the scales are looked for their meanings and the type of response they will yield. These two measures are rated on the seven point likert scale, in that scale 1 means that the both versions are extremely comparable or similar and number 7 means that these versions are not at all comparable or similar (Sperber, DeVellls, &

Boehlecke, 1994). It is suggestible to review the item and find problematic words if the mean score of any item is equals to or more than 3, it is also advisable to look at the item once again even if the mean score ranges between 2.5 to 3 and those items with a mean of less than 2.5 are considered absolutely fine and there is no need to review them again (Sperber, 2004).

Validation Method

For the validation of the translated questionnaires above mentioned procedure is used. For this purpose an online form was created with the description of measures of comparison, purpose of the study and how to rate. Properties of the Likert type scale were also described to provide relevant information. Both the versions of each item and sentence were provided along with likert scale to rate them on their language comparability and interpretability similarity. Initially 30 raters were approached with good skills of English language all of these raters have 18 years of education. Return rate was 90 percent as 27 rater's submitted complete form after those 3 more raters were contacted to complete this validation procedure. After receiving all the responses, these responses are then transferred on an excel sheet from Google form and then average is calculated for each response on both measures of comparison.

Result

It was concluded that average response ranges from 1.16 to 2.03 that rules out the need of reviewing committee and indicates that the back translation is comparable and similar to the original items in terms of both the language and the interpretability.

Phase II: Pilot Study

Pilot study is like a preliminary study that was conducted to find out some empirical data regarding translated versions of the scales and it is also helpful in determining the directions for the main study. To compare the English and the Urdu versions of the translated scale and to evaluate the status and quality of these scales pilot study plays an important role.

There are some objectives of the pilot study. These includes

1. Finding out the psychometric properties of the translated questionnaires
2. Getting some initial groundwork realities regarding data to be collected for the main study.
3. It also serves the purpose of understanding difficulties to be encounter in data analysis and collection and also helps in understanding relationship between variables.

Present study is further divided into two parts: pilot study I and pilot study II. Each part is devoted to some particular aims and objectives.

Aims and Objectives of The Pilot Study I

1. To determine the test-retest reliability of the translated questionnaires (self talk scale Urdu version and Clinical global impression scale for severity (CGI-S) Urdu version) and to evaluate and assess it in comparison to the English version of the scale

2. To develop the inter-rater reliability of the Clinical global impression scale for severity (CGI-S) Urdu version.

Aims and Objectives of The Pilot Study II

1. To determine the psychometric properties (reliabilities) of all the questionnaires to be used in main study on a smaller group of participants.

2. To find out some preliminary information regarding the relationship between alexithymia, self talk and somatization among psychiatric patients.

Pilot Study I

This study was devoted to determine the psychometric properties of the translated questionnaires. There are two main objectives of this study that are mentioned above. First part of this study was devoted to determine test re-test reliabilities of the translated scales and second part involves inter-rater reliability of the Clinical global impression scale for severity.

Test Re-Test Reliability of The Self Talk Scale

After completing all the procedure of translation, adaptation and validation a final copy of Urdu version of the self talk scale was prepared but before using this scale in a main study it's important to determine its reliability.

Sample

Instruments were administered on 100 students of international Islamic university for this purpose both males (n=50) and females (n=50) were approached. There were no specific requirement regarding age and education of the sample.

Procedure

After obtaining informed consent from participants they were asked for some basic information and then scales were administered. The sample was randomly divided into four groups, each group had 25 participants and scales were administered on them twice, once in a testing phase and second time in a re-testing phase. Following scales were employed during two phases.

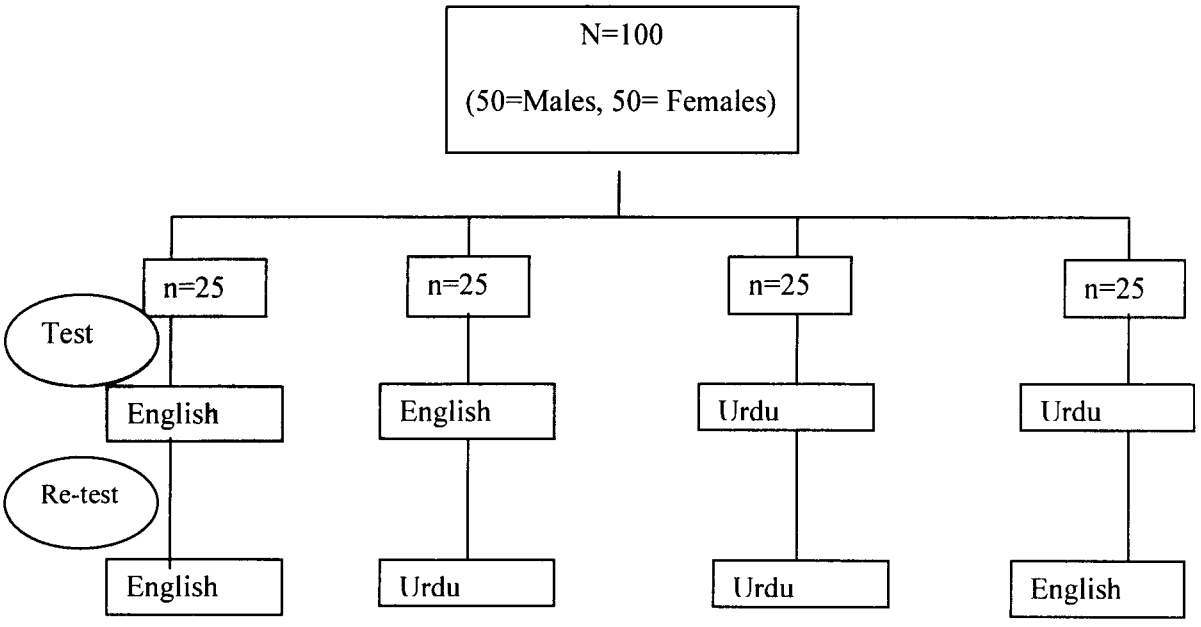
1. The self-talk scale English version (Brinthaupt, Hein, & Kramer, 2009)

2. The self-talk scale Urdu version

After 15 days or two weeks the same participants were again approached and scales were re-administered (re-testing phase). The scheme in which scales were administered among participants in two phases is shown below

Figure 3

Figure Showing Division of Sample into Four Groups and Administration of Two Versions of the Scales (The Self Talk Scales) In a Test And a Re-Test Phases.



Result

After administering scales on all four groups in two phases the data was compiled and results were calculated using SPSS 25. The time duration between these two phases is 15 days. The return rate was good during both testing and re-testing phases.

Table 1

Retest reliabilities of the Urdu and English version of the self talk scale (N=100)

	E-E (*n*=25)	E-U (*n*=25)	U-U (*n*=25)	U-E (*n*=25)
r	.73**	.71**	.75**	.87**
$ICC_{2,1}$	.96	.72	.86	.90

Note. E-E= English-English, E-U= English-Urdu, U-U= Urdu-Urdu, U-E= Urdu-English, **=$p<.01$.

Table 1 shows the test-retest reliability of the Urdu and English version of the self talk scale. It was calculated through Pearson correlation and intra-class correlation coefficient. These correlations are significant and are in an acceptable range.

Test Re-Tests Reliability of The Clinical Global Impression Scale For Severity (CGI-S)

After completing the basic translation and validation procedure the next step was to find out the test retest reliability of the Urdu and English version of the Clinical Global impression scale for severity (CGI-S)

Sample

The Urdu and English version of the CGI-S were filled by the respective psychologist of the patient (n=40). Psychologist simply rated the condition of their patients on the scale. These

patients were taken from the Institute of Psychiatry Benazir Bhutto Hospital, both OPD and indoor patients were included.

Procedure

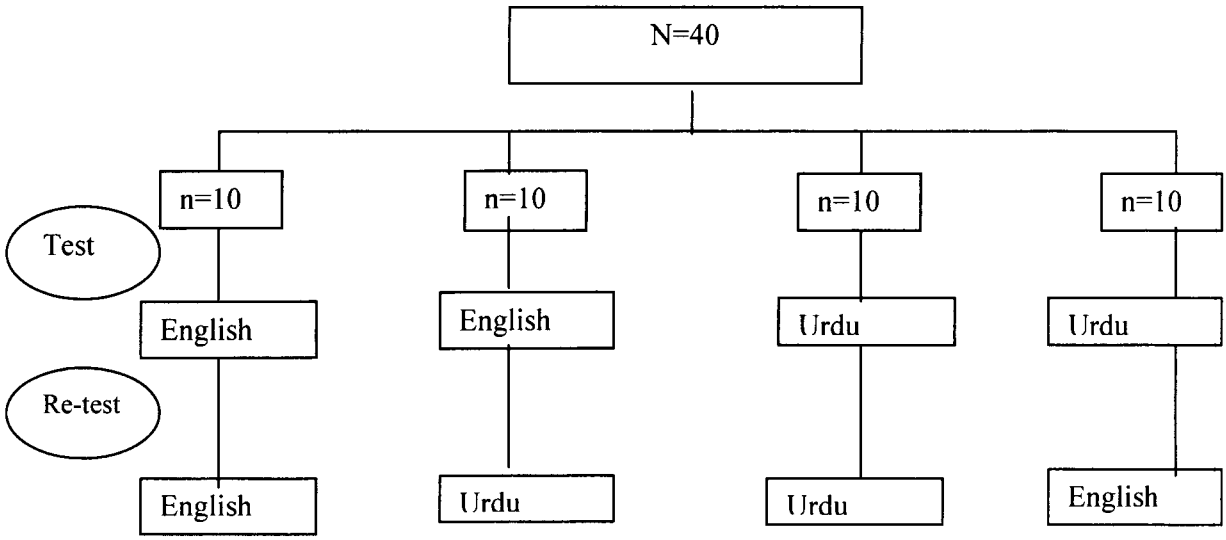
Participants were randomly divided into four groups. Each group has to fill instrument in English or Urdu language. These instruments were administered in two phases with a gap of 4 days as giving more gaps between the first and second administration can lead to involvement of other factors such as any change in condition of the patients due to therapeutic sessions or medication (Kim, Jhin, Chung, Chang, & Lee, 2007). The scales that were used during this study were

1. Clinical Global Impression scales for severity (CGI-S) English version (NIMH, 1976).

2. Clinical Global Impression scales for severity (CGI-S) Urdu version.

Figure 4

Figure Demonstrating Distribution Of Participants Into Four Groups And Scheme Of Administration Of Scales Both English And Urdu Versions In Two Phases (CGI-S).



Result

The scores of the scale were based on the condition of the patients as marked by their psychologists. These scales were administered on 40 patients in a testing phase and after gap of 4 days these scales were administered **on same patients** by same psychologists. Results were calculated using SPSS 25.

Table 2

Retest reliabilities of the Urdu and English version of the Clinical Global Impression scale for severity (CGI-S)(N=40)

	E-E (n=10)	E-U (n=10)	U-U (n=10)	U-E (n=10)
r	.87**	.85**	.73*	.79**
$ICC_{2,1}$	.90	.86	.82	.88

Note. E-E= English-English, E-U= English-Urdu, U-U= Urdu-Urdu, U-E= Urdu-English, **=p<.01. *=p<.05

Table 2 shows the test retest reliabilities of the CGI-S Urdu and English version. It was concluded that all reliabilities are significant and in a required and acceptable range.

Inter-Rater Reliability of The Clinical Global Impression Scale For Severity (CGI-S)

Inter-rater reliability of the CGI-S was also calculated along with test re-test reliability. The main purpose of this was to overcome any chance of error or miscalculation of reliabilities that can be attributed to shorter time gap between two intervals in test retest reliability.

Sample

40 psychiatric patients were randomly selected from institute of psychiatry Benazir Bhutto hospital. The condition or severity of illness of each patient was rated by two

psychologists (raters) independently. These raters were paired randomly and there was a different set of raters for each patient.

Procedure

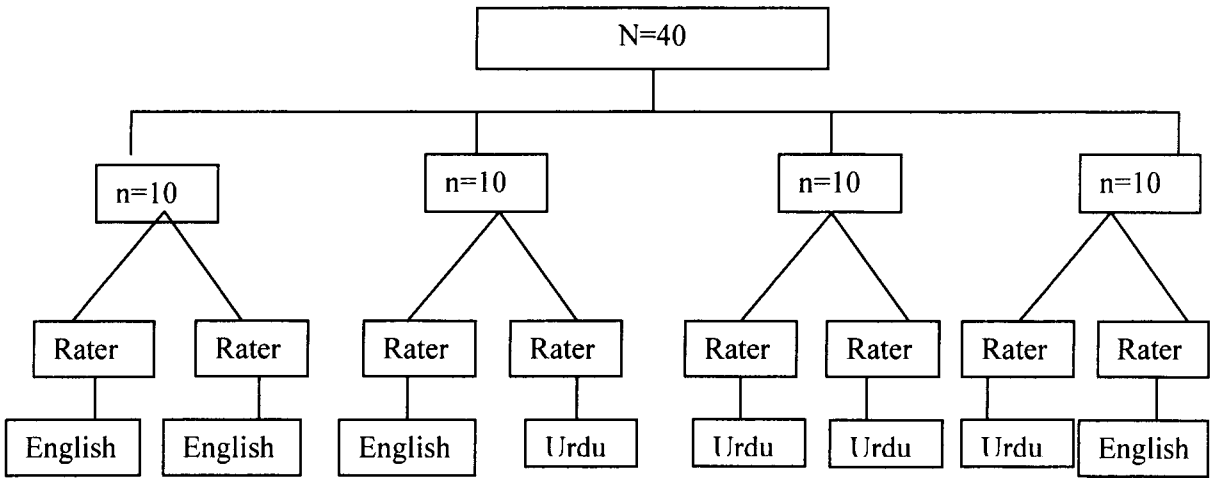
The sample was divided into four different groups randomly. Each patient was rated by two psychologists independently at the same time. Different or same scale was given to each rater depending upon the group that was assigned. The scales that were used during this study were

1. Clinical Global Impression scale for severity (CGI-S) English version (NIMH, 1976).

2. Clinical Global Impression scale for severity (CGI-S) Urdu version.

Figure 5

Figure Portraying Distribution Of Participants Into Four Major Groups That Are Subdivided Into Two Groups Each And Scheme Of Administration Of Scales (CGI-S) Both English And Urdu Versions In One Phase.



Result

There was a different pair of raters for each patient. Patients and raters were selected randomly and the raters were given a question either in Urdu or in English depending upon in

which group they are. This grouping was also random and raters were not allowed to share their ranting and they were requires to do this rating independently. Results were calculated using SPSS 25.

Table 3

Inter-rater reliability of the Urdu and English version of the Clinical Global Impression scale for severity (CGI-S) (N=40)

	E-E (*n*=10)	E-U (*n*=10)	U-U (*n*=10)	U-E (*n*=10)
ICC_1	.95	.92	.95	.96

Note. E-E= English-English, E-U= English-Urdu, U-U= Urdu-Urdu, U-E= Urdu-English.

Table 3 shows the inter rater reliability of the CGI-S Urdu and English version and the values indicate that these reliabilities are in a good range.

Pilot Study II

The second pilot study was conducted to achieve two main objectives

1. First objective is to find reliabilities of all scales that will be used in a main study.
2. Second objective is to find relationship among all variable just to get some preliminary information.

This pilot study was conducted among psychiatric patients (population of a main study) to find which type of difficulties a researcher can encounter while doing main study. This step will help in tackling these difficulties and will also help in improving skills to do a main study.

Sample

20 psychiatric patients were taken as a sample in the second pilot study. These patients were selected from the institute of psychiatry Benazir Bhutto hospital Rawalpindi. These patients are recommended by respective psychologists of the patients (both indoor and OPD). In participants there are 10 males and 10 females, there was no specific age range, both married and un married patients were a part of study. These patients have different psychiatric disorders (depression, anxiety, somatic and related, OCD, personality disorder).

Results

After data collection, results were calculated using SPSS 25. These results were calculated keeping in mind the two main objectives of this section as stated above.

Table 4

Cronbach's alpha reliability coefficient of the Toronto Alexithymia Scale (TAS), the self talk scale (STS) and four dimension symptom questionnaire (FDSQ somatization) (N=20)

Variables	No. of items	α	*M*	*SD*	Kurtosis	Skewness
TAS	20	.90	67.95	15.74	.11	-.71
STS	16	.93	37.50	10.72	-.37	.56
FDSQ (Somatization)	16	.88	8.05	5.92	1.28	1.20

Note. M= mean, α = alpha reliability, SD= standard deviation

Table 4 shows the alpha reliabilities of these scales, the values indicate that scales are reliable. For clinical global impression scale of severity (CGI-S) inter rater reliability was calculated through ICC (intra-class correlation coefficient) and results indicates a satisfactory reliability of .98.

Table 5

Co-relational matrix among Toronto Alexithymia Scale (TAS), the self talk scale (STS) and four dimension symptom questionnaire (FDSQ somatization)and clinical global impression scale for severity (CGI-S)(N=20).

Variables	TAS	STS	FDSQ (somatization)	CGI-S
TAS	1	-.71**	.58**	.45*
STS		1	-.49*	-.42
FDSQ (somatization)			1	.35
CGI-S				1

Note. **=$p<.01$. *=$p<.05$

Table 5 shows that there is a significant negative relationship between alexithymia and self-talk while a significant positive relationship exists between alexithymia, somatization and severity of psychiatric illness. There is a significant negative relationship between self talk and somatization while a non-significant negative relationship exists between self talk and severity of psychiatric illness. Another non significant relationship is present among somatization and severity of psychiatric illness. The reason of these non-significant relationships might be the size of the pilot study so increasing the size of sample in main study may help in improving results.

Table 6

Item total correlation of the self-talk scale (STS) (N=20)

Item number	*r*	Item number	*r*
1	.66**	9	.82**
2	.66**	10	.76**
3	.53*	11	.76**
4	.54*	12	.72**

5	.61**	13	.72**
6	.77**	14	.74**
7	.66**	15	.73**
8	.84**	16	.65**

Note. **=p<.01. *=p<.05

Table 6 shows the item total correlation of the self talk scale (STS) and it shows that all items have a significant positive correlation with the scale total.

Table 7

Item total correlation of the sub-scales of the self-talk scale (STS) (N=20)

Self criticism		Self reinforcement		Self management		Social assessment	
Item no.	*r*	Item no.	*r*	Item no.	*r*	Item no.	*r*
1	.67**	2	.73**	3	.70**	4	.72**
7	.70**	5	.56**	9	.81**	6	.70**
10	.82**	8	.90**	12	.75**	11	.74**
14	.79**	13	.83**	15	.81**	16	.75**

Note. **=p<.01. *=p<.05

Table 7 shows the item total correlation of the sub-scales of the self talk scale (STS) and it shows that all items of these four sub scales have a significant positive correlation with the subsequent sub scale total.

Discussion

The current section of the study was devoted to the translation of the two instruments that were currently not available in Urdu language. These instruments are the self talk scale (Brinthaupt, Hein, & Kramer, 2009) and the Clinical Global Impression scale for Severity (NIMH, 1976). These instruments were translated so that they can be easily used among Pakistani population. To translate these scales this section involves forward and backward

translation procedure that was according to the guidelines provided by Brislin (1976). Validation study was also carried out that was according to the method given by Sperber, DeVellis, and Boehlecke (1994) along with that the pilot study was also conducted to determine some psychometric properties of these questionnaires and it is concluded that the translation of both scales were appropriate and have significant psychometric properties. It was observed that these scales are good to use in a main study.

After getting satisfactory psychometric properties of the newly translated questionnaires the second pilot study was conducted to find the psychometric properties of all the scales that will be applied in the main study among psychiatric patients that are the actual sample of the study. However, this was the preparation phase but results indicated a good reliabilities and good co-relations among study variables. The main purpose was to get some preliminary data and to become aware of some practical problems that a researcher can encounter in hospital setting.

Phase III: Main Study

Research Design

This study was based on cross sectional survey method

Participants

200 inpatients and out patients psychiatric patients i.e depression, anxiety, somatic symptom disorder, substance related disorders were taken from different hospitals of Rawalpindi and Islamabad. Those patients were taken that are already diagnosed and referred by a psychiatrist or psychologist, researcher herself also re-diagnosed those patients according to criteria of DSM V. Both males and females were included in the study.

Inclusion Criteria

Only referred cases by a psychiatrist and psychologists were included with the age of 18 years and more who are willing and can read, understand and answer instruments.

Exclusion Criteria

Patients with any co morbid psychiatric disorder, age under 18 years, mental retardation, any neurological condition, disorders NOS and those who cannot read, understand or answer instruments were not requested to participate.

Table 8

Frequency and percentages of the demographic variables (N=200)

Variables	*f*	%
Hospital		
Benazir Bhutto hospital (BBH)	108	54
Fauji foundation hospital (FFH)	58	29
Brain surgery hospital (BSH)	34	17
Gender		
Males	89	44.5
Females	111	55.5
Age		
18-33	96	48
34-48	67	33.5
49-64	31	15.5
65-65+	6	3
Education		
Not educated	18	9
Primary	20	10
Secondary	38	19
Matric	63	31.5
Intermediate	35	17.5
Bachelors	19	9.5

Masters	6	3
Others	1	0.5
Birth order		
Only child	13	6.5
Eldest	79	39.5
Middle	68	34
Last born	40	20
Family system		
Individual	129	64.5
Joint	71	35.5
Diagnostic category		
Depressive disorders	51	25.5
Anxiety disorders	35	17.5
OCD and related disorders	6	3
Trauma and stress related disorders	5	2.5
Somatic symptoms and related disorders	32	16
Personality disorders	30	15
Bipolar and related disorders	22	11
Substance related and addictive disorders	19	9.5
Insight		
Absent	63	31.5
Partial	60	30
Present	77	38.5
Experience relapse		
No	107	53.5
Yes	93	46.5
Positive family history		
No	158	79
Yes	42	21
Any experienced of childhood trauma		
No	172	86
Yes	28	14
Able to make decisions		

No	75	37.5
Sometimes	79	39.5
Yes	46	23

Table 8 shows the demographic properties of the sample population who participated in this study. The table shows that the population was taken from three hospitals: Benazir Bhutto hospital (BBH) (f=108, %age= 54), Fauji foundation hospital (FFH) (f= 54, %age= 29), Brain surgery hospital (BSH) (f= 34, %age= 17). Among the total population 55 percent were females (f=111) and f=89 were males. The age ranged from 18 to 65 plus years. Of which 48 % (f=96) were of age range 18 to 33 years. 35.5 % (f=67) were of age range 34 to 48. Most of the population is literate only 9% (f=18) is uneducated. 6.5% (f=13) were only children of their parents. 39.5% (f=79) were the eldest in sib ship. 34% (f=68) were middle born and 20% (f=40) were last born. 64.5% (f=129) of the population belongs to isolated/separated family systems. 35.5% (f=71) belonged to joint family system. The sample population was divided into different diagnostic categories. The 25.5% patients were included in depressive disorder. 17.5 % were anxiety disorder patients. 3% were OCD and related disorder patients. 2.5% were trauma and stress related disorder patients. 15 % were personality disorder patients. 11 % were suffering from bipolar and related disorder. 9.5% were substance use/ addiction patients.31.5% of the patients lacked insight. 30% had partial insight while 38.5 % had insight. 79% of the patients had a negative family history of the disorder while 21% of the patients had positive family history. 86% of the patients had no childhood trauma while 14% suffered from childhood trauma. 37.5% of the patients were unable to make decisions, 39.5% of the patients were able to make decisions sometimes while 23% were able to make their decisions independently

Operational Definitions

Alexithymia

Alexithymia refers to a multidimensional concept, characterized by cognitive-affective deficits consisting of (1) difficulties in identifying and describing emotions, (2) difficulties in distinguishing between emotions and physical sensations of emotional arousal, (3) reduced imaginative processes, illustrated by a lack of fantasy, and (4) an externally oriented cognitive style (operational thinking)." In the current study, alexithymia is a state, defined as difficulty in identifying, describing emotions and externally oriented thinking (Taylor, Bagby & parker 1997). In this study obtained scores indicate difficulty in expression of emotions such as high scores indicate that a person has more difficulty in expression of emotions as compare to low scorers, they also have difficulty differentiating emotions and verbalizing them.

Self-Talk

Brinthaupt, Hein, and Kramer (2009) define self talk as a tendency to talk with one self and how frequent a person talks, it involve both inner and private speech it is not only about the way person talk but in which situation a person talks with himself most oftenly. In this study obtained scores on self talk scale will show the frequency of self talk. Those who talk with them more often scores high on self talk scale.

Somatization

Somatization refers to a pattern of behavior in which individuals repeatedly seek medical help for disabling physical symptoms that they mistakenly attribute to physical disease (Campo & Fritsch, 1994). In present study score obtained on the sub-scale of 4DSQ will show somatization among participants.

Instruments

Following scales were used

Toronto Alexithymia Questionnaire (TAS-20)(Taylor, Bagby, & Parker, 2003)

Alexithymia was assessed using Toronto Alexithymia Scale (TAS-20) by Taylor, Bagby, and Parker (2003). This is a self report scale consisting of 20 items on a 5-point Likert scales ranging from 1 (strongly disagree) to 5 (strongly agree). The scoring for items 4, 5, 10, 18, and 19 should be reversed (i.e., a rating of 1 becomes scored 5; 2 = 4; 3 = 3; 4 = 2; and 5 = 1). This scale gives the scores of sub domains namely: Difficulty Identifying Feelings (DIF) item numbers 1, 3, 6, 7, 9, 13 and 14 Difficulty Describing Feelings (DDF) item numbers 2, 4, 11, 12 and 17 and externally oriented thinking (EOT) item numbers 5, 8, 10, 15, 16, 18, 19 and 20 and total score. Psychometric properties on TAS-20 have shown to have better internal consistency (Croncbach's alpha = 0.81) and test re-test reliability ($r=0.77$; $p<0.01$) over a 3 week period. A score of 61 or more indicate high alexithymia and a score of 51 or less as a low alexithymia or non-alexithymia (Taylor, Bagby, & Parker, 2003). Urdu translation and validation of the Toronto Alexithymia Scale was conducted by Ghayas, Niazi, Ghazal, and Tahir (2017) alpha reliability of overall scores is .81, DIF is .86, DDF is .70 and EOT is .60.In present study Urdu translated version will be used

The Self Talk Scale (STS) (Brinthaupt, Hein, & Kramer. 2009)

To measure the frequency of self talk STS scale will be used that is developed by Brinthaupt, Hein, and Kramer (2009). This is a self reported measure consist of 16 items scores on a 5 point likert scale (1= never, 2= seldom, 3 = sometimes, 4= often, 5 = very often) there is no reverse item. Scale consist of 4 subscales each consist of 4 items subscales are Social Assessment (item number 4, 6, 11 and 16), self reinforcement (item number 2, 5, 8 and 13), self criticism (item number 1, 7, 10 and 14) and self management (item number 3, 9,

12 and 15). Cronbach's alpha coefficients for each subscale were in the acceptable range Social Assessment = .82, Self-Reinforcement = .89, Self-Criticism=.83, and Self-Management = .79. There are no clear cut ranges and cutoff scores. Frequent and infrequent self talkers will be obtained after dividing the obtained data in a quartile and upper quartile will be referred to as a frequent and lower quartile as an infrequent self talkers.(Brinthaupt, Hein, & Kramer. 2009). This scale is not available in Urdu so this was translated for use in present study following committee approach.

The Four-Dimensional Symptom Questionnaire (4DSQ) (Terluin, 1996)

The 4DSQ is a original Dutch self-reported measure (Terluin, 1996) that is translated and validated in different languages (Terluin et al., 2006) that is a self-report questionnaire comprising 50 items distributed over four scales. The responses are scored as 0 for "no", 1 for "sometimes" and 2 for the other response categories, and the item scores are summated to scale scores. The Distress scale contains 16 items and has a score range of 0–32, the Depression scale contains 6 items and has a range of 0–12, the Anxiety scale contains 12 items and has a range of 0–24, and the Somatization scale contains 16 items and has a range of 0–32. The 4DSQ has been extensively tested for reliability and validity. Reliability is high (coefficients generally >.80). Factorial, criterion and concurrent validity have been confirmed. In present study Urdu translated version will be used (Terluin & Ashraf, 2015).

Clinical Global Impression Scale (CGI)

After re-diagnosing referred patient, their severity of illness will be rated using a CGI scale of severity. CGI consist of 3 subscales that are rated by the observer, these scales are CGIS for the severity (item number 1), CGIC for global improvement or change (item number 2) and efficacy index (item number 3) for therapeutic response. CGIS can alone be used and it will be uses alone in a present study it is rated on a 7 points scale ranging from non assessed (0) to most extreme ill patients (7). This scale is developed for the purpose of

globally rating of an illness (Guy, 1976).This scale was not available in Urdu so this was translated for use in present study following committee approach.

Ethical considerations

Ethical approval was obtained from Ethical Review Board, Department of Psychology, IIUI, Ethics Committee, along with head of hospitals. In addition inform consent was taken from the participants and it was ensured regarding privacy and confidentially to the matters etc.

Proposed Data Analysis

Pearson correlation will be used to find a relationship between alexithymia, self-talk and somatization among psychiatric patients. Linear regression analysis will be performed to see alexithymia as a predictor of somatization, T test to find the differences between males and females and among patients of depression and anxiety, ANOVA to find differences among severity levels of psychiatric patients

Procedure

Permissions were obtained from the authors of scales and concerned authorities to start a research. After permission study was conducted in three phases. Phase one comprises of Urdu translation of those scales that are not available in Urdu. Phase two was concerned with the pilot study of translated scales to obtained reliability of instruments. Phase three comprises of the main study. Data was obtained from three different hospitals of Rawalpindi after the permission from the authorities. Informed consent of the patients was obtained and they were assured that their information will remain confidential and they have a right to leave at any time and no harm will be given to them, they were also be ensured that their information will only be used for a research purpose after that they were interviewed for their re-diagnosis after this all the questionnaires was administered. Each question was narrated to

help them easily understand the question respective psychologist of the patient was also requested to rate the condition of the patient. After obtaining the complete details, data was entered in SPSS 25 as it is used for analysis of data.

RESULTS

Chapter III

Results

The purpose of the current research is to study the relationship between alexithymia, self talk and somatization among psychiatric patients. For achieving the objectives and to test the formulated hypothesis of the current study different statistical procedures were carried out using statistical procedure for social sciences (SPSS-25). This section is devoted to express the findings of the current study.

Table 9

Alpha Coefficient and Descriptive Statistics of the scales and subscales used (N=200)

				Ranges			
Variables	*M*	*SD*	*α*	*Potential*	*Actual*	*Skewness*	*Kurtosis*
TAS-20	63.77	13.67	.89	20-100	32-96	-.20	-.72
DIF	23.2	6.44	.87	7-35	7-35	-.32	-.82
DDF	15.47	3.53	.53	5-25	6-22	-.29	-.54
EOT	25.1	5.02	.68	8-40	11-40	.01	.54
STS	39.32	13.36	.94	16-80	16-75	.40	-.59
SC	9.58	3.38	.74	4-20	4-19	.53	-.27
SR	12.87	3.60	.80	4-20	5-20	-.21	-.81
SM	10.01	3.70	.80	4-20	4-19	.31	-.82
SA	10.02	3.58	.82	4-20	4-20	.43	-.52
FDSQ (somatization)	9.45	5.00	.82	00-32	2-26	.90	.52

Note. (TAS-20 = Toronto alexithymia scale, DIF= difficulty identifying emotions, DDF= difficulty describing feelings, EOT= externally oriented thinking, STS= self-talk scale, SC=self criticism, SR= self reinforcement, SM=self management, SA= social assessment, FDSQ somatization = four dimensional symptom questionnaire subscale somatization).

Table 9 shows that alpha reliabilities of all the scales administered in this study. The table shows that overall scale of Toronto alexithymia scale has alpha reliability of 0.89. It has three sub scales and their reliabilities are as follows: Difficulty identifying emotions have alpha reliability value of 0.87. Difficulty describing feelings have alpha reliability value of 0.53. Externally oriented thinking has alpha reliability of 0.68. The overall reliability of self-talk scale has reliability is 0.94. It has four sub scales and their reliabilities are as follows: self-criticism subscale has alpha reliability of 0.74. Self-reinforcement sub scale has reliability of 0.80. Self-management subscale has reliability of 0.80. Social assessment sub scale has alpha reliability of .82. Four dimensional symptom questionnaire subscale somatization have alpha reliability of 0.82.

Table 10

Inter-rater reliability of the Clinical Global Impression scale for severity rated by researcher and psychologist of the patient (CGI-S)(N=200)

CGI-S	
ICC_1	0.91

Note.(CGI-S= clinical global impression scale for severity).

The table 10 shows the inter-rater reliability of the clinical global impression scale foe severity rated by the researcher and the psychologist of patient. The inter-rater reliability is 0.91 which is satisfactory.

Table 11

Pearson co-relational matrix among study variables and demographic characteristics (N=200).

Variables		1	2	3	4	5	6	7	8	9	10
1	TAS-20	-	-.52**	.34**	.21**	.18**	.20**	.16*	-.25**	.12	-.03
2	STS		-	-.21**	-.11	-.14*	-.22**	-.19**	.11	-.05	.00
3	FDSQ (somatization)			-	.08	.15*	.15*	.24**	-.09	.19**	.15*
4	CGI-S				-	.09	.12	.19**	-.07	.04	-.16*
5	relapse					-	.73**	.31**	.05	.33**	.09
6	No. of times of relapse						-	.35**	-.01	.40**	.10
7	childhood trauma							-	-.03	.15*	-.01
8	Decision making								-	-.02	-.06
9	Duration of illness									-	.01
10	Presence of insight										-

Note: **=$p<.01$. *=$p<.05$(TAS-20 = Toronto alexithymia scale, STS= self-talk scale, FDSQ somatization = four dimensional symptom questionnaire subscale somatization, CGI-S= clinical global impression scale for severity).

The table 11 shows the person product moment correlation among the study variables and demographic characteristics. Toronto alexithymia scale, is related significantly negatively with STS, (-.52**), decision making (-.25**) and negatively with presence of insight (-.03).STS is related significantly negative with FDSQ (-.21**), experience of relapse (-.14**), no of times of relapse (-.22**) and with childhood trauma (-.19**). STS is related negatively with CGI-S (-.11), duration of illness (-.05). FDSQ has a significant positive relation with relapse (.15*), no. of times of relapse (.15*), childhood trauma (.24**), duration of illness (.19**) and presence of insight (.15*). CGI-S has a significant positive relation with

childhood trauma (.19**) and it has a significant negative relation with presence of insight (-.16*). Relapse has a significant positive relation with no of times of relapse (.73**), childhood trauma (.31**) and duration of illness (-33**). No of times of relapse has a positive relation with duration of illness (.35**) and with duration of illness (.40**). Childhood trauma has a significant positive relation with childhood trauma (.15*)

Table 12

Independent sample t test to find differences among males and females psychiatric patients (N=200).

Variables	Female (n=111)		Male (n=89)		t	*P*	95 % CI		Cohen's
	M	SD	M	SD	(200)		LL	UL	d
TAS-20	64.27	13.65	63.14	13.75	0.58	0.562	-2.71	4.97	0.08
DIF	23.38	6.34	22..96	6.59	0.45	0.647	-1.39	2.23	0.06
DDF	15.86	3.23	14.98	3.83	1.75	0.082	-.11	1.86	0.24
EOT	25.02	5.31	25.19	4.67	0.22	0.819	-1.57	1.25	0.03
STS	40.53	13.72	37.80	12.81	1.43	0.153	-1.01	6.46	0.20
SC	9.92	3.39	9.14	3.33	1.63	0.104	-0.16	1.7	0.23
SR	12.79	3.51	12.97	3.73	0.35	0.720	-1.19	0.82	0.04
SM	10.31	3.75	9.64	3.63	1.28	0.201	-0.36	1.71	0.18
SA	10.28	3.83	9.68	3.25	1.18	0.239	-0.4	1.6	0.16

FDSQ (somatization)	9.81	5.11	9.0	4.85	1.15	0.250	-0.58	2.22	0.16
CGI-S	4.74	0.77	4.83	0.80	0.83	0.405	-0.31	0.12	0.11

Note. (TAS-20 = Toronto alexithymia scale, DIF= difficulty identifying emotions, DDF= difficulty describing feelings, EOT= externally oriented thinking, STS= self-talk scale, SC=self criticism, SR= self reinforcement, SM=self management, SA= social assessment, FDSQ somatization = four dimensional symptom questionnaire subscale somatization, CGI-S= clinical global impression for severity).

The table 12 shows the independent t test value to find the differences among the male and female patients. On TAS-20 no significant difference was present between male (M= 63.14, SD=13.75) and female patients (M=64.27, SD=13.65). On the subscales of TAS-20 no significant differences were found between both the samples. On DIF females scored slightly higher (M=23.38, SD=6.34) than males (M- 22.96, SD=6.59). On DDF males scores slightly lower (M= 14.98, SD=3.83) than females (M=15.86, SD=3.23). On EOT males scores M=25.19 (SD=4.67) and females scored M= 25.02 (SD=5.31). On STS, males scored M= 37.80 (SD= 12.81) lower than females M=40.53 (SD=13.72). On its subscales SC, females scored (M=9.92, SD=3.39) slightly higher than males (M=9.14, SD=3.33). On SR, females scored (M= 12.79, SD=3.51) while males scored (M=12.97, SD=3.73). On SM, females scored (M=10.3, SD=3.75) and males scored (M=9.64, SD= 3.63). On SA females scored (M=10.28, SD= 3.83) while **males scored** (M=9.68, SD=3.25). On FDSQ no significant **differences were found** among males (M=9.0, SD=4.85) and females (M=9.81, SD=5.81). On CGI-S no significant differences were found among females (M=4.74, SD=0.77) and males (M=4.83, SD=0.80)

Table 13

Independent sample t test to find differences regarding whether psychiatric patients have experienced relapse or not (N=200).

Variables	Relapse				t	*p*	95 % CI		Cohen's
	No		Yes						
	(n=107)		(n=93)						
	M	SD	M	SD	(200)		LL	UL	d
TAS-20	61.23	14.15	66.69	12.54	2.87	0.005	-9.22	-1.70	0.40
DIF	21.87	6.69	24.72	5.82	3.18	0.002	-4.60	-1.07	0.45
DDF	14.91	3.67	16.11	3.27	0.35	0.016	-2.17	-0.22	0.34
EOT	24.43	5.26	25.86	4.65	2.00	0.046	-2.81	-0.02	0.28
STS	41.19	13.51	37.16	12.92	2.14	0.033	0.33	7.70	0.30
SC	9.94	3.56	9.16	3.12	1.64	0.103	-0.15	1.72	0.23
SR	12.16	3.76	13.68	3.25	3.03	0.003	-2.50	-0.53	0.43
SM	10.54	3.72	9.40	3.60	2.17	0.031	0.10	2.15	0.31
SA	10.47	3.45	9.49	3.67	1.9	0.053	-0.01	1.97	0.27
FDSQ (somatization)	8.67	4.83	10.35	5.06	2.40	0.017	-3.06	-0.29	0.33
CGI-S	4.71	0.84	4.86	0.72	1.34	0.179	-0.37	0.06	0.19

Note. (TAS-20 = Toronto alexithymia scale, DIF= difficulty identifying emotions, DDF= difficulty describing feelings, EOT= externally oriented thinking, STS= self-talk scale, SC=self criticism, SR= self reinforcement, SM=self management, SA= social assessment, FDSQ somatization = four dimensional symptom questionnaire subscale somatization, CGI-S= clinical global impression for severity).

Table 13 shows Independent sample t test to find differences regarding whether psychiatric patients have experienced relapse or not. On TAS-20 M= 61.23 (SD=14.15) patients have no relapse while M= 66.69 (SD= 12.54) patients have a relapse. No significant differences were found among the sub scales of TAS-20. On DIF, M= 21.87 (SD=6.69) patients do not have a relapse while M= 24.72 (SD=5.82) patients had a relapse. On DDF, M=14.91 (SD=3.67) have no relapse while M= 16.11 (SD= 3.27) have a relapse. On EOT, M= 24.43 (SD=5.26) patients have no relapse while M=25.86 (SD= 4.65) have a relapse. On STS, M=41.19 (SD=13.51) patients have no relapse while M=37.16 (SD=12.92) have a relapse. On SC, M= 9.94 (SD=3.56) have no relapse while M=9.16 (SD=3.12) have experienced a relapse. On STS subscale SR, M=1216 (3.76) patients had no relapse while M= 13.68 (SD=3.25) had experienced a relapse. On SM, M=10.54 (SD=3.72) patients had experience no relapse however, M=9.40 (SD=3.60) had experienced a relapse. On SA, M=10.47(SD=3.45) patients had experienced a relapse while M=9.49 (SD=3.67) patients had experienced relapse. On FDSQ, M= 8.67 (SD=4.83) had experienced no relapse while M=10.35 (SD=5.06) had experienced relapse. On CGI-S, M=4.71 (SD=0.84) had no relapse However, M=4.86 (.72) had a relapse.

Table 14

Independent sample t test to find differences regarding whether psychiatric patients have experienced childhood trauma or not (N=200).

	Experienced childhood trauma								
	No		Yes						
Variables	(n=172)		(n=28)		t	*p*	95 % CI		Cohen's
	M	SD	M	SD	(200)		LL	UL	d
TAS-20	62.88	13.67	69.25	12.55	2.30	0.022	-11.80	-0.92	0.48

	DIF	22.68	6.41	26.35	5.76	2.84	0.005	-6.21	-1.12	0.60
	DDF	15.26	3.54	16.78	3.25	2.13	0.034	-2.93	-0.11	0.44
	EOT	24.93	5.10	26.10	4.52	1.14	0.254	-3.19	0.84	0.24
STS		40.37	13.38	32.85	11.47	2.80	0.006	2..23	12.79	0.60
	SC	9.78	3.44	8.32	2.63	214	0.033	0.11	2.81	0.47
	SR	12.66	3.65	14.17	3.03	2.07	0.039	-2.95	-0.07	0.45
	SM	10.30	3.70	8.21	3.18	2.82	0.005	0.63	3.55	0.60
	SA	10.29	3.59	8.35	3.12	2.68	0.008	0.51	3.35	0.57
FDSQ (somatization)		8.95	4.76	12.53	5.39	3.61	0.000	-5.53	-1.63	0.70
CGI-S		4.72	0.81	5.16	0.51	2.75	0.006	-0.74	-0.12	0.65

Note. (TAS-20 = Toronto alexithymia scale, DIF= difficulty identifying emotions, DDF= difficulty describing feelings, EOT= externally oriented thinking, STS= self-talk scale, SC=self criticism, SR= self reinforcement, SM=self management, SA= social assessment, FDSQ somatization = four dimensional symptom questionnaire subscale somatization, CGI-S= clinical global impression for severity).

Table 14 shows the t test to check the differences among psychiatric patients whetherthey have experienced a childhood trauma or not. On TAS-20 no significant differences were found among the patients in the experiencing of trauma. On TAS-20, M=62.88 (SD=13.67) patients have experienced no childhood trauma while M= 69.25 (SD=12.55) patients have experienced trauma. On its subscales, DIF, M= 22.68 (SD=6.41) patients did not had experienced any childhood trauma, while M= 29.63 (SD=5.76) had experienced childhood trauma and significant difference exists on this scale. On DDF, M=15.26 (SD=3.54) patients had experienced no trauma while M= 16.78 (SD=3.25) had experienced trauma in their childhood. On EOT M=24.93 (SD=5.10) had experienced no trauma, while M=26.10 (SD=4.52) patients had experienced trauma in their lives. On STS, M= 40.37 (SD=13.38) had experienced no childhood trauma while M=32.85 (SD=11.47). On SC, M=9.78 (SD=3.44) patients had not experienced childhood trauma while M= 8.32 (SD=2.63) patients had experienced childhood trauma. On SR, M= 12.66 (SD=3.65) patients

had not experienced childhood trauma while M= 14.17 (SD=3.03) patients had experienced childhood trauma. On SM, M= 10.30 (SD=3.70) patients had not experienced childhood trauma however M= 8.21 (SD=3.18) patients had experienced childhood trauma in their lives. On SA, M= 10.29 (SD=3.59) patients had not had a childhood trauma while M= 8.35 (SD=3.12) psychiatric patients had experienced childhood trauma. On FDSQ scale, M= 8.95(SD=4.76) patients had not experienced childhood trauma rather M=12.53 (SD=5.39) patients had experienced childhood trauma and there is a significant difference between those who experienced trauma and those who had not. On CGI-S, M=4.72 (SD=0.81) patients had not experienced childhood trauma while M=5.16 (SD=0.51) patients had experienced childhood trauma and significant difference exist on CGI-S scale.

Table 15

Table showing prevalence of alexithymia and non-alexithymia among different diagnostic categories of psychiatric patients.

Diagnosis	N	TAS-20 status	n	%
Depressive disorders	51	Non-alexithymia	22	43.1
		alexithymia	29	56.9
Anxiety disorders	35	Non-alexithymia	14	40
		alexithymia	21	60
Obsessions compulsions and related disorders	6	Non-alexithymia	4	66.7
		alexithymia	2	33.3
Trauma & stress related disorders	5	Non-alexithymia	2	40
		alexithymia	3	60
Somatic symptoms & related disorders	32	Non-alexithymia	10	31.2

		alexithymia	22	68.8
Personality disorders	30	Non-alexithymia	8	26.7
		alexithymia	22	73.3
Bipolar and related disorders	22	Non-alexithymia	10	45.5
		alexithymia	12	54.5
Substance related and addictive disorders	19	Non-alexithymia	7	36.8
		alexithymia	12	63.2

Note. Score of ≤ 51 on TAS-20 is non-alexithymia (Taylor, Bagby, & Parker, 2003).

Table 15 shows the frequency (prevalence) and percentages of alexithymia and non-alexithymia among different diagnostic categories of psychiatric patients. Among thedepressive patients (N=51), 43.1% (n=22) were non-alexithymic while 56.9% (n=29) were suffering from alexithymia. Among the anxiety disorder patients (N=35), 40 % (n=14)were non-alexithymic while 21 % (n=21) were alexithymic. Among the OCD and related disorder patients (N=6), 66.7 %(n=4) were non-alexithymic while 33.3 %(n=2) were alexithymic patients. In trauma and stress related disorder patients (N=5), 40 % (n=2) were non-alexithymic while 60% (n=3) were alexythymic patients. Among the somatic symptoms and related disorder patients (N=32), 31.2% (n=10) non-alexithymic patients while 68.8% (n=22) were suffering from alexithymia. Among the personality disorder patients (N=30), 26.7% (n=8) were patients who were non-alxexithymic while 73.3% (n=22) were such personality disorder patients who also suffered from alexithymia. Among the bipolar and related disorder patients (N=22), **45.5%** (n=7) patients are non-alexithymic while 54.5% (n=12) were alexithymic patients. Among the substance related and addictive disorder patients (N=19), 36.8% (n=7) were non-alexithymic while 63.2% (n=12) were alexithymic patients.

Table 16

One way ANOVA to find differences among variables depending upon the birth order of the psychiatric patients (N=200)

	Only child (n=13)		Eldest (n=79)		Middle (n=68)		Youngest (n=40)				
Variables	M	SD	M	SD	M	SD	M	SD	F	p	η^2
TAS-20	71.76	13.10	65.44	14.00	60.36	12.73	63.67	13.53	3.39	0.019	0.04
DIF	27.23	5.74	23.62	6.38	21.82	6.31	23.40	6.52	2.93	0.035	0.04
DDF	16.61	3.30	16.03	3.75	14.70	3.49	15.30	3.01	2.26	0.082	0.03
EOT	27.92	5.92	25.78	5.22	23.83	4.25	24.97	5.11	3.40	0.019	0.05
STS	34.38	12.24	37.87	13.47	41.39	13.18	40.25	13.52	1.52	0.210	0.02
SC	8.92	3.52	9.17	3.13	10.14	3.41	9.62	3.39	1.18	0.318	0.01
SR	15.69	2.62	13.39	3.58	11.89	3.44	12.60	3.65	5.24	0.002	0.07
SM	8.53	3.45	9.79	3.80	10.39	3.46	10.27	3.95	1.08	0.356	0.01
SA	9.00	2.70	9.56	3.71	10.51	3.49	10.40	3.66	1.35	0.259	0.02
FDSQ (somatization)	12.38	5.89	9.18	4.19	8.95	4.96	9.87	4.76	1.90	0.130	0.02
CGI-S	5.07	0.70	4.81	0.81	4.63	0.83	4.88	0.65	1.72	0.164	0.02

Note. (TAS-20 = Toronto alexithymia scale, DIF= difficulty identifying emotions, DDF= difficulty describing feelings, EOT= externally oriented thinking, STS= self-talk scale, SC=self criticism, SR= self reinforcement, SM=self management, SA= social assessment, FDSQ somatization = four dimensional symptom questionnaire subscale somatization, CGI-S= clinical global impression for severity, Between groups df =3 ; within group df = 196 ; group total df = 199).

Table 16 shows the differences among variables depending upon the birth order of the psychiatric patients. the table shows that onTAS-20 and its subscales significant differences

exist among the patients according to the birth order. On overall TAS-20 scale, the patients who were only child scored highest (M= 71.76, SD= 13.10) while middle born patients have scored lowest (M=60.36, SD=12.73).On its subscales, DIF, only child had scored highest (M=27.23, SD=5.74) while middle born scored lowest (M=21.82, SD=6.31). On DDF, only child scored highest (M=16.61, SD=3.30) while middle born child scored lowest (M=14.70, SD=3.49). On EOT, the only child scored highest (M=27.92, SD=5.92) while middle born scored lowest (M=23.83, SD=4.25).

On STS overall scale, middle born scored highest (M=41.39, SD=13.18) while only child scored lowest (M=34.38, SD=12.24). on its subscales, SC, middle born scored highest (M=10.14, SD=3.41) while only child scored lowest (M=8.92, SD=3.52). on SR, only child scored highest (M=15.69, SD=2.62) while middle born scored lowest (M=11.89, SD=3.44). On SM, middle born scored highest (M=10.39, SD=3.46) while only child scored lowest (M=8.53, SD=3.45). On SA, middle birth order patients scored highest (M=10.51, SD=3.49) while the psychiatric patients who are only child scored lowest (M=9.00, SD=2.70). On FDSQ, the patients who were only child scored highest (M=12.38, SD=5.89) while patients who were middle born scored lowest (M=8.95, SD=4.96). On CGI-S, patients who were only child scored highest (M=5.07, SD=0.70) while middle born patients scored lowest (M=4.63, SD=.83).

Table 17

Post hoc analysis (tukey's honestly significant difference)

						95 % CI	
Scale	I (birth order)	J (birth order)	Mean diff (I-J)	St Error	p	LL	UL
TAS-20	Only child	Middle child	11.40*	4.06	0.028	0.86	21.93
DIF	Only child	Middle child	5.40*	1.92	0.028	0.42	10.39
EOT	Only child	Middle child	4.08*	1.49	0.034	0.20	7.96

STS							
SR	Only child	Middle child	3.79*	1.05	0.002	1.05	6.53
		youngest child	3.09*	1.11	0.031	0.19	5.98

Note. (TAS-20 = Toronto alexithymia scale, DIF= difficulty identifying emotions, EOT= externally oriented thinking, STS= self-talk scale, SR= self reinforcement, *=$p<.05$).

Table 17 shows the significant differences among the psychiatric patients with respect to study variables upon birth order. The table shows that on TAS-20 and its subscales DIF and EOT, there were significant differences among the only child and middle born patients. And on subscale of STS, SR significant difference existed between only child and middle child.

Table 18

One way ANOVA to find differences among variables depending upon the perceived decision making ability of the psychiatric patients (N=200)

	No (n=75)		Sometimes (n=79)		Yes (n=46)				
Variables	M	SD	M	SD	M	SD	F	p	η^2
TAS-20	66.85	12.92	64.51	13.45	57.47	13.46	7.33	0.001	0.06
DIF	24.64	5.99	23.36	6.54	20.56	6.31	6.03	0.003	0.05
DDF	16.17	3.16	15.88	3.46	13.63	3.67	8.91	0.000	0.08
EOT	26.04	5.06	25.26	4.74	23.28	5.07	4.51	0.012	0.04
STS	38.42	13.09	38.06	13.24	42.93	13.66	2.22	0.111	0.02

	SC	9.26	3.34	9.49	3.29	10.23	3.56	1.22	0.296	0.01
	SR	13.45	3.37	13.21	3.55	11.34	3.70	5.69	0.004	0.05
	SM	9.89	3.52	9.59	3.62	10.93	4.02	1.98	0.140	0.02
	SA	9.69	3.31	9.63	3.63	11.21	3.75	3.41	0.035	0.03
FDSQ (somatization)		9.88	4.73	9.58	5.08	8.54	5.26	1.06	0.348	0.01
CGI-S		4.94	0.75	4.59	0.82	4.84	0.72	4.12	0.018	0.04

Note. (TAS-20 = Toronto alexithymia scale, DIF= difficulty identifying emotions, DDF= difficulty describing feelings, EOT= externally oriented thinking, STS= self-talk scale, SC=self criticism, SR= self reinforcement, SM=self management, SA= social assessment, FDSQ somatization = four dimensional symptom questionnaire subscale somatization, CGI-S= clinical global impression for severity, Between groups df =2 ; within group df = 197 ; group total df = 199).

Table 18 shows the differences among variables depending upon the perceived decision making ability of the psychiatric patients. On TAS-20 the more population was of those who were not able to make decisions (M=66.85, SD=12.92). On DIF (M=24.64, SD=5.99), DDF (16.17, SD=3.16), EOT (M=26.04, SD=5.06) subscales of TAS-20 more patients were unable to make decisions. On STS scale patients were able to make decisions (M=42.93, SD=13.66). Similar findings were present on its subscale SC (M=10.23, SD=3.56), SM (M=10.93, SD=4.02) and SA (M=11.21, SD=3.75). On SR subscale, patients were able not to make decisions (M=13.45, SD=3.37). On FDSQ scale and CGI-S a little difference was found among these groups.

Table 19

Post hoc analysis (tukey's honestly significant difference)

Scale	I (able to make decisions)	J (able to make decisions)	Mean diff (I-J)	St Error	*p*	95 % CI LL	95 % CI UL
TAS-20	No	Yes	9.37*	2.48	0.001	3.51	15.23
	Sometimes	Yes	7.04*	2.45	0.013	1.23	12.84
DIF	No	Yes	4.07*	1.17	0.002	1.29	6.85
	Sometimes	Yes	2.80*	1.16	0.045	0.04	5.55
DDF	No	Yes	2.54*	0.63	0.000	1.03	4.04
	Sometimes	Yes	2.25*	0.63	0.001	0.76	3.74
EOT	No	Yes	2.75*	0.92	0.009	0.57	4.94
STS							
SR	No	Yes	2.10*	0.66	0.005	0.54	3.66
	Sometimes	Yes	1.86*	0.65	0.013	0.32	3.41
SA	Yes	Sometimes	1.58*	0.65	0.044	0.03	3.13
CGI-S	No	Sometimes	0.35*	0.12	0.015	0.05	0.64

Note. (TAS-20 = Toronto alexithymia scale, DIF= difficulty identifying emotions, DDF= difficulty describing feelings, EOT= externally oriented thinking, STS= self-talk scale, SR= self reinforcement, SA= social assessment, CGI-S= clinical global impression for severity, *=$p<.05$).

Table 19 shows the significant differences among patient's responses on study variables with respect to ability of decision making. On TAS-20 significant differences exists among those who can make decisions and who cannot and significant differences exist among those who were able to make decisions and those who marked sometimes (p=0.01). On DIF and DDF, significant differences exist among those who were able to make decisions and who were not able to make decisions (p=0.00) and among those who were able to make decisions sometimes and those who were able to make decisions (p=0.04).

On STS subscale SR, significant differences exist among those who can make decisions and who cannot (p=0.66) while significant differences exist among those who were able to make decisions and those who made decisions sometimes (p=0.65). On SA, significant differences among those who were able to make decisions and those who were able to make decisions sometimes (p=0.65).On CGI-S, significant differences among those who were able to make decisions and those who were able to make decisions sometimes (p=0.12).

Table 20

One way ANOVA to find differences among variables depending upon the diagnostic category of the psychiatric patients (N=200)

	DD (n=51)		AD (n=35)		OCD (n=6)		TSD (n=5)		SSD (n=32)		PD (n=30)		BD (n=22)		SAD (n=19)				
Variables	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	F	*p*	η^2
TAS-20	62.54	12.28	61.82	13.74	55.66	15.09	66.80	12.79	65.84	13.40	70.26	12.78	59.04	14.52	64.15	15.21	2.01	0.055	0.6
DIF	22.74	5.34	22.45	666	21.16	7.25	24.40	7.09	23.56	7.05	25.80	6.42	21.13	5.95	23.78	7.49	1.28	0.261	0.4
DDF	15.39	3.43	15.08	3.03	12.33	2.87	16.20	2.77	16.03	3.60	17.00	3.09	14.36	3.91	15.15	4.31	2.09	0.046	0.0
EOT	24.41	4.69	24.28	5.37	22.16	4.99	26.20	3.63	26.25	4.39	27.46	4.17	23.54	6.47	25.21	4.81	2.16	0.039	0.0
STS	40.76	14.42	39.68	14.27	48.16	14.37	40.80	13.17	33.09	13.52	37.23	11.55	45.09	8.76	38.68	12.09	2.25	0.031	0.0
SC	9.68	3.57	10.00	3.85	12.00	3.09	9.60	3.43	8.15	3.35	9.33	2.82	10.63	2.40	9.31	3.33	1.72	0.106	0.0
SR	12.00	3.44	12.25	3.57	10.83	2.99	13.60	1.51	13.50	3.48	14.53	3.50	12.40	4.10	13.68	3.59	2.20	0.036	0.0

SM	10.52	4.04	9.82	3.84	12.33	4.32	10.80	3.56	8.28	3.43	9.46	3.37	11.77	2.72	9.78	3.24	2.45	0.020	0.0
SA	10.43	3.89	10.11	3.73	12.33	3.61	10.80	3.34	8.56	3.90	9.50	3.04	11.36	2.80	9.52	2.85	1.88	0.074	0.0
FDSQ (somatization)	9.03	5.28	9.94	4.75	8.00	4.09	11.00	7.10	10.18	4.90	10.53	5.37	7.50	4.23	9.05	4.64	1.03	0.408	0.0
CGI-S	4.54	0.91	4.41	0.74	5.00	0.54	5.20	0.75	5.04	0.57	4.80	0.77	5.09	0.70	5.10	0.61	3.76	0.001	0.1

Note.(TAS-20 = Toronto alexithymia scale, DIF= difficulty identifying emotions, DDF= difficulty describing feelings, EOT= externally oriented thinking, STS= self-talk scale, SC=self criticism, SR= self reinforcement, SM=self management, SA= social assessment, FDSQ somatization = four dimensional symptom questionnaire subscale somatization, CGI-S= clinical global impression for severity, DD = Depressive disorders, AD = Anxiety disorders, OCD = Obsessions compulsions and related disorders, TSD = Trauma & stress related disorders, SSD = Somatic symptoms & related disorders, PD = Personality disorders, BD = Bipolar and related disorders, SAD = Substance related and addictive disorders, Between groups df =7 ; within group df = 192 ; group total df = 199).

The table 20 shows the results for ANOVA in order to find the differences among different variables dependent upon the diagnostic category of the psychiatric patients. According to the table, the OCD patients scored lowest (M=55.66, SD=15.09) on TAS-20 while PD scored highest (M=70.26, SD=12.78) on this scale, moreover the difference was found to be significant among the groups (ρ=.05).the table also shows that BD patients scored lowest on DIF (M= 21.13, SD= 5.95) while PD patients scored highest among Other patients (M= 25.80, SD= 6.42). The different among all the groups of psychiatric patients is not significant for DIF (ρ= 0.26). on DDF, the PD patients scored highest (M= 17.0, SD= 3.09) while OCD patients scored lowest (M= 12.33, SD= 2.87) among other

psychiatric patients. On EOT, the personality disorder patients, PD, scored highest (M= 27.46, SD= 4.17) and OCD patients scored lowest (M= 22.16, SD= 4.99). on STS, the OCD patients scored highest (M= 48.16, SD= 14.37) and SSD patients scored lowest (M= 33.09, SD= 13.52) among other groups respectively. On SC, OCD patients scored highest (M= 12.00, SD= 3.09) while the lowest score were scored by SSD patients (M= 8.15, SD= 3.35). on SR, PD patients scored higher among the other patients with a M= 14.53 (SD= 3.50) while the lowest score was scored by OCD (M= 10.83, SD= 2.99). On SM, the highest score was taken by OCD (M= 12.33, SD= 4.32). On SA, OCD patients scored higher (M= 12.33, SD= 3.61), while SSD scored (M=8.56, SD= 3.90) lowest among the other groups. On FDSQ, the TSD scored (M=11, SD= 7.10) higher and BD scored lowest (M= 7.50, SD= 4.23) respectively. On CGI-S, the TSD scored highest (M= 5.20, SD= 0.75), while AD scored lowest (M= 4.41, SD= 0.74) among other group members.

Table 21

Post hoc analysis (tukey's honestly significant difference)

Scale	I (diagnosis)	J (diagnosis)	Mean diff (I-J)	St Error	p	95 % CI	
						LL	UL
STS	BD	SSD	11.99*	3.62	0.024	0.89	23.09
SR	PD	DD	2.53*	0.81	0.043	0.04	5.02
SM	BD	SSD	3.49*	1.00	0.014	0.42	6.55
CGI-S	SSD	AD	0.63*	0.18	0.017	0.06	1.19
	BD	AD	0.67*	0.20	0.025	0.04	1.30
	SAD	AD	0.69*	0.21	0.032	0.03	1.34

Note.(STS= self-talk scale, SR= self reinforcement, SM=self management, CGI-S= clinical global impression for severity, DD = Depressive disorders, AD = Anxiety disorders, SSD = Somatic symptoms & related disorders, PD = Personality disorders, BD = Bipolar and related disorders, SAD = Substance related and addictive disorders, , *=p<.05).

Table 21 shows that there is a significant difference on self talk scale and its two subscales among borderline personality disorder, somatic symptom disorder and among personality disorders and depressive disorders. The difference on CGI-S was between anxiety disorder and bipolar disorder, somatic symptom disorder and Substance related and addictive disorders

Table 22

Linear regression analysis to test alexithymia as a predictor of somatization

		Outcome: Happiness	
		95%CI	
Predictors	Model *B*	*LL*	*UL*
(constant)	1.42	-1.71	4.56
TAS-20	0.12	0.07	0.17
R^2	0.11		
F	26.58***		

Note. (TAS-20 = Toronto alexithymia scale, Dependent variable FDSQ (somatization), ***=p<0.00).

Table 22 shows the linear regression analysis. This table indicates that there is an effect of alexithymia (independent variable) on somatization (dependent variable). Alexithymia predicts the variance in scores of somatization among psychiatric patients but this variance is not that much prominent. Only 11 percent variation in scores of somatization can be attributed to alexithymia.

DISCUSSION

Chapter IV

Discussion

The current research was basically concerned with the effect of alexithymia on self-talk and somatization among psychiatric patients. The main focus of the research was to see how alexithymia can affect the self-talk of any person especially those who are already suffering from any psychological issue. Other concern was to explore the effect of alexithymia on somatization among patients with psychiatric diagnosis. It was also aimed to find whether alexithymia is a good predictor of somatization or not. Along with these variables various demographic variables were also inquired and an effort was made to understand how these variables can contribute among condition of psychiatric patients.

One of the first objectives of the study was to investigate about the relationship between alexithymia and self talk among psychiatric patients. For that purpose Pearson co-correlation matrix was conducted (table no. 11). The findings were consistent with the first hypothesis as results indicated that alexithymia contributes negatively towards the self-talk among psychiatric patients. In simple words higher the alexithymia lower will be the self-talk of the person. These results are significant at 99 percent confidence interval. These findings are also consistent with the previous literature as reported by Girbau (2007), similar findings were also reported by Runco and Richarcd (1997). Individuals with alexithymia are not as much capable of imagination in mind (self-talk) as others (Mantani et al., 2005).

The second objective of the current study is to find the relationship between alexithymia and somatization among psychiatric patients. For the purpose of investigating the relationship a Pearson co-relational matrix was calculated (table no.11). Results confirm the second hypothesis that there is a positive relation among alexithymia and somatization in simple words increase in scores of alexithymia impact scores of somatization in positive (increase) direction. The co-relation value was not that strong (.34) but it is significant at 99

percent confidence interval. These findings agreed with the literature as different previous researches suggest the negative relationship among these two variables.

Sayar, Kirmayer and Taillefer (2003), Bach and Bach (1995), Besharat, Zebardast, Nadali and Salehi (2008), TenHouten (2006), Mattila et al. (2008) and Taycon, Ozdemir and TAYCON (2017) report similar findings that alexithymia and somatization are positively related with each other. Wood, William and Kalyani (2009) reported that alexithymia can impact the scores of somatization. This study was conducted among the patients of traumatic brain injury (N=83).

With reference to the second objective the fifth hypothesis stats that alexithymia can predict somatization among psychiatric patients. Linear regression analysis was used for this purpose. Results indicate that alexithymia can predict somatization but only 11 percent variation in scores of somatization can be attributed to alexithymia (table no. 22). Though literature (Sayar, Kirmayer & Taillefer, 2003) suggest the variance of approximately 54 percent but there are also other factors that can be attributed to this difference of variance. Sayar, Kirmayer and Taillefer (2003) study was conducted only among depressive patients but in current study different categories of psychiatric patients were included.

The third objective of the research was to find gender differences in scores of alexithymia among psychiatric patients. In order to fulfill that objective both male and female psychiatric patients were approached for this research. In terms of statistical analysis independent sample t test was performed (table no. 12). Result of the t test was in consistent with the third hypothesis as findings shows that there is a little difference among scores of males and females. This difference was not significant as p value is 0.56 and males scores (63.14) little lower than females (64.27).

Literature also suggests that gender differences may or may not exist. There are various researches that support the finding of the current research and still various others that do not support the findings of the current research. Parker, Bagby and Taylor (2003) conducted a study among English speaking adults (N=1933) the main purpose of this study to collect a normative data on TAS-20. This study included males (n= 868) and females (n= 1065). Results indicated that there is very little or no difference among both groups regarding scores of alexithymia. Bem (1974) also reported that gender differences among alexithymia is not clear, the result can vary depending upon other demographics and situations of the sample.

One of the reason that there is no significant difference exist between males and females is that when suffering from any mental and emotional crises both are having similar kind of thought patterns. Both were suffering from societal pressures. Such as being judged by society and acceptance from siblings, parents and partners

The fourth objective of the present study was to find the relationship between alexithymia and psychiatric illness. The basic purpose of this objective is to explore that severity of illness can be attributed to higher scores on alexithymia or not. For that purpose the Pearson co-relational matrix was calculated among scores of TAS-20 (alexithymia) and CGI-S (severity of illness) (table no. 11). Results indicated that there is a positive relationship between scores on alexithymia and severity of the illness of psychiatric patients. These results are agreed with the fourth hypothesis that more the scores on alexithymia more severe the psychiatric illness of the patient. Though the correlation is not that strong (0.21) but it is significant at 99 percent confidence interval.

Although alexithymia is not much investigated but in relation with psychiatric illness it is much widely investigated and mostly researches state findings that are coherent with

findings of the current research. In Tehran a study that was conducted by Hamidi, Rostami, Farhoodi and Abdolmanafi (2010) to find the differences in scores of alexithymia (TAS-20) among substance abusers and non substance abusers. Results show that substance abusers show significantly higher scores as compared to others.

Honkalampi, Hintikka, Laukkanen and Vinamaki (2001), Serafini et al., (2016), Wood, William and Kalyani (2009), Marchesi, Brusamonti and Maggini (2000) and Celikel, Saatcioglu (2006) also concluded a positive relationship between alexithymia and severity of different psychiatric disorders.

The next objective was to find demographic differences among study variables along with prevalence of alexithymia among different categories of the psychiatric disorders. In order to complete this objective various analysis was run. Pearson co-relational matrix was calculated to find relationship between study variables and some of the demographic variables (table no. 11). Results shows that there is a positive relationship between alexithymia and presence of relapse (0.18) and number of times of relapse (0.20) these results are significant at 99 percent confidence interval. Cleland, Magura, Foote, Rosenblum and Kosanke (2005) findings are consistent with findings of the current study. A significant difference also exists between presence and absence of childhood trauma and study variables (table 14). Chen, Xu, You, Zhang and Ling (2017) also supported the positive relation between alexithymia and presence of childhood trauma.

The psychiatric patients who have experienced any childhood trauma also report high alexithymia as concluded by Pearson co-relational matrix (table no. 11). The correlation (0.16) is significant at 0.05 percent confidence interval. Farooq and Yousaf, (2016) also reported similar results. Thimm (2010) and Young, Klosko, and Weishaar (2003) also agreed

with this concept. They stated that early life experiences such as childhood traumas can lead to maladaptive cognitive and emotional development.

Speranza, Loas, Wallier and Corcos (2007) investigated the effect of alexithymia on treatment. They concluded that it is one of the negative prognostic factors and it promotes relapse. In current study t test (table 13)was done to find differences among study variables in relation to presence and absence of relapse. The results depicted significant differences. It is also supported by literature. Loas, Fremaux, Otmani, Lecercle, and Delahousse (1997) and Ziolkowski, Gruss, and Rybakowski (1995) also reported that alexithymia can interfere with the treatment process.it can lead to poor treatment adherence and promote relapse.

Alexithymia is also positively related with duration of illness this was also supported by findings of Chen, Xu, You, Zhang and Ling (2017). There is a negative relationship (-0.25) between alexithymia and an ability to make decision (table 11) ($p<.01$) as alexithymia decreases self awareness and individual may become confused and lost his confidence in making decisions. Significant differences (table 18) exist among study variables regarding whether they are able to make decision or not. On alexithymia and its subscales significant differences exists between yes and no and yes and sometimes regarding ability to make decisions. Similar differences exist on subscales of the self talk scale and also on CGI-S (Clinical Global impression scale for severity).

Self talk helps an individual to make decision by increasing the awareness of the internal and external environment and alexithymia can decrease self- awareness and thus affect the decision making ability of the individual (Diaz, Berk & Diaz, 2014). Scores reveals that those who are able to make decisions have lower scores on alexithymia as compared to those who are not able to make decisions efficiently and among self talk scale sub scale self assessment (SA) those who said yes to decision making ability scores higher as compared to

those who said some times and no. This reveals that self talk can help in regulating emotions, improve perception and awareness of the individual and thus improve their decision making ability ((LeUnes, 2008).

There is a negative relationship between self talk and occurrence of relapse (-0.14) and number of times of relapse (-0.22) (table no. 11). These results were also supported by literature as self talk is considered as prevention against relapse. Gender differences among somatization suggest that there is no significant difference (table 12) among males and females but females scores a bit higher as compared to males. These findings provide support for the sixth hypothesis of the study. Quarshie (2006) and Barsky, Peekna and Borus (2001) in their studies concluded that females show more somatic symptoms as compared to males.

Family structure and birth order can affect the individual in many ways. The significant difference (table 16) exists between middle child and only child among alexithymia and its sub scales (DIF, EOT) and among subscale of self talk scale (SR). A difference among only child and youngest born also exists on the subscale of the self-talk scale (SR). The reason can be that in Pakistani culture only child is the center of attention and parents treat them with love and care and also strict on them to refrain them from indulging in any bad habits. Middle child is mostly not the center of attention and they were treated normally. These differences can be attributed to differences in experience of attachment with parental figure (Bucci, 1997).

There is a difference in prevalence of alexithymia in different diagnostic categories of the psychiatric patients. Among each category both alexithymic and non alexithymic psychiatric patients were present. The percentages were shown in table 15. The difference in prevalence of alexithymic and non alexithymic patients among different categories depicts that findings are consistent with the literature. Lindsay and Ciarrochi (2009) studied patients

(N=40) of substance abuse and compared them with patients of other psychiatric disorders. They concluded that alexithymia is prevalent among 50 percent of substance abusers.

Chen, Xu, You, Zhang and Ling (2017) studied alexithymia scores among adult prisoners (N=1706) of China. They concluded that over 30 percent of patients have alexithymia that is co-morbid with psychiatric disorders such as depression, anxiety etc. Hwason et al., (2012) studies four groups of psychiatric disorders and concluded that each group vary in scores of alexithymia. Similar findings were also reported by Leweke, Leichsenring, Kruse and Hermes (2012).

Limitations

The limitations of the current research are as follows:

1. The data for the current research is collected from the limited hospitals of the Rawalpindi due to permission issues but this can limit the generalization of the study.
2. The nature of current study is quantitative that lead to the collection of data regarding specific phenomenon and limit exploration of other phenomenon's.
3. Only recommended patients from doctors and psychologists were included in current study this can also effect the inclusion of most severely ill patients.
4. It is a cross sectional study and does not provide information in detail.
5. Results can be effected by the present environmental condition of the patient.
6. The process of data collection was time consuming because each question was verbally narrated to them because of educational and other issues.

Suggestions and Recommendations

1. One can improve the generalization of the study by improving the sample size and by increasing the number of hospitals from which data can be collected.

2. A longitudinal study can help in exploring many other factors.
3. To increase the knowledge and explore other life issues one can also use qualitative research.
4. Calm and similar environmental conditions while data collection can help in controlling the effect of the extraneous variables.

Implications

1. Current research is helpful in highlighting the importance of alexithymia.
2. It create awareness among psychologists that alexithymia can promote relapse and hinder therapy sessions.
3. This research identifies that different therapeutic techniques should be used with alexithymic patients as they have limited imagination.
4. It highlights the importance of using more self-talk techniques and less imaginary techniques while treating alexithymic patients.
5. It will help in highlighting the development of therapeutic plan differently.

Conclusion

Present study was conducted among psychiatric patients to find the effect of alexithymia on self-talk and somatization. This research was completed in three phases. First phase was concern with the translation of two scales that were not available in Urdu language. In first phase the questionnaires were translated and validated using different methods. The second phase was concerned with the pilot study to find reliability of translated scales and along with that using complete research tools to identify any problems before starting the third phase. The third phase involves different stages such as approval, data collection, organizing data and then analyzing data to interpret the findings. The finding suggests that childhood trauma is identified as one of the factor that contributes positively

toward alexithymia and somatization and negatively towards self-talk. Alexithymia can also determine the relapse among psychiatric patients. Results shows that alexithymia and self talk are negatively related and a positive relation exist between alexithymia and somatization. Alexithymia also predict somatization and there are various other demographic factors tha are related with study variables such as relapse, duration of illness, childhood trauma etc.

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سوال ناموں کے ترجمے کی درخواست اور اجازت نامہ

میں سنبل ملک (246-FSS/MSCP/F-16) بین الاقوامی اسلام یونیورسٹی اسلام آباد کے شعبہ نفسیات میں ایم-ایس طبّی نفسیات کی طالبہ ہوں۔ ہمارا ادارہ تعلیم و تدریس کے ساتھ تحقیق بھی کرتا ہے۔ یہ اسی سلسلے کی ایک کڑی ہے جس کے لیے ہمیں آپ کا تعاون درکار ہے۔ میں جذبات کے اظہار کی صلاحیت، جسمانی علامات اور خود کلامی کے باہمی تعلق اور ان سے پیدا ہونے والے مسائل پر تحقیق کر رہی ہوں۔ درج بالا تحقیق کے لیے کچھ سوالناموں کا اردو میں ترجمہ درکار ہے۔ آپ سے درخواست ہے کہ دیے گئے سوالناموں کا اردو میں ترجمہ کر دیجیے تاکہ ان سوالناموں کو سمجھنا آسان ہو سکے۔ اس سلسلے میں آپ کے تعاون کی مشکور رہوں گی۔ ترجمہ کرنے کے لیئے رضامندی کے اظہار کے لیئے نیچے دی گئی جگہ پر دستخط کریں۔

مترجم	العارض
نام	سنبل ملک
دستخط	246-FSS-MSCP/ F-16
ای- میل	Muhammadsuleman02@gmail.com
عہدہ	شعبہ نفسیات
ادارہ/ایڈریس	انٹرنیشنل اسلامک یونیورسٹی اسلام آباد
رابطہ نمبر	
ادارے کی مہر	

سوالناموں کے ترجمے کی درخواست اور اجازت نامہ

میں سنبل ملک (246-FSS/MSCP/F-16) بین الاقوامی اسلامی یونیورسٹی اسلام آباد کے شعبہ نفسیات میں ایم-ایس طبّی نفسیات کی طالبہ ہوں۔ ہمارا ادارہ تعلیم و تدریس کے ساتھ تحقیق بھی کرتا ہے۔ یہ اسی سلسلے کی ایک کڑی ہے جس کے لیے ہمیں آپ کا تعاون درکار ہے۔ میں جذبات کے اظہار کی صلاحیت، جسمانی علامات اور خود کلامی کے باہمی تعلق اور ان سے پیدا ہونے والے مسائل پر تحقیق کر رہی ہوں۔ درج بالا تحقیق کے لیے کچھ سوالناموں کا اردو میں ترجمہ درکار ہے۔ اس مقصد کے لیے کچھ ماہرین نے ان سوالناموں کا اردو میں ترجمہ کیا ہیں اور کمیٹی کی مدد سے ان سوالناموں کو ایک آخری حتمی شکل دی گئی ہے۔ آپ سے درخواست ہے کہ دیے گئے سوالناموں کا دوبارہ سے انگریزی میں ترجمہ کر دیجیے تاکہ ان سوالناموں کو جانچا جا سکے۔ اس سلسلے میں آپ کے تعاون کی مشکور رہوں گی۔ ترجمہ کرنے کے لیئے رضامندی کے اظہار کے لیئے نیچے دی گئی جگہ پر دستخط کریں۔

مترجم	العارض
نام	سنبل ملک
دستخط	246-FSS-MSCP/ F-16
ای- میل	Muhammadsuleman02@gmail.com
عہدہ	شعبہ نفسیات
ادارہ/ایڈریس	انٹرنیشنل اسلامک یونیورسٹی اسلام آباد
رابطہ نمبر	
ادارے کی مہر	

اجازت نامہ

میں سنبل ملک (246-FSS/MSCP/F-16) بین الاقوامی اسلامی یونیورسٹی اسلام آباد کے شعبہ نفسیات میں ایم-ایس-طبّی نفسیات کی طالبہ ہوں۔ ہمارا ادارہ تعلیم وتدریس کے ساتھ تحقیق بھی کرتا ہے۔ یہ اسی سلسلے کی ایک کڑی ہے جس کے لیے ہمیں آپ کا تعاون درکار ہے۔ میں جذبات کے اظہار کی صلاحیت، جسمانی علامات اور خود کلامی کے باہمی تعلق اور ان سے پیدا ہونے والے مسائل پر تحقیق کر رہی ہوں۔ اس سلسلے میں مجھے آپ سے کچھ معلومات درکار ہیں۔ آپ کو کچھ سوالنامے پیش کیے جا رہے ہیں۔ آپ سے درخواست ہے کہ سوالات کو غور سے پڑھنے کے بعد ساتھ دی گئی ہدایات کے مطابق جواب دیں۔ آپ کو اس بات کا یقین دلایا جاتا ہے کہ اس تحقیق میں آپ کو کسی قسم کا نقصان نہیں پہنچایا جائے گا۔ آپ کی تمام معلومات کو گمنام اور صیغہ راز میں رکھا جائے گا اور محض تحقیقاتی مقاصد کے لیے استعمال کیا جائے گا۔ آپ کو مکمل اختیار حاصل ہے آپ جب چاہئے اس تحقیق سے علیحدگی اختیار کر سکتے ہیں۔

اگر آپ اس تحقیق پر آمادہ ہیں تو نیچے دستخط فرما دیجیے

دستخط: _____

آپکے تعاون کا شکریہ۔

آبادیاتی شیٹ/ کوائف نامہ

نام(اختیاری) _____

عمر_____

جنس 1۔مرد 2۔عورت

تعلیم والد کی تعلیم والدہ کی تعلیم

ماہانہ آمدن

کوئی جسمانی بیماری

نفسیاتی بیماری کا نام اور تشخیص کی مدت

اعصابی بیماری کی شکایت

1۔ہاں 2۔نہیں

کیا آپ کے خاندان میں کوئی کسی ذہنی بیماری کا شکار ہیں؟ اگر ہاں تو آپ سے ان کا کیا رشتہ ہیں؟

بیماری کی بصیرت۔۔۔۔کیا آپ سمجھتے ہے کے آپ کو کوئی ذہنی بیماری ہیں؟

1۔ہاں 2۔نہیں 3۔شاہد

کیا کبھی کسی جرم کے سلسلے میں آپ کو تھانے یا کچہری کا سامنا کرنا پڑا؟

بیماری میں بہتری کے بعد آپ پہلے بیماری والی حالت کی طرف کبھی لوٹے ہیں اگر ہاں تو کتنی بار؟

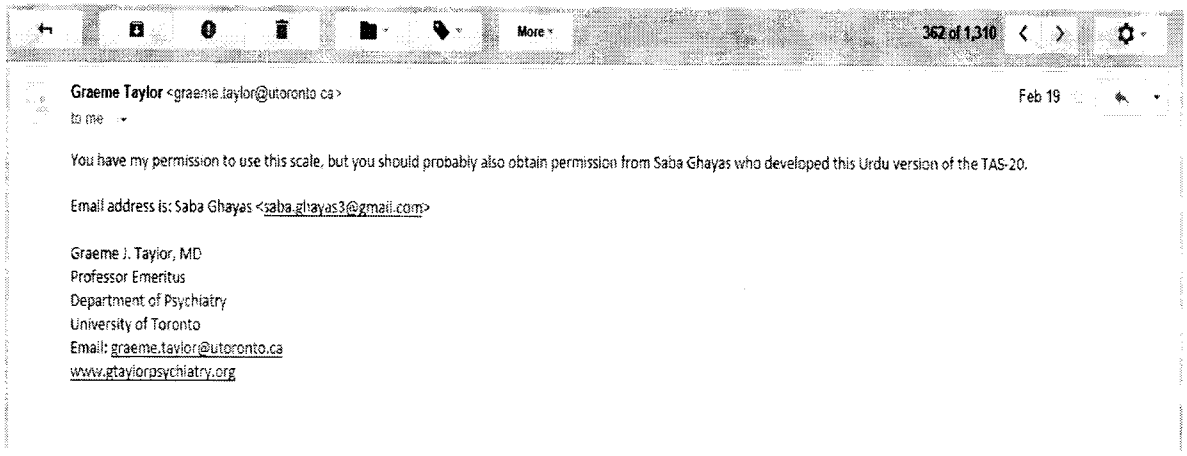
کیا آپ کوئی نشہ کرتے ہیں اگر ہاں تو کس چیز کا؟

خاندانی نظام

1۔مشترکہ 2۔انفرادی

Permission of authors

Toronto Alexithymia questionnaire (TAS-20)



Graeme Taylor <graeme.taylor@utoronto.ca> Feb 19
to me

You have my permission to use this scale, but you should probably also obtain permission from Saba Ghayas who developed this Urdu version of the TAS-20.

Email address is: Saba Ghayas <saba.ghayas3@gmail.com>

Graeme J. Taylor, MD
Professor Emeritus
Department of Psychiatry
University of Toronto
Email: graeme.taylor@utoronto.ca
www.gtaylorpsychiatry.org

Saba Ghayas <saba.ghayas3@gmail.com> Feb 23
to me

Walaikum assalam.
M sorry for this reply. I was on leave and was out of station You are allowed to use the scale.

Regards

The self talk scale (STS)

Thank you for your interest in using the Self-Talk Scale (STS). Because it has been published and is publicly available, you are free to use it without my permission. I have attached a copy of the development article and two versions of the STS (with and without scoring).

I am unaware of any Urdu translation of the STS. Typically, a native speaker who also knows English will translate the STS into their home language. Then, a different native speaker will back-translate it into English (without seeing the original English). I would be happy to work with you on the back-translation to make sure that your translation accurately captures the meaning of the individual items of the STS.

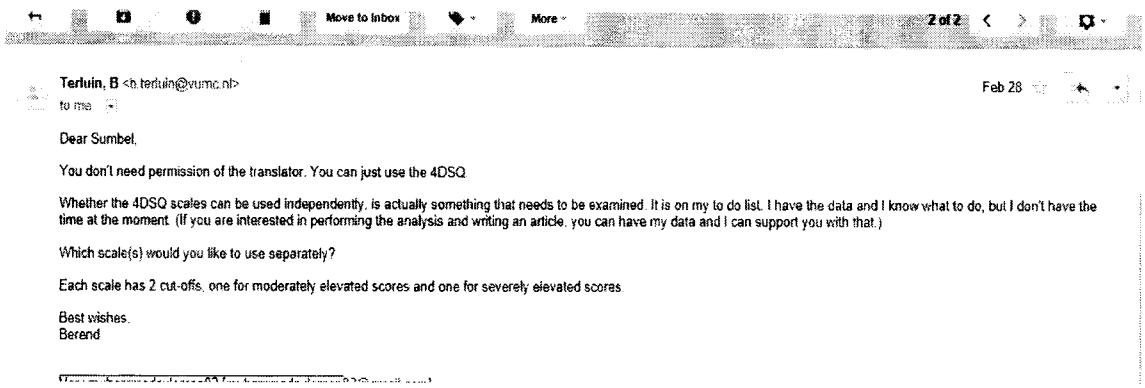
If you can tell me more about your research topic, I might be able to direct you to some relevant resources. I have attached another article that we published that looked at being an only child (no siblings) as well as having an imaginary companion.

I hope this helps! Please let me know if you have any questions.

Dr. B.

Dr. Tom Brinthaupt
Professor of Psychology
Director of Faculty Development
Learning, Teaching, and Innovative Technologies Center
http://www.mtsu.edu/ltandltc
Middle Tennessee State University
Offices: 615.494.7676 (LT&ITC) or 615.898.2317 (Psych)
Web: mtweb.mtsu.edu/tbrintha

The Four-Dimensional Symptom Questionnaire (4DSQ)



Move to Inbox More 2 of 2

Terluin, B <b.terluin@vumc.nl> Feb 28

to me

Dear Sumbel,

You don't need permission of the translator. You can just use the 4DSQ.

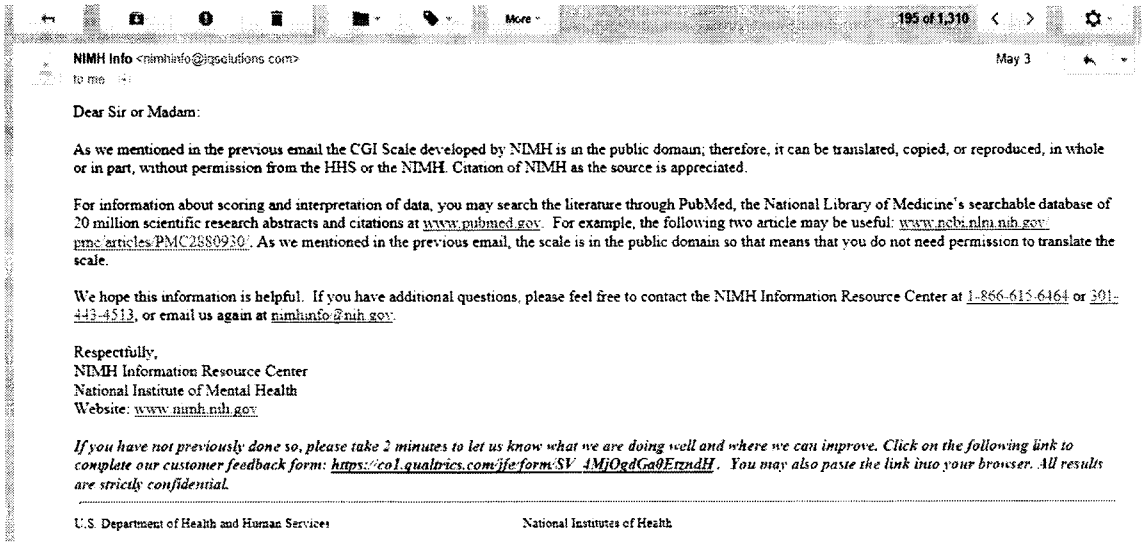
Whether the 4DSQ scales can be used independently, is actually something that needs to be examined. It is on my to do list. I have the data and I know what to do, but I don't have the time at the moment. (If you are interested in performing the analysis and writing an article, you can have my data and I can support you with that.)

Which scale(s) would you like to use separately?

Each scale has 2 cut-offs, one for moderately elevated scores and one for severely elevated scores.

Best wishes,
Berend

Clinical Global Impression Scale (CGI)



More 195 of 1,310

NIMH Info <nimhinfo@iqsolutions.com> May 3

to me

Dear Sir or Madam:

As we mentioned in the previous email the CGI Scale developed by NIMH is in the public domain; therefore, it can be translated, copied, or reproduced, in whole or in part, without permission from the HHS or the NIMH. Citation of NIMH as the source is appreciated.

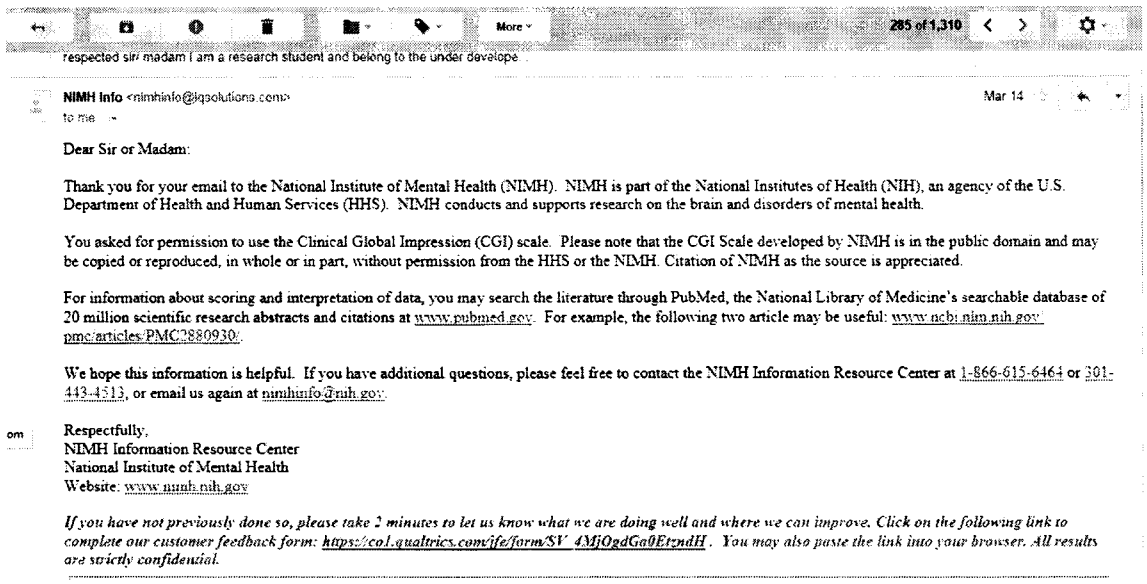
For information about scoring and interpretation of data, you may search the literature through PubMed, the National Library of Medicine's searchable database of 20 million scientific research abstracts and citations at www.pubmed.gov. For example, the following two article may be useful: www.ncbi.nlm.nih.gov/pmc/articles/PMC2880930/. As we mentioned in the previous email, the scale is in the public domain so that means that you do not need permission to translate the scale.

We hope this information is helpful. If you have additional questions, please feel free to contact the NIMH Information Resource Center at 1-866-615-6464 or 301-443-4513, or email us again at nimhinfo@nih.gov.

Respectfully,
NIMH Information Resource Center
National Institute of Mental Health
Website: www.nimh.nih.gov

If you have not previously done so, please take 2 minutes to let us know what we are doing well and where we can improve. Click on the following link to complete our customer feedback form: https://co1.qualtrics.com/jfe/form/SV_4MjOgdGa0EtzndH. You may also paste the link into your browser. All results are strictly confidential.

U.S. Department of Health and Human Services National Institutes of Health



More 285 of 1,310

respected sir/ madam I am a research student and belong to the under develope

NIMH Info <nimhinfo@iqsolutions.com> Mar 14

to me

Dear Sir or Madam:

Thank you for your email to the National Institute of Mental Health (NIMH). NIMH is part of the National Institutes of Health (NIH), an agency of the U.S. Department of Health and Human Services (HHS). NIMH conducts and supports research on the brain and disorders of mental health.

You asked for permission to use the Clinical Global Impression (CGI) scale. Please note that the CGI Scale developed by NIMH is in the public domain and may be copied or reproduced, in whole or in part, without permission from the HHS or the NIMH. Citation of NIMH as the source is appreciated.

For information about scoring and interpretation of data, you may search the literature through PubMed, the National Library of Medicine's searchable database of 20 million scientific research abstracts and citations at www.pubmed.gov. For example, the following two article may be useful: www.ncbi.nlm.nih.gov/pmc/articles/PMC2880930/.

We hope this information is helpful. If you have additional questions, please feel free to contact the NIMH Information Resource Center at 1-866-615-6464 or 301-443-4513, or email us again at nimhinfo@nih.gov.

om

Respectfully,
NIMH Information Resource Center
National Institute of Mental Health
Website: www.nimh.nih.gov

If you have not previously done so, please take 2 minutes to let us know what we are doing well and where we can improve. Click on the following link to complete our customer feedback form: https://co1.qualtrics.com/jfe/form/SV_4MjOgdGa0EtzndH. You may also paste the link into your browser. All results are strictly confidential.

نمبر شمار	بیانات	مکمل غیر متفق	غیر متفق	غیر جانبدار	متفق	مکمل متفق
1	میں اکثر اپنے جذبات کے متعلق شش و پنج کا شکار ہوتا ہوں					
2	اپنے احساسات کے صحیح اظہار کے لئے مناسب الفاظ تلاش کرنا میرے لیے مشکل ہوتا ہے۔					
3	میرے کچھ جسمانی حسیات ایسے ہیں جن کو ڈاکٹر بھی سمجھ نہیں پاتے۔					
4	میں اپنے احساسات کو آسانی سے بیان کر سکتی ہوں/ کر سکتا ہوں۔					
5	میں مسائل کو محض بیان کرنے کی بجائے ان کا تجزیہ کرنے کو ترجیح دیتی ہوں/ دیتا ہوں۔					
6	میں جب پریشان ہوتی/ ہوتا ہوں تو مجھے سمجھ نہیں آتی کہ میں اداس ہوں، غصے میں ہوں یا خوف زدہ ہوں۔					
7	میں اکثر اپنی جسمانی محسوسات کی وجہ سے الجھن میں پڑ جاتی /جاتا ہوں۔					
8	میں واقعات کو رونما ہونے دیتی/ دیتا ہوں بجائے اس کے کہ میں سمجھنے کی کوشش کروں کہ ایسا کیوں رونما ہوا ہے۔					
9	مجھے ایسے احساسات ہوتے ہیں جن کو میں پہچان نہیں پاتا/ پاتی۔					
10	جذبات سے آگاہ رہنا بہت ضروری ہے۔					
11	میرے لئے یہ بیان کرنا بہت مشکل ہے کہ میں لوگوں کے بارے میں کیا محسوس کرتا/ کرتی ہوں۔					
12	لوگ ہمیشہ مجھے کہتے ہیں کہ میں انہیں اپنے احساسات کے بارے میں مزید بتاؤں ۔					
13	میں نہیں جانتا کہ میرے اندر کیا چل رہا ہے۔					
14	امیں اکثر اپنے ناراض ہونے کی وجہ نہیں جانتا۔					
15	میں لوگوں سے ان کے احساسات کے متعلق بات کرنے کی نسبت ان کے معمولات کے بارے میں بات کرنا زیادہ پسند کرتا/ کرتی ہوں۔					
16	نفسیاتی ڈراموں کو دیکھنے کی بجائے میں ہلکی پھلکی تفریح والے شو زیادہ پسند کرتا ہوں۔					
17	میرے لیا اپنے انتہائی اندرونی احساسات کا اظہار مشکل ہے چاہے مخاطب میرے قریبی دوست ہی کیوں نہ ہوں۔					
18	میں خاموشی کے لمحات میں بھی میں کسی کو اپنے قریب محسوس کر سکتی/ کر سکتا ہوں۔					
19	اپنے جذبات کا تجزیہ میرے لئے اپنے مسائل کے حل میں مددگار ثابت ہوتا ہے۔					
20	فلموں یا ڈراموں میں چھپے ہوئے معنی ڈھونڈنا میرے لئے اس سے لطف اندوز ہونے میں رکاوٹ پیدا کرتا ہے۔					

Self-Talk Scale

Please indicate your gender by circling one: Female Male Other

Researchers have determined that all people talk to themselves, at least in some situations or under certain circumstances. Each of the following items concerns those times when you might "talk to yourself" or carry on an internal conversation with yourself (either silently or out loud).

Determine how true each item is for you personally by circling the appropriate number next to each item. Assume that each item begins with the statement: "I talk to myself when ..." Be sure to rate each item. Please take your time and think carefully about each item. Use the following scale to rate each item:

1	2	3	4	5
Never	**Seldom**	**Sometimes**	**Often**	**Very Often**

I TALK TO MYSELF WHEN...

1. I should have done something differently **[self-criticism]**	1 2 3 4 5
2. Something good has happened to me **[self-reinforcement]**	1 2 3 4 5
3. I need to figure out what I should do or say **[self-management]**	1 2 3 4 5
4. I'm imagining how other people respond to things I've said **[social-assessment]**	1 2 3 4 5
5. I am really happy for myself **[self-reinforcement]**	1 2 3 4 5
6. I want to analyze something that someone recently said to me **[social-assessment]**	1 2 3 4 5
7. I feel ashamed of something I've done **[self-criticism]**	1 2 3 4 5
8. I'm proud of something I've done **[self-reinforcement]**	1 2 3 4 5
9. I'm mentally exploring a possible course of action **[self-management]**	1 2 3 4 5
10. I'm really upset with myself **[self-criticism]**	1 2 3 4 5
11. I try to anticipate what someone will say and how I'll respond to him or her **[social-assessment]**	1 2 3 4 5
12. I'm giving myself instructions or directions about what I should do or say **[self-management]**	1 2 3 4 5
13. I want to reinforce myself for doing well **[self-reinforcement]**	1 2 3 4 5

14. Something bad has happened to me **[self-criticism]** 1 2 3 4 5

15. I want to remind myself of what I need to do **[self-management]** 1 2 3 4 5

16. I want to replay something that I've said to another person **[social-assessment]** 1 2 3 4 5

Note. Relevant factors appear in parentheses next to each item.

Self talk scale urdu version

The self talk scale urdu version can be requested from Sumbel Malik at given email id:

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چار اطرافی علاماتی سوالنامہ

ذیل میں مختلف شکایات اور علامات کے متعلق سوالات کی ایک فہرست ہے جو شاید آپ میں ہوں۔ ہر سوال ان شکایات کو بیان کرتا ہے جو کم از کم گزشتہ ایک ماہ سے ہوں۔ ایسی شکایات یا علامات جو ایک ماہ سے کم عرصے سے آپ میں ہیں وہ اس میں شامل نہیں ہوں گی۔ برائے مہربانی بتایئے کہ آپ نے غور کیا ہے کہ ان میں سے ہر شکایت کس حد تک کم از کم گزشتہ ایک ماہ سے آپ میں پائی گئی ہے۔ ہر بیان کے سامنے سب سے مناسب جواب پہ انتخاب کریں۔

پچھلے ایک ماہ میں آپکو یہ تکلیف ہوئی۔	نہیں	کبھی کبھار	باقاعدگی سے	اکثر	زیادہ تر
۱۔ چکر آنا، سر میں ہلکا درد ہونا	۰	۱	۲	۳	۴
۲۔ پٹھوں میں درد	۰	۱	۲	۳	۴
۳۔ بے ہوش ہونا	۰	۱	۲	۳	۴
۴۔ گردن میں درد	۰	۱	۲	۳	۴
۵۔ کمر میں درد	۰	۱	۲	۳	۴
۶۔ بہت زیادہ پسینہ آنا	۰	۱	۲	۳	۴
۷۔ دل کی دھڑکن تیز ہونا	۰	۱	۲	۳	۴
۸۔ سر درد	۰	۱	۲	۳	۴
۹۔ پیٹ پھولا ہوا/یا ہوا کا محسوس ہونا	۰	۱	۲	۳	۴
۱۰۔ دھندلی نظر یا آنکھوں کے سامنے تارے ہونا	۰	۱	۲	۳	۴
۱۱۔ سانس لینے میں تکلیف	۰	۱	۲	۳	۴
۱۲۔ پیٹ خراب ہونا/یا متلی محسوس ہونا	۰	۱	۲	۳	۴
۱۳۔ پیٹ میں درد یا معدے میں تکلیف ہونا	۰	۱	۲	۳	۴
۱۴۔ انگلیوں میں بے چینی	۰	۱	۲	۳	۴
۱۵۔ سینے میں دباؤ یا گھٹن کا محسوس ہونا	۰	۱	۲	۳	۴
۱۶۔ سینے میں درد	۰	۱	۲	۳	۴
۱۷۔ افسردگی یا اداسی	۰	۱	۲	۳	۴
۱۸۔ یک دم بغیر وجہ کے ڈر جانا	۰	۱	۲	۳	۴
۱۹۔ پریشانی	۰	۱	۲	۳	۴
۲۰۔ نیند میں خلل/خرابی	۰	۱	۲	۳	۴
۲۱۔ مبہم ڈر کا احساس	۰	۱	۲	۳	۴
۲۲۔ توانائی میں کمی یا کمزوری	۰	۱	۲	۳	۴
۲۳۔ دوسرے لوگوں کے ساتھ رچے ہوئے کا پتا	۰	۱	۲	۳	۴
۲۴۔ بے چینی اور اضطرابی کے دورے	۰	۱	۲	۳	۴
پچھلے ایک ماہ کے دوران آپکو یہ احساس ہوا					
۲۵۔ تناؤ/ٹینشن	۰	۱	۲	۳	۴
۲۶۔ جلدی یا آسانی سے بے چین ہونا	۰	۱	۲	۳	۴

	نہیں	کبھی کبھار	باقاعدگی سے	اکثر	زیادہ
۲۷۔خوفزدہ ہو جانا	۰	۱	۲	۳	۴
کیا گزشتہ ماہ کے دوران آپ نے محسوس کیا					
۲۸۔ہر چیز بے مقصد ہے	۰	۱	۲	۳	۴
۲۹۔مزید کچھ اور حاصل نہیں کر سکتے	۰	۱	۲	۳	۴
۳۰۔زندگی بے مقصد ہے	۰	۱	۲	۳	۴
۳۱۔ابھی آپکو لوگوں میں اور زندگی میں کوئی دلچسپی نہیں	۰	۱	۲	۳	۴
۳۲۔آپ اور مزید مقابلہ نہیں کر سکتے	۰	۱	۲	۳	۴
۳۳۔اچھا ہوتا اگر آپ مر جاتے	۰	۱	۲	۳	۴
۳۴۔ابھی آپ کسی اور چیز سے لطف اندوز نہیں ہو سکتے	۰	۱	۲	۳	۴
۳۵۔کہ آپکی صورتحال سے کوئی بچاؤ نہیں ہے	۰	۱	۲	۳	۴
۳۶۔آپ اور سامنا نہیں کر سکتے	۰	۱	۲	۳	۴
کیا پچھلے ماہ میں					
۳۷۔اور کچھ کرنے کو دل نہیں چاہتا	۰	۱	۲	۳	۴
۳۸۔واضح طور پر سوچنے میں دقت ہے	۰	۱	۲	۳	۴
۳۹۔سونے میں مشکل ہے	۰	۱	۲	۳	۴
۴۰۔گھر سے اکیلے باہر نکلنے سے خوف آتا ہے	۰	۱	۲	۳	۴
پچھلے ماہ میں					
۴۱۔کیا آپ آسانی سے جذباتی ہو گئے	۰	۱	۲	۳	۴
۴۲۔کیا آپ کسی چیز سے خوف زدہ ہو گئے اگر چہ جب آپکو واقعی خوف زدہ ہونے کی کوئی وجہ نہ تھی	۰	۱	۲	۳	۴
مثال کے طور پر (جانوروں سے، بلندی سے، چھوٹے/تنگ کمروں سے)					
۴۳۔آپ بس، ٹیکسی یا ٹرین میں سفر کرتے ہوئے ڈر گئے یا ڈریں	۰	۱	۲	۳	۴
۴۴۔کیا آپکو لوگوں کے ساتھ ہونے پر پریشانی محسوس ہوتی تھی یا ہوئی	۰	۱	۲	۳	۴
۴۵۔کیا آپکو کبھی محسوس ہوا کہ کوئی اجنبی شخص دھمکی دے رہا ہے	۰	۱	۲	۳	۴
۴۶۔کیا آپ نے کبھی سوچا کہ کاش میں مر جاؤں	۰	۱	۲	۳	۴
۴۷۔کیا آپ نے کسی ایسے پریشان کن واقعہ کے عارضی تصورات کیے جنکا آپ تجربہ کر چکے ہیں؟	۰	۱	۲	۳	۴
۴۸۔آپ نے کبھی اپنی بہترین کوشش کی کہ آپ اپنے پریشان کن خیالات کو ایک طرف رکھ دیں؟	۰	۱	۲	۳	۴
۴۹۔کیا آپ نے کبھی ایسی مخصوص جگہوں پر جانے سے گریز کیا جو آپکو خوفزدہ کرتی ہیں؟	۰	۱	۲	۳	۴
۵۰۔کیا آپکے ساتھ کبھی ایسا ہوا کہ کوئی کام کرنے سے پہلے وہ کام کئی دہرانا پڑا؟	۰	۱	۲	۳	۴

Clinical Global Impression (CGI)

1. **Severity of illness**
   Considering your total clinical experience with this particular population, how mentally ill is the patient at this time?
   0 = Not assessed
   1 = Normal, not at all ill
   2 = Borderline mentally ill
   3 = Mildly ill
   4 = Moderately ill
   5 = Markedly ill
   6 = Severely ill
   7 = Among the most extremely ill patients

2. **Global improvement:** Rate total improvement whether or not, in your judgement, it is due entirely to drug treatment.
   Compared to his condition at admission to the project, how much has he changed?
   0 = Not assessed
   1 = Very much improved
   2 = Much improved
   3 = Minimally improved
   4 = No change
   5 = Minimally worse
   6 = Much worse
   7 = Very much worse

3. **Efficacy index:** Rate this item on the basis of **drug effect only**.
   Select the terms which best describe the degrees of therapeutic effect and side effects and record the number in the box where the two items intersect.
   EXAMPLE: Therapeutic effect is rated as 'Moderate' and side effects are judged 'Do not significantly interfere with patient's functioning'.

Therapeutic effect		**Side effects**			
		None	*Do not significantly interfere with patient's functioning*	*Significantly interferes with patient's functioning*	*Outweighs therapeutic effect*
Marked	Vast improvement. Complete or nearly complete remission of all symptoms	01	02	03	04
Moderate	Decided improvement. Partial remission of symptoms	05	06	07	08
Minimal	Slight improvement which doesn't alter status of care of patient	09	10	11	12
Unchanged or worse		13	14	15	16

Not assessed = 00

Reproduced from Guy W, editor. ECDEU Assessment Manual for Psychopharmacology. 1976. Rockville, MD, U.S. Department of Health, Education, and Welfare

Clinical global impression scale for severity-urdu version

The clinical global impression scale for severity-urdu version can be requested from Sumbel Malik at the given email id:

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