THE EXPLANATORY RELATIONSHIP AMONG SELF - ESTEEM, PROBLEM SOLVING, WAYS OF COPING, SOCIAL SUPPORT AND SUICIDAL IDEATION OF PATIENTS WITH SCHIZOPHRENIA

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ABSTRACT

THE EXPLANATORY RELATIONSHIP AMONG SELF-ESTEEM, PROBLEM SOLVING, WAYS OF COPING, SOCIAL SUPPORT AND SUICIDAL IDEATION OF PATIENTS WITH SCHIZOPHRENIA

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This study aimed to explore the relationship among self-esteem, problem solving ability, ways of coping, social support and suicidal ideation of patients with schizophrenia and the differences between these variables according to the existence of suicide attempt of the patients with schizophrenia. In order to analyse the relationship and find out the differences among patients who did and did not attempt suicide, Rosenberg's Self Esteem Scale, Problem Solving Inventory, Turkish Ways of Coping Inventory, Multidimensional Scale of Perceived Social Support and Suicidal Ideation Scale were conducted to 90 patients with schizophrenia. The results of the study indicated that there was not a significant main effect for suicide attempt on self-esteem, problem solving,

problem focused coping, emotion focused coping, indirect coping, social support and suicidal ideation of patients with schizophrenia. The only variable that significantly predict suicidal ideation found to be self-esteem. The results of the study evaluated and implications of the study were discussed. Finally, limitations of the study and recommendations for future research were explained.

Keywords: Suicidal ideation, problem solving ability, ways of coping, self-esteem, social support.

ÖZ

ŞİZOFRENİLİ HASTALARDA BENLİK SAYGISI, PROBLEM ÇÖZME BECERİSİ, BAŞ ETME YOLLARI, SOSYAL DESTEK VE İNTİHAR DÜŞÜNCESİNİN AÇIKLAYICI İLİŞKİSİ

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Bu çalışmanın amacı; şizofrenili hastalarda benlik saygısı, problem çözme becerisi, baş etme yolları, sosyal destek ve intihar düşüncesi arasındaki ilişkiyi ve bu değişkenlerin şizofreni hastalarında intihar girişimi olup olmamasına göre nasıl değişkenlik gösterdiğini araştırmaktır. Bu ilişkiyi açıklamak ve intihar girişimi bulunan ve bulunmayan şizofren hastalarda bu değişkenler açısından ortaya çıkan farklılıkları ortaya koymak amacıyla 90 şizofrenili hastaya Rosenberg Benlik Saygısı Ölçeği, Problem Çözme Envanteri, Baş Etme Yolları Envanterinin Türkçe Formu, Çok Boyutlu Algılanan Sosyal Destek Ölçeği, İntihar Düşüncesi Ölçeği uygulanmıştır. Çalışmanın sonuçlarına göre intihar girişimi benlik saygısı, problem çözme becerisi, problem odaklı baş etme, duygusal odaklı baş etme, dolaylı baş etme, sosyal destek ve intihar düşüncesini

anlamlı olarak etkilememiştir. İntihar düşüncesini anlamlı olarak yordayan tek değişken benlik saygısı olarak bulunmuştur. Çalışmanın sonuçları değerlendirilmiş ve çıkarımları tartışılmıştır. Son olarak çalışmanın kısıtlılıkları ve gelecekte yapılacak olan çalışmalar için öneriler açıklanmıştır.

Anahtar Kelimeler: İntihar düşüncesi, problem çözme becerisi, baş etme yolları, benlik saygısı, sosyal destek.

… Dedicated to my family

for their unconditional love and support…

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CHAPTER 1

INTRODUCTION

1.1. Background Information on the Topic of Study

Suicide is found to be the leading cause of premature death among people with schizophrenia. Comparison of general population and patients with schizophrenia shows that people with schizophrenia hold an 8.5 fold greater risk of suicide. Furthermore, at some point in their lives, between 40 – 50 % of patients with schizophrenia report suicidal ideation, defined as "thoughts about suicide, which may be as detailed as a formulated plan, without the suicidal act itself". Between 20 – 50 % of patients with schizophrenia have a history of suicide attempts and 4 – 13 % eventually commit suicide (Montross, Zisook, & Kasckow, 2005). Suicide risk and attempt in psychotic patients is a significant and serious clinical and social problem. Suicide ideation and attempts are common with over half of all such patients having a history of attempted suicide or having significant suicidal ideation at any one time (Fenton, 2000).

Suicidal ideation and planning are important steps that lead to an attempt of self-harm that may result in death (Kontaxakis, Hovaki – Kontaxaki, Margariti, Stamouli & Kollia, 2004) with previous unsuccessful suicide attempts increasing risk for later successful suicide (Hawton, Sutton, Haw, Sinclair, & Deeks, 2005). Considerable research has been carried out in identifying risk

factors and characteristics of suicidal risk in patients with schizophrenia such as demographic and comorbid factors (e.g. age, gender, depression, substance abuse). These factors are too general to have clinically meaningful predictive value (Westermeyer, Harrow, & Marengo, 1991).

Suicide among patients with schizophrenia arises as an important area to be investigated for the clinicians who work with patients with schizophrenia. It is important to be aware of the suicide risk of these patients because while treating them clinicians can face with the risk of suicide. If clinicians do not pay attention about the suicide risk of patients with schizophrenia, these patients can harm themselves although they are thought to be in the treatment phase (Tatarelli, Pompili, & Girardi, 2007).

Being aware of the possibility of suicidal ideation of a schizophrenic patient, it is important to assess the patient's suicidality in the clinical interview (Tatarelli et al., 2007). Lindenmayer (2003) reported that while assessing suicidality of a schizophrenic patient in the clinical interview, it is cruical to assess both trait-dependent risk factors and state-dependent risk factors. From this point of view, state dependent risk factors of a schizophrenic patient can be listed as: clinical depression, low self-esteem, substance abuse, hopelessness, social isolation, lack of truth toward therapy, psychotic symptoms, loss of faith in treatment, undertreatment or non-compliance with therapy and negative attitude towards medication, agitation and impulsivity. At the same time, trait dependent risk factors of a schizophrenic patient can be listed as: young age, male sex, high socioeconomic family status, low family support, high

intelligence, high premorbid level of education, unmarried status, reduced self – esteem, enhanced awareness of illness and long duration of illness.

According to a research conducted by Montross, Zisook and Kasckow (2005) to highlight the risk factors of suicide among patients with schizophrenia; it was found that male gender, young age, comorbid depression, a severe level of illness, previous suicide attempts, low social support and a recent diagnosis or hospital discharge were risk factors. Protective factors of suicide among patients with schizophrenia were found to be the presence of strong social support including familial relationships, healthy connections with service providers and religiosity. These risk factors and protective factors that were mentioned in the study of Montross, Zisook and Kasckow (2005) help clinicians to be aware of the possibility of suicidal ideation of patients with schizophrenia and help them to find suitable ways of preventing them from the suicidal behaviour such as Kontaxakis, Hovaki – Kontaxaki, Margariti, Stamouli and Kollia's (2004) study. In their study, they reported that preventing patients with schizophrenia' suicidal behaviour should include helping them to improve their self-esteem and reducing depression.

Psychotic symptoms, especially auditory hallucinations such as being shouted at by voices are found to be particularly disturbing to patients with schizophrenia and the patients who experienced the hallucinations were found to be more hopeless on Beck's hopelesseness scale and lonelier with lower self-esteem than the patients who do not experience these kinds of hallucinations (Gallagher, Dinan, Sheehy, & Baker, 1995). Because of having greater job mobility, the hallucinators with the greater likelihood of unemployement in the

combination with social isolation and low self-esteem contributed to the greater level of hopelessness and suicidal risk (Gallagher et. al., 1995). Moreover, self-esteem was found to be a powerful internal protective factor against suicide behaviors. Resiliency to suicidal behaviors was found to be associated with increased self-esteem (Sharaf, Thompson, & Walsh, 2009).

Falloon, Barbieri, Boggian and Lamonaca (2007) conducted a study which included a four-phase programme of 24 weekly or bi-weekly lessons in small groups begins with patient's pratical everyday problems before moving to gradually more complex and emotionally charged interpersonal, personal and crisis issues. In this study, they showed that deficit in problem solving ability is also an important predisposing factor for the development of suicidal behavior for patients with schizophrenia. Research findings prove that people who have effective problem solving skills have high self-esteem (Arenofsky, 2001; D' Zurilla & Nezu, 1999; D' Zurilla, Chang, & Sanna, 2003; McCabe, Blankstein, & Mills, 1999), better mental health (Heppner & Anderson, 1985), low anxiety (Belzer, D'Zurilla, & Maydeu - Olivares, 2002), more self confidence in decision making (Deniz, 2004), are better at coping with stress (D' Zurilla & Chang, 1995) and have high life satisfaction (Bulut, 2007; D'Zurilla & Nezu, 1999).

It is known that patients with schizophrenia have a wide range of deficits which impair their ability to resolve their problems in daily life as well as coping with major life stresses and consequently making satisfying progress towards their desired personal life goals. Moreover, external resources such as availability of social support especially from the family was found to be a

powerful external protective factor against suicide behaviors and argued to reduce the risk for suicidal behavior (Sharaf et. al., 2009). Moreover, higher levels of family cohesion and family support shown to be associated with lower levels of suicidal ideation (Harris & Molock, 2000). Social support including strong social connections with family, friends, or mental health providers was found to decrease suicidality (Cotton, Drake, & Gates, 1985).

If all of these variables such as self-esteem, problem solving, ways of coping and social support combine, they affect sucidality of patients with schizophrenia. For instance, in a recent study of Fidan, Ceyhun and Kırpınar (2009) they proved that when the coping mechanisms among stressful events are ineffective and not problem solving oriented, also unsufficient support of family to the patient added in this schema, suicide attitude may pass through from thought to action easily. As mentioned before, there is extensive literature on the effect of internal and external variables on suicide and in this study the effect of these variables on suicidal ideation of patients with schizophrenia will tried to be explained.

1.2. Aims of the Study

The first aim of this study is to examine the differences between patients with schizophrenia who attempted and did not attempt suicide in terms of self-esteem, problem solving ability, problem focused coping, emotion focused coping, indirect coping, social support and suicidal ideation.

A second aim of the study is to examine how self-esteem, problem solving ability, problem focused coping, emotion focused coping, indirect coping, social support predict suicidal ideation of patients with schizophrenia.

1.3. Importance of the Study

To be able to develop effective psychological treatments, a better understanding is necessary to understand the psychological processes underlying suicidal behaviour. There is a paucity of theoretically driven, clearly defined, empirically testable models of psychological mechanisms which can explain suicide in general (O'Connor & Sheehy, 2001) and in schizophrenia in particular (Bolton, Gooding, Kapur, Barrowclough & Tarrier, 2007). The absence of testable theoretical models of suicide behaviour and suicide risk interferes with both the understanding of suicide and the progression of preventative interventions. Indeed, Tarrier, Haddock, Lewis, Drake, Gregg & the Socrates Trial Group (2006) have shown that conventional cognitive behavioural therapy for psychosis does not significantly reduce suicide behaviour of schizophrenic patients. Thus the development of targeted cognitive behavioural suicide prevention interventions, which are well-grounded theoretically, are a priority.

It is fundamental to conduct this study because it will be an integrative study that investigates both risk and protective factors of suicidal ideation for patients with schizophrenia such as self- esteem, problem solving ability, coping mechanisms and social support. Because of having a great risk of suicidal behavior, research in this area is very important to help to keep these patients alive. While trying to decrease suicidal risk, it is influential to be aware of the relationship between risk and protective factors so that it will be able to develop integrant treatment methods.

1.4. Implications of the Study

It is clear that patients with schizophrenia experience a lot of problems in their daily lives such as personal and social problems. While struggling with these daily life problems, it is important to figure out how they cope with the stress. Attaining this knowledge, patients with schizophrenia' self-esteem may be increased with some special programs that will be developed by clinicians and they may help patients with schizophrenia learn to benefit from the social support which they can take from their families and friends. Consequently, the suicide risk of patients with schizophrenia may be decreased. With the help of the results of this research, it will come out that by knowing the relations of the variables in this study, clinicians may develop treatment programs that will include precautions about the probability of schizophrenic patient's suicidal risk. By drawing every schizophrenic patient's own case conceptualization, these variables will lead the clinician to be aware of the suicide risk of these patients.

CHAPTER 2

REVIEW OF THE LITERATURE

In this part, literature regarding schizophrenia, suicide and related variables such as self-esteem, problem solving ability, ways of coping and social support reviewed in detail. Definitions, characteristics and relations between these variables focused on.

2.1. Schizophrenia

Schizophrenia is a serious mental illness which is characterized by positive, negative, and cognitive symptoms that affect almost all aspects of mental activity, including perception, attention, memory and emotion (Lindenmayer & Khan, 2006). Schizophrenia's prevalence has been estimated at 0.5 to 1.5 percent in the general population (APA, 2000). Rates of transmission for first – degree relatives of a schizophrenic patient have been reported to be approximately 10 to 18 percent and for second – degree relatives this rate decreases to 2 to 3 percent (Maxmen & Ward, 1995).

The disorder usually begins in late adolescence and early adulthood, furthermore the median age at onset is about 23 years for men and 28 years for women. However, onset is rare before 16 years and uncommon after 50 years. The disorder can have a relatively acute onset (over the course of 2 – 3 weeks) also an insidious one (Lindenmayer & Khan, 2006). Most of the patients experience a prodromal phase before the first episode during which certain signs and symptoms will be present although the patient does not fulfill all the criteria of the disorder (McGorry, Edwards & Mihalopoulos, 1996).

2.1.1 Diagnosis of Schizophrenia

Emil Kraepelin first assigned the term “dementia praecox” to describe a population of patients who exhibited evidence of delusions and hallucinations in the absence of brain damage. He used the term “dementia” as the lifelong course of the condition that leads to impair in functioning and “praecox” as the onset of symptoms, typically in the late teens or early twenties (Maxmen & Ward, 1995). Kraepelin introduced a simple difference between conditions that characterized by mental deterioration such as the catatonia and hebephrenia, which with paranoid deterioration became subdivisions of the desease, and more periodic forms of mania and melancholia. Kraepelin’s follow – up data suggested a mental state profile recognizable at the time of presentation and a “generally regular and progressive” course. The chief symptoms were auditory and tactile hallucinations, delusions, thought disorder, incoherence, blunted affect, negativism, stereotypes and lack of insight (Wing & Agrawal, 2003).

The symptoms of schizophrenia were expressed as psychological rather than physical abnormalities, with catatonic symptoms, for example, being described in terms of disorders of the will. Paranoia was regarded as a separate disorder, characterized by incorrigible delusions often circumscribed but non-deteriorating course (Wing & Agrawal, 2003). Later, Kraepelin (as cited in Wing & Agrawal, 2003) eventually came to agree that dementia praecox and manic – depressive psychosis could coexist and a unitary psychosis could not be ruled out.

As Maxmen and Ward (1995) reported that Eugen Bleuler introduced the term "schizophrenia" to describe the disorder which is referred to disorganization among thoughts, emotions and behaviours that manifested in the fundamental symptoms of the disorder. He retained the separation from manic – depressive psychosis while pointing out that affective symptom could coexist. Bleuler's concept was based on an assumption that the manifold external clinical manifestations masked an inner clinically unity that 'clearly marked off from other types of disease'.

Moreover, he argued that 'each case nevertheless reveals some significant residual symptoms common to all'. The end result was identical, 'not quantitatively but qualitatively' (Wing & Agrawal, 2003). Bleuler's primary symptom was cognitive: a form of 'thought disorder', loosening of the associations. It provided links to Kraepelin's 'dementia' and to the biological origins of the disease, but also, through 'psychic complexes', to disorders of affectivity, ambivalence, autism, attention and will. These essential symptoms could be observed in every case. Catatonia, delusions, hallucinations and behavioral problems he regarded as accessory psychological reactions, not caused by the biological process or processes (Wing & Agrawal, 2003).

To make a diagnosis of schizophrenia, DSM – IV – TR includes some specific conditions (APA, 2000). An individual must have two or more characteristic symptoms "present for a significant portion of time during a one-month period (or less if successfully treated)" (APA, p.312). These "characteristic symptoms" form Criterion A of the DSM – IV – TR criteria for

schizophrenia and these symptoms are the psychotic symptoms of the disorder which are grouped into two categories.

First category is the positive symptoms that refer to delusions, or bizarre beliefs of an often paranoid nature, hallucinations, most often auditory but also visual and tactile, disorganized speech, and "grossly disorganized or catatonic behaviour" (p. 312) (APA, 2000). Second category includes negative symptoms describe the absence of certain features of normative behavior. Negative symptoms also include affective flattening, or absence of expressed emotion, inappropriate affect, or expressed emotion that is inappropriate to a given stimulus, alogia (poverty of speech), and avolition (reduction in conducting basic activities of daily living (First & Tasman, 2004; Maxmen & Ward, 1995).

In addition to the characteristic symptoms of schizophrenia that mentioned above, an individual must evidence significantly impaired functioning either socially or occupationally, and evidence of the disorder must be present for at least six months. DSM – IV – TR includes that symptoms can not be better explained by a mood disorder, substance abuse, or the effects of a general medical condition (APA, 2000). According to DSM – IV – TR, diagnostic criteria for schizophrenia consisted of six main parts which were characteristic symptoms, social / occupational dysfunction, duration, schizoaffective and mood disorder exclusion, substance / general medical condition exclusion and relationship to a pervasive developmental disorder. These parts were given in Appendix A (see p. 84).

2.1.2 Subtypes of Schizophrenia

The diagnosis of schizophrenia is divided into subtypes of Paranoid, Disorganized, Catatonic, Residual and Undifferentiated (APA, 2000). The paranoid subtype is characterized by delusions of a paranoid nature or persistent auditory hallucinations. These delusions may be of a grandiose nature such as patients believe they are gods or have supernatural abilities and may be of a persecutory nature that patients believe other are plotting to harm them, that their thoughts and actions are under the control of external forces, or that their thoughts can be heard or monitored by others. This subtype generally does not include the degree of disorganization of speech / behavior that seen in other subtypes. Patients are tense, suspicious, and guarded. Additionally, anxiety, anger, aloofness and argumentativeness come across as associated futures. Finally, DSM – IV – TR diagnostic criteria for paranoid schizophrenia include a preoccupation with one or more paranoid delusions, which may be systematized, or frequent auditory hallucinations along with no prominent symptoms of disorganized speech, disorganized behavior, or flat / inappropriate affect (Lindenmayer & Khan, 2006).

The disorganized or hebephrenic subtype is characterized by disorganized behavior, speech and flat or inappropriate affect (APA, 2000). Incoherence, loose associations of thought, tangential or circumstantial thinking, suggesting the patient is flooded with a multitude of ideas can be given for the examples of disorganized speech. This disorganized (hebephrenic) behavior can lead to significant interference with activities of daily living (Lindenmayer & Khan, 2006).

The catatonic subtype of schizophrenia is characterized by disturbed motoric symptoms and less common that can be given examples such as immobility, excessive motor activity that typically lacks any goal-direction, mutism, peculiar voluntary movements, negativism, in which a rigid posture is maintained against attempts at moving the individual, echolalia in which an individual mimics gestures or movements of another person (APA, 2000). DSM – IV – TR diagnosis also includes two or more of the following behaviors: stupor (marked reduction or suspended sensibility) or mutism, excitement not influenced by external stimuli, bizarre postures, meaningless resistance toward instructions or attempts to be moved, rigidity, waxy flexibility, and echolalia or echopraxia (Lindenmayer & Khan, 2006).

Residual type of schizophrenia is a state in which the patient is not currently suffering from severe delusions, hallucinations or disorganized speech and behavior but lacks motivation and interest in day-to-day living. DSM – IV – TR diagnostic criteria include an absence of prominent delusions, hallucinations, disorganized speech and grossly disorganized or catatonic behavior. And also specifies the existence of negative symptoms or two or more of the symptoms specified in criterion A of DSM – IV- TR's diagnostic criteria for schizophrenia, present in an attenuated form (e.g., odd beliefs) (APA, 2000).

The undifferentiated subtype of schizophrenia includes patients that exhibit characteristic symptoms that are required for a diagnosis of schizophrenia, but these symptoms do not meet criteria for a paranoid, disorganized, catatonic or residual subtype (APA, 2000). In another way, it is an incorporation of a combination of symptoms from other subtypes. After

reviewing the literature on schizophrenia, literature regarding suicide will take place in this section. First of all definition of suicide will be given than suicide among patients with schizophrenia, risk factors of suicide among patients with schizophrenia, assessment of suicidal ideation of patients with schizophrenia in the clinical interview and prevention of suicide among patients with schizophrenia will take place respectively.

2.2 Suicide

Generally the term suicide can be defined as the act of deliberately killing oneself (WHO, 2010). Suicide is also defined as a person's giving an end to his/her own life due to emotional, psychological, or social effects (NCHS, 1991). There are many reasons leading a person to suicide. Suicidal behavior can be distinguished by being either a discrete event or a continuous process that is repeatable from suicidal act which may mean a more goal-directed event (Silverman, Bermvan, Sanddal, O'Carroll & Joiner, 2007).

Basing the definitions on the presence or absence of suicidal intent, the suicidal behavior can be explained as a form of coping with or responding to different contexts (internal and external) and suicide-related ideation. Suicidal behavior can also be explained as an example of weighing options, suicide threat as a form of a coping communication to retrieve control or attachment. At the same time self-harm can be defined as an inadequate coping response to obtain a time out or to reset instability between stressors and resources. Suicide is also defined as a final solution to gain release or escape (often from psychological pain) (Silverman et. al., 2007).

Suicide is found to be the leading cause of premature death among patients with schizophrenia (Allebeck & Wistedt, 1986; Caldwell & Gottesman, 1990). The comparison with the general population indicates that patients with schizophrenia hold an 8.5 fold greater risk of suicide (Harris & Barraclough, 1997). Furthermore, at some point in their lives, between 40 – 50 % of patients with schizophrenia report suicidal ideation and it was also found that 20 – 50 % of patients with schizophrenia have a history of suicide attempts (Breier, Schreiber, Dyer & Pickar, 1991; Roy, 1986) and 4 – 13 % eventually commit suicide (Montross, Zisook, & Kasckow, 2005). Suicide among patients with schizophrenia is an important issue to be investigated for the clinicians who work with patients with schizophrenia (Tatarelli, Pompili, & Girardi, 2007). If clinicians do not pay attention about this subject, patients can harm themselves although they are thought to be in the treatment phase (Tatarelli et al., 2007).

2.2.1 Risk Factors of Suicide among Patients with Schizophrenia

According to the research made by Montross, Zisook and Kasckow (2005) to highlight the risk factors of suicide among patients with schizophrenia; it was found that male gender, young age, comorbid depression, a severe level of illness, previous suicide attempts, low social support and a recent diagnosis or hospital discharge were risk factors. They also reported that risk factors of suicide among patients with schizophrenia can be divided as two parts basing on the research made to highlight these risk factors: consistently supported risk factors and less consistently supported risk factors. Consistently supported risk factors were found to be more significant than less consistently supported risk factors in predicting suicide of patients with schizophrenia.

Consistently supported risk factor was found to be presence of previous attempts of suicide. This factor undermines gathering full psychiatric histories from patients with schizophrenia who were at high risk of suicide, to predict future attempts effectively (Montross et. al., 2005). Another consistently risk factor was found to be severity of illness that for more severe cases of schizophrenia, suicide risk was increased and severity of illness could be also explained by numerous relapses, younger ages of onset, or higher doses of antipsychotic medication (Caldwell & Gottesman 1992). The other consistently supported risk factor was found to be lack of social support. Social support strongly mediated levels of suicidal ideation of psychiatric patients such as patients with schizophrenia (Pinikahana, Happell, & Keks, 2003).

Siris (2001) reported that comorbidity was also a consistently risk factor because comorbid depressive symptoms were established as a common risk factor for suicide among patients with schizophrenia. Another consistent risk factor was the timing of the disorder that the majority of patients with schizophrenia commit suicide in the first 10 years of illness onset (Roy, 1982) and approximately 50% of suicides occur within the first two years (Tandon & Jibson, 2003). Patients with schizophrenia were also at higher risk to commit suicide within the first few weeks or months after a hospital discharge (Rossau & Mortensen, 1997). In the study of Cannon, Buckley and Larkin (1991) it was found that 80 % of the patients with schizophrenia who committed suicide do so while housed in the hospital or within six months of discharge. The last consistent risk factor was found to be demographic factors such as gender and age that mentioned before. In this case, patients with schizophrenia who were

male found to be more likely to commit suicide (Caldwell & Gottesman, 1990) and mean age for suicide was approximately 33 years (Roy, 1992).

Less consistent risk factors for suicide among patients with schizophrenia included subtype of schizophrenia. Paranoid subtype was found to have higher risk of suicide (Fenton, McGlashan, Victor, & Blyler, 1997). The other less consistent risk factor for suicide among patients with schizophrenia was command hallucinations. However there was not an emprically connection between suicide risk and command hallucinations. On the other hand command hallucinations remained clinically important for patients with schizophrenia (Breier & Astrachan, 1984). Both low and high levels of premorbid functioning appeared to increase the suicide risk of patients with schizophrenia so they were reported to be less consistently supported risk factors by Raymont (2001). Hopelessness was reported as another less consistently risk factor for patients with schizophrenia, especially if depression was added to this schema it appeared to increase the suicide risk of patients with schizophrenia (Beck, Steer, Kovacs & Garrison, 1985). History of violence such as past impulsivity, aggression, and violence could signal suicidal potential for patients with schizophrenia (Cheng, Leung, Lo & Lam (1990). Lastly, tragic losses were less consistently supported risk factors of suicide for patients with schizophrenia such as recent dire losses related to despair and heightened risk of suicide for patients with schizophrenia (Cotton, Drake & Gates, 1985).

Based up on the review of Pompili, Mancinelli, Ruberto, Kotzalidis, Girardi and Tatarelli (2005) risk factors for suicide in schizophrenic outpatients and inpatients can be outlined as seen in Table 1 (see p. 18).

Table 1. Risk factors for suicide in schizophrenic patients

Being white, Young, Male (often under 30 years), Unmarried, High premorbid expectations
Gradual onset of illness, Social isolation, Fear of further mental deterioration,
Excessive treatment dependency, Loss of faith in treatment, Family stress or instability,
Limited external support, Recent loss or rejection, Hopelessness, Deteriorating health,
Paranoid schizophrenia, Substance abuse, Deliberate self-harm, Unemployement,
Chronicity of illness with numerous exacerbation, Family history of suicide,
Pre-admission and intra-admission suicidal attempts, Agitation and impulsivity,
Fluctuating suicidal ideation, Extrapiramidal symptoms caused by medications,
Prescription of a greater number of neuroleptic and antidepressants,
Increased length of stay, Increased number of ward changes,
Discharge planning and period following discharge, Period of approved leave,
Apparent improvement, Past and present history of depression,
Frequent relapses and rehospitalization, Living alone before the past admission,
Longer hospitalization periods than other psychiatric inpatients,
Negative attitudes towards medication and reduced compliance with therapy,
Charged feelings about their illness and hospital admission,
Early signs of a disturbed psychosocial adjustment, Dependence and incapability of working,
Difficult relationship with staff and difficult acclimation in ward environment
Hospitalization close to crucial sites (big roads, railway stations, rivers, etc)

Symptoms of schizophrenia were also found to play a fundamental role for suicide risk of patients with schizophrenia. Negative symptoms such as paucity of energy, emotional numbing, social and emotional withdrawal were found to decrease suicidal risk of patients with schizophrenia. Suicidal risk of patients with schizophrenia was found to be increased with presence of positive symptoms of schizophrenia such as hallucinations (auditory and / or visual) and delusions (Kaplan & Harrow, 1999). Fenton, Mc Glashan and Blyler (1997) reported that being diagnosed with paranoid subtype of schizophrenia with intensive positive symptoms increased suicide risk of patients with schizophrenia.

In a study of Sevinçok and Uslu (2001) that conducted with Turkish patients with schizophrenia it was demonstrated that positive symptoms were related with suicidal ideation and suicide attempt of patients with schizophrenia. This relation might be explained by difficulty of coping with positive symptoms and this might cause depression for this population of patients. In a study which was conducted by schizophrenic and schizophreniform patients, it was proved that as the frequency of positive symptoms of schizophrenia increases, depression and anxiety increases as well (Emsley, Oosthuizen & Joubert, 1999).

Based on a meta-analysis by Alaräisänen, Heikkinen, Kianickova, Miettunen, Räsänen and Isohanni (2007) that includes the review of the literature on risk factors for suicide in schizophrenia; they reported five pathways which are partly hypothetical and overlapping. First pathways is comorbid depression pathway in which comorbid depression is such a widely reported and acknowledged risk factor for suicide in schizophrenia. Second

pathway is difficult illness pathway which includes a group of patients with a chronic course of illness and many relapses, exacerbations whom lose their hope progressively. Third pathway is impulsiveness pathway which includes patients (mostly young males) with impulsivity, dysphoric affect and substance abuse are at elevated risk of suicide. In this pathway suicides can also be due to auditory or other hallucinations or some other psychotic reasons. Fourth pathway is high premorbid function pathway which includes a group of mainly young patients whose premorbid functioning and intellectual capacity is above average. In this high premorbid functioning group of patients psychosis may mean a dramatic drop of cognitive and general capacity that also destroys their high expectations about their future. In this group of intelligent people who are suffering from psychosis may also be able to hide their suicidal ideas and their psychotic symptoms, leading to underestimation of their suicidality. Also their insight is probably better than other patients' right after the first psychotic episode. This might also elevate their suicide risk by producing stigma and depression. Last pathway is failure of treatment pathway that includes lack of psychosocial support, inadequate pharmacological therapy, failure to detect suicidality, unmet need of a contact person, extrapyramidal side effects/akathisia. Also patient's disappointment with treatment received is added in this schema (Alaräisänen et. al., 2007).

Besides, being aware of the possibility of suicidal ideation of patients with schizophrenia, it is considered to be important to assess the patient's suicidality in the clinical interview (Tatarelli et al., 2007). Lindenmayer (2003) reported that while assessing suicidality of a schizophrenic patient in the clinical

interview, it is cruical to assess both trait-dependent risk factors and state-dependent risk factors. According to Lindenmayer (2003), state dependent risk factors of a patient with schizophrenia can be listed as: clinical depression, low self-esteem, substance abuse, hopelessness, social isolation, lack of truth toward therapy, psychotic symptoms, loss of faith in treatment, undertreatment or non compliance with therapy and negative attitude towards medication, agitation and impulsivity. Trait dependent risk factors of a patient with schizophrenia can be listed as: young age, male sex, high socioeconomic family status, low family support, high intelligence, high premorbid level of education, unmarried status, reduced self-esteem, enhanced awareness of illness and long duration of illness. So, in the clinical interview whole of these areas should be asked and later on in the treatment phase, these issues are necessary to be worked with the patient.

2.2.2 Prevention of Suicide among Patients with Schizophrenia

It is necessary to identify the elements of protective factors of suicide among patients with schizophrenia. By the help of the identification of the protective factors, clinicians would not only minimize patients' risk factors but also bolster modifiable protective factors. By this way, it will be possible to create more comprehensive approaches to prevent suicide (Montross et. al., 2005).

Being a one of the major challenges in treating schizophrenia, strategies for prevention of suicide should include both pharmacological and psychosocial methods. Medication is essential when preventing suicides of schizophrenia patients and if schizophrenia patients do not use antipsychotic medication the risk for suicide becomes very high compared to patients using medication

(Tiihonen, Walhbeck, & Lonnqvist, 2006). Mann et.al., (2005) reviewed the literature and reported a number of strategies that are effective for prevention of suicide for psychiatric patients such as education and awareness programs for the general public, primary care providers and other gatekeepers, screening for individuals at high risk, and providing treatment using pharmacotherapy and psychotherapy. The prevention of suicide in schizophrenia should include providing proper information for the family members of the schizophrenic patient in the hope of reducing their hostility toward the patient.

In addition, continuity of care after suicide attempts, restricting access to lethal methods and media reporting guidelines are important strategies to prevent suicide. Because of being such a strong predictor of future suicide, preventing and reducing attempted suicide in schizophrenia may have a positive long-term impact (Mann et.al., 2005). Lastly, presence of strong social support including familial relationships, healthy connections with service providers and religiosity were found to be the protective factors of suicide among patients with schizophrenia by the research in this area (Montross et. al., 2005).

2.3 Some Variables Related to Suicide among Patients with Schizophrenia

In this section, some variables such as self-esteem, problem solving ability, ways of coping and social support related to suicidal risk of patients with schizophrenia were reviewed in accordance with the literature because these variables took a crucial place while explaining the suicidal ideation of patients with schizophrenia in the present study.

2.3.1 Self-Esteem

In this section, first of all definition of self-esteem will be explained. Then the relation between suicide and self-esteem of patients with schizophrenia will be given.

2.3.1.1 Definition of Self-esteem

Self-esteem is defined in terms of a stable sense of personal worth or worthiness by Rosenberg (1965). It is the positive or negative belief about one's self (Rosenberg, 1979). One sees himself/ herself as positive and worthwhile while being aware of his/ her faults when his/ her self- esteem is high. When self-esteem is low, one sees himself/ herself as a deficient person regarding his/ her weaknesses. People with low self- esteem are not sure of their behaviors and beliefs (Nir & Neumann, 1995).

Self-esteem is also a process of self-description (Laing, 1993) and is a positive or negative orientation toward oneself; an overall evaluation of one's worth or value (Rosenberg, 1965). Yörükoğlu (1986) suggests that feeling confident of one's own worth, one's ability to display knowledge and skills, to achieve success and acceptance, to have loving relationships with others, as well as the accepting and being happy with one's physical traits are important factors in the formation and development of self-esteem. According to Baumeister, Tice and Hutton (1989) individuals who have high self-esteem trust themselves to take risks to achieve their aims despite the possibility of failure and become more ambitious. On the contrary, individuals with low self-esteem tend to protect themselves, fearing rejection in the pursuit of success and prestige, avoiding risk, and making situations difficult for themselves (Tice, 1993).

It was shown by Torucu (1990) and Aksoy (1992) that some demographic variables have an important role in changing severity of self-esteem of the individual. Socio-economic status, maternal and paternal education level affected the severity of self-esteem of the adolescents. If the socio-economic status, maternal and paternal education level increase, self-esteem of the individuals increases too.

2.3.1.2 Relation of Suicide and Self -Esteem of Patients with Schizophrenia

By analyzing the relationship between suicide and self-esteem, research reflect that patients who attempt suicide and have a history of suicidal ideation were found to have low self-esteem than those who did not (Palmer, 2004; Tarrier et al., 2004). Gallagher, Dinan, Sheehy and Baker (1995) found that psychotic symptoms, especially auditory hallucinations such as being shouted at by voices are found to be particularly disturbing to patients with schizophrenia and the patients who experienced the hallucinations were found to be more hopeless on Beck's hopelesseness scale and more lonely with lower self-esteem than the patients who do not experience the hallucinations. Because of having greater job mobility, the hallucinators with the greater likelihood of unemployement in the combination with social isolation and low self-esteem contributed to the greater level of hopelessness and suicidal risk (Gallagher, Dinan, Sheehy, & Baker, 1995). By the results of the research mentioned above, self-esteem becomes a cruical area of the studies which investigate the suicidal ideation of patients with schizophrenia. Moreover self-esteem was found to be a powerful internal protective factor against suicide behaviors and resiliency to

suicidal behaviors was found to be associated with increased self-esteem (Sharaf, Thompson, & Walsh, 2009).

Dieserud, Roysamb, Ekeberg and Kraft (2001) reported that in a sample which included suicide attempters, path analysis indicated two routes to suicide attempts. The first one began with low self-esteem, loneliness, and loss and added in later steps, depression, hopelessness, and suicide ideation. The second pathway also started with low self-esteem and low self-efficacy but the pathway to suicide attempt was moderated by both a negative problem solving appraisal and poor problem-solving skills. This implies that it is not the perception of blocks to problem solving or lack of control which may be one of the primary factors leading to suicide; rather, it may be the extent to which individuals feel they are unable to overcome blocks and to gain control. Thus, low self-esteem may be incorporated into the suicide schema and indicate low personal agency and solution generating capacity. However, Johnson, Gooding and Tarrier (2008) reported that in some individuals, the exposure to low self-worth cues may correspondingly activate the suicide schema and bring suicide as an escape plan.

2.3.2 Problem Solving Ability

Problem can be defined as "any life situation or task that demands a response for adaptive or effective functioning" (D' Zurilla & Goldfried, 1971). Situations become as a problem for individuals when they face an obstacle in reaching their objective or when these situations disturb them (Bingham, 1998; D' Zurilla & Nezu, 1982; Morgan, 1999). Problem solving can be defined as the best way to overcome these obstacles in such situations (Hamarta, 2009).

Problem solving is the ability of identifying and defining problems, finding and generating solutions, using the solutions and at the end to see whether they are effective or not (Reinecke, DuBois, & Schultz, 2001). It consists of three parts. These are: not ignoring the problem and believing to dissolve, searching and finding the cause, doing something about the problem (Ross & Minowsky, 1989).

People response to distressing events by using problem solving skills (Mearns, 1991). If people use and / or plans problem solving strategies, more positive outcomes out of distressing events are possible (Folkman & Lazarus, 1988). Nezu and Ronan (1985) suggest that deficits in problem solving skills are associated with a variety of psychological problems including risk for depression. Problem solving skills are important in better understanding how people cope with stressful situations.

Although people experience similar conditions, they may show different reactions. It is possible that they used poor coping techniques during a bad period of time. People with low problem solving skills are less likely to develop effective solutions when they encounter stressful situations, which may result in feelings of pessimism and hopelessness (Reinecke, DuBois, & Schultz, 1991; Schotte & Clum, 1987). People who have deficits in problem solving skills are also cognitively unprepared to develop effective alternative solutions for adaptive coping under stressful life situations (Clum, Patsiokas, & Luscomb, 1979). When people are faced with high stress, they may become more careless in considering their options, or they may be more negative and critical in the way they view situations, which may lead to greater emotional distress.

Exposure to high levels of stress is likely to deteriorate problem-solving skills (Chang, 2002; D' Zurilla, 1988).

The role for problem-solving ability has been implicated and many studies have related poor problem solving to suicidality (Pollock & Williams, 2001). Poor problem-solving ability may be due to an over-general retrieval style from autobiographical memory. Williams and Pollock describe this as a mnemonic lock, where a person faced with a problem fails to access their past in order to generate possible solutions.

The role of autobiographical memory is further supported by associations between over-generality in memory and number of previous suicide attempts and episodes of depression amongst depressed women (Kuyken & Brewin, 1995). Over-general autobiographical memory has also been linked to an inability to imagine the future in a specific way. Thus, an inability to access past problem-solving capabilities to resolve current problems and an inability to imagine future resolutions may increase feelings of entrapment and hopelessness (Williams, Ellis, Tyers, Healy, Rose & MacLeod, 1996).

Research findings prove that people who have effective problem solving skills have high self-esteem (Arenofsky, 2001) and also better mental health (Heppner & Anderson, 1985). Research conducted about problem solving skills points out that people whose problem solving skills are effective, experiences low anxiety (Belzer, D'Zurilla, & Maydeu - Olivares, 2002) and they feel more self confidence in decision making (Deniz, 2004). People who could use their problem solving skills effectively were found to be better at coping with stress

(D' Zurilla & Chang, 1995) and have high life satisfaction compared to people whose problem solving skills were uneffective (Bulut, 2007).

In the study of Chan, Chen, Cheung, Cheung (2004), they reported that problem solving capacity of the patients with schizophrenia markedly worse than normal controls. Their problem solving capacity was very similar to that of the patients with traumatic brain injury. Although patients with schizophrenia' problem solving capacity was found to be worse than normal controls, it was found to be possible to make a progress through the problem solving capacity by a social problem solving training.

In the study of Üçok, Çakır, Duman, Dişçigil, Kandemir and Atlı (2006) they reported that patients with schizophrenia who assigned to a social problem solving training group successfully progressed through the problem solving tasks compared to the control group. This improvement was independent from duration or severity of illness. They did not found any difference in terms of the type of antipsychotic medication used. All of the patients with schizophrenia on different antipsychotics showed improvement in training group.

Research show that deficit in problem solving ability is also an important predisposing factor for the development of suicidal behavior for patients with schizophrenia (Falloon, Barbieri, Boggian & Lamonaca, 2007). In addition, it is known that patients with schizophrenia have a wide range of deficits which impair their ability to resolve their problems in daily life. Moreover, they experience deficits in coping with major life stresses and consequently making satisfying progress towards their desired personal life goals (Falloon, et. al., 2007).

2.3.3 Ways of Coping

Coping can be defined as "constantly changing cognitive and behavioural efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person" (Lazarus and Folkman 1984, p.141). According to Lazarus and Folkman (1984), this is a process-oriented rather than trait-oriented definition that limits coping to conditions of psychological stress. According to the functions of coping styles, there are two main sources such as problem focused coping that refers to engaging in activities that directly aim at reducing or diminishing the stressfulness of the situation and emotion focused coping that in which the aim is to alleviate negative emotions by reinterpreting the situation or by distancing oneself from the stress-evoking event, by strategies like avoidance (Folkman, 1984).

According to Moos and Holahan (1987) there are three general coping styles: active-behavioral, active-cognitive, and avoidant. They emphasized that stressful events elicit both active and passive (i.e., avoidant) coping strategies. Active coping strategies are attempts to alter the stressful situation itself or to manage the resultant emotions. Avoidant coping strategies, in contrast, do not deal directly with the situation or the emotions, but reduce tension through diversion (e.g., smoking or eating). Moos and colleagues further divided active coping strategies into cognitive (e.g., try to remain positive) and behavioral (e.g., talk to others) types.

On the other hand, when people are confronted with stress they face two challenges: meeting the requirements of the stress situation and protecting the

self from psychological disorganization (Lazarus, 2000). When they feel competent to handle the stress, they may opt for problem-focused coping; when they doubt their own competencies; emotion-focused coping may prevail. Those who use problem-focused coping likely approach stress as a problem to be solved; they move from merely thinking and worrying about their difficulties to actively taking steps to deal with them, thereby reducing stress (Lazarus, 2000).

Folkman and Lazarus (1985) defined five types of coping resources. These are: parental health/energy: physical and emotional wellbeing, problem solving skills to search and analyze information and generate different actions, social networks: potentially supportive relationship which facilitates positive adaptations, utilitarian resources including SES and income variables, general specific beliefs like self efficiacy, self-esteem and religiousity. In addition there are some coping resources which include both personal and situational factors such as high self-esteem and personal support that found to be effective in buffering stress and mediating better psychological adjustment (Bright & Hayward, 1997; Folkman & Lazarus, 1985).

Hatfield (1989) proposed that patients with schizophrenia use numerous strategies to manage stress so as to maintain their emotional balance and social functioning. Their recourse to coping depends on their cognitive abilities and individual capacity for adaptation. Although Folkman and Lazarus's stress-coping model (1991) had been extensively used to explain the adaptation process in caregivers of people with physical diseases, it was rarely applied to relatives of those with mental health problems (Solomon & Draine, 1995). Families' coping skills became as a research area of the patients with

schizophrenia. In an international study of Magliano, Fadden, Economo, Held, Xavier, Guarneri, Malangone, Marasco and Maj (2000) it was found that if relatives of the patients with schizophrenia were able to improve their coping skills, or the social functioning of the person with schizophrenia improved, it was possible to decrease burden of the families of patients with schizophrenia even after several years.

Coping with life stresses is a major variable that affects the patients with schizophrenia' suicidal ideation. When the coping mechanisms among stressful events are ineffective and not problem solving oriented, also insufficient support of family to the patient, suicide attitude may pass through from thought to action easily (Fidan, Ceyhun & Kırpınar, 2009). Factors thought to protect patients with schizophrenia against suicide include problem focused coping strategies, efficacious problem-solving skills, and general life satisfaction (Montross et al., 2005).

2.3.4 Social Support

Social support can be described as the help, acceptance, and caring received from family, friends, and others (Mueser & Gingerich, 2006). High levels of support play a positive role in buffering the negative effects of stress on patients with schizophrenia and can effectively manage stress in several ways. First one is, support may prevent stress from occuring by addressing potential problem situations before they erupt. Second, social support can help patients with schizophrenia resolve a conflict with another person and third, supportive others can prompt the schizophrenic patient to use coping skills in appropriate situations (Mueser & Gingerich, 2006).

In a recent study, suicidal patients were found to report significantly higher levels of defeat and entrapment (measured as escapability), and lower levels of social support than hospital controls (O'Connor, 2003). Possessing a supportive network of family, friends, co-workers, or mental health professionals can mitigate thoughts of suicide. Positive connections with others help solidify reasons for living, and add meaning to lives that may otherwise feel desolate and lonesome (O'Connor, 2003). Therefore, a lack of social support is a frequently noted risk factor of suicide for patients with schizophrenia (Montross et. al., 2005). In a study of Evren, Evren and Erkıran (2002) which was conducted to a Turkish sample of patients with schizophrenia, it was found that patients with schizophrenia's suicidal ideation was more frequent if the patients were especially in the acut phase of the illness, had a history of suicide attempt and their social support was restrictive.

External resources such as availability of social support especially from the family was found to be a powerful external protective factor against suicide behaviors and argued to reduce the risk for suicidal behavior (Sharaf et. al., 2009). Moreover, higher levels of family cohesion and family support shown to be associated with lower levels of suicidal ideation (Harris & Molock, 2000). Social support including strong social connections with family, friends, or mental health providers was found to mediate suicidality (Cotton, Drake, & Gates, 1985). Pompili, Girardi, Ruberto, and Tatarelli (2004) have identified possible protective factors for suicide in schizophrenia. Compliance with therapy, social support, family therapy, social contacts, and support from

physicians are of paramount importance for preventing suicide among these patients.

2.4 Connection Between the Literature Review and Purpose of the Study

The general review of the literature makes a point of suicide and the connection between risk and protective factors for the psychiatric patients. Especially, self-esteem, problem solving ability, social support and ways of coping were included in research for prediction of suicide for different populations of psychiatric patients. Moreover, it is also clear that suicide takes an important place for patients with schizophrenia because a larger percantage of patients with schizophrenia ended their lives by committing suicide compared to the others. Although, suicide is an important phenemonen for the treatment of patients with schizophrenia, there are a few studies about this area. In addititon, the risk factors and protective factors were handled seperately in these research mentioned in the literature. This study aims to examine the differences between patients with schizophrenia who attempted and did not attempt suicide in terms of self-esteem, problem solving ability, problem focused coping, emotion focused coping, indirect coping, social support and suicidal ideation. Another aim of this study is to examine how self-esteem, problem solving ability, problem focused coping, emotion focused coping, indirect coping, social support predict suicidal ideation of patients with schizophrenia.

CHAPTER 3

METHOD

Regarding the aim of the study, different scales such as Rosenberg's Self Esteem Scale, Problem Solving Inventory, Turkish Ways of Coping Inventory, Multidimensional Scale of Perceived Social Support, Suicidal Ideation Scale and demographic information forms were delivered to the participants to explain the relationship between self-esteem, problem solving ability, ways of coping, social support and suicidal ideation of patients with schizophrenia. In this section, characteristics of the participants, scales and forms were given in detail. General information about data collection procedure was mentioned and lastly a general outline of data analysis process was given.

3.1 Participants

Purposive sampling procedure that is described by the use of judgment and a deliberate effort to get representative samples by including presumably typical groups in the sample (Kerlinger, 1986) was used to collect data because in this study it was aimed to gather information from patients with schizophrenia. To reach potential participants and to test the research questions a snowball sampling method (Kumar, 1996) was used. Participants of the study were 100 patients with schizophrenia who graduated from at least primary school and without mental retardation. Participants of the study were out-patients and in-patients of İzmit Seka Community Hospital or out-patients in Bakırköy Prof. Dr. Mazhar Osman Mental Health and Neurological Disorders Hospital and both in-patients and out-patients of Ankara Oncology Hospital

Psychiatry Clinic. Although 100 patients with schizophrenia were given the battery of the study, only 90 patients filled out the battery from the beginning to the end. 10 patients with schizophrenia left the study because they felt uncomfortable about filling out the scales in the battery. All of the patients whom joined to the study were using neuroleptic drugs such as Akineton, Largactil, Norodol, Nörofren, Sülpir, Clopixol, Zyprexa and Risperdal as a part of their treatment process.

3.2 Materials

All of the participants who accepted to be a volunteer to join the study by signing the Informed Consent Form (see Appendix B) were applied the battery which consisted of Demographic Information Form 1 (see Appendix C), Demographic Information Form 2 (see Appendix D), Scale of Suicidal Ideation (SSI) (see Appendix E), Rosenberg Self-Esteem Scale (RSES) (see Appendix F), Problem Solving Inventory (PSI) (see Appendix G), Multidimensional Scale of Perceived Social Support (MSPSS) (see Appendix H) and Turkish Ways of Coping Inventory (TWCI) (see Appendix I) respectively.

3.2.1 Demographic Information Form 1

Demographic Information Form 1 was consisted of age, gender, marriage status, education level, job, employment status of the patient. It also included the city where patient lives, people who the patient is living with, education level of the patient's family members (mother and father separately).

3.2.2 Demographic Information Form 2

Demographic Information Form 2 included duration of the diagnosis of schizophrenia, subtype of schizophrenia, comorbid diagnosis (if existent),

method of the treatment that the patient received for the diagnosis of schizophrenia, duration of the treatment that the patient received for the diagnosis of schizophrenia, frequency and duration of hospitalization related to schizophrenia, number and reason of previous suicide attempts (if present), technique which is used to commit suicide, treatment method after committing suicide (if any). This form was filled by researcher with the information which was taken from patients' doctor.

3.2.3 Problem Solving Inventory

Problem solving inventory is developed by Heppner and Peterson (1982) and includes 35 items which is a 6-point Likert type scale that the responses differs between 1 (I always behave like that) and 6 (I never behave like that). It assesses individuals' perception of the problem solving ability and higher scores mean that individuals' perception of problem solving ability is inadequate (Heppner, 1988). The total score that can be taken from the scale differs between 32 – 192; scores between 32 and 80 indicate high problem solving ability and scores between 81 – 192 indicate low problem solving ability. The Cronbach's alpha was found to be .90 and the scale was found to be internally consistent according to the alpha score which are found to be between .72 and .90. Additionally the test – retest reliability is reported to be ranged between .83 and .89. According to the factor analytic studies Heppner (1988) reported three facors for PSI such as: (a) problem – solving confidence (.85), (b) approach – avoidance style (.84), and (c) personal control (.72).

The reliability and validity study of the scale's Turkish form was conducted by Şahin, Şahin and Heppner (1993). Due to this study Cronbach's

alpha was found to be .88 for the total inventory and test – retest reliability was reported as .81. Estimates of validity were also gathered and the scale was found to be significantly correlated with Beck Depression Inventory and with State Trait Anxiety Inventory - T and the correlations were r(222)= .33, p< .001 and r(222)= .45, p< .001 respectively . Şahin, Şahin and Heppner (1993) found six factors such as: "impulsive style" (.87), "reflective style" (.76), "avoidant style" (.74) "monitoring" (.69), "problem solving confidence" (.64), and "planfulness" (.59) for this inventory.

3.2.4 Turkish Ways of Coping Inventory (TWCI)

The scale which is a self-report instrument that asks participants to call to mind a recent stressor and assess individuals' engaging cognitive and behavioral coping strategies in dealing with stressful situations, such as problem-focused, emotion-focused and indirect coping strategies (Folkman & Lazarus, 1980, Siva 1991). Folkman and Lazarus (1980) developed the original Ways of Coping Checklist which includes 68 items, referring to a broad range of cognitive and behavioral strategies used by people to cope with stressful situations that can be responsed as yes or no. Folkman and Lazarus (1985) revised the scale and changed the response format from "yes or no" to 5 – point Likert type scale. In the revised version of the scale, there were 66 items and 8 subscales. Six of these subscales were related to emotion focused coping styles, one of these subscales was related to problem solving and last of these subscales was related to both emotion focused and problem focused strategies.

Because of being tended to use superstitious beliefs and fatalism of Turkish people, in this form of the inventory there are six additional items which

represent these domains different from the 68 items of original form of the inventory (Siva, 1991). So TWCI includes 74 items which can be responsed into a 5 – point Likert scale. According to the factor analyses in a Turkish sample, there have been found three higher order factors such as problem-focused coping and emotion-focused coping and indirect coping (seeking social support) by Gençöz, Gençöz and Bozo (2006). Internal consistency coefficient were found to be .90 for problem-focused coping style, .88 for emotion-focused coping style and .84 for indirect coping style. Guttman split-half reliability was foun to be .84 for problem-focused coping, .86 for emotion-focused coping and .82 for indirect coping (Gençöz et.al., 2006). Siva (1991) reported the overall TWCI revealed a Cronbach alpha coefficient of .90.

3.2.5 Scale of Suicidal Ideation

It was developed by Linehan and Nielsen (1981) in order to assess severity of suicidal ideation. It includes parameters that increase suicidal risk such as; uncontrolled anger, desire to harm himself and others, hopelessness, suicidal ideation and desire, impairment of self – esteem, guilt, leisure in thinking and talking. It consists of 17 items which can be answered as 'Yes' or 'No'. Higher scores indicate higher suicidal ideation. The scale is graded as 1 point for the answer of 'Yes' and 0 points for the answer of 'No'. The reliability and validity study of the scale's Turkish form was conducted by Dilbaz and colleagues (Dilbaz, Holat, & Bayam, 1995).

3.2.6 Rosenberg Self-Esteem Scale

It was developed by Rosenberg (1965) and includes 63 items, has 12 subscales. The self-esteem subscale is a 4-point Likert type composed of 10

items (1: strongly disagree, 2: disagree, 3: agree, 4: strongly agree) and 5 of the questions are reverse coded (items: 3, 5, 8, 9, 10). Higher scores indicate higher self-esteem.

The reliability study of the scale was conducted by Çuhadaroğlu (1986) and the test retest reliability of the Turkish adaptation of the self-esteem subscale was found to be .75 and the reliability coefficients of the other subscales differs between .46 and .89, and the Cronbach alpha reliabilty coefficients of the scale was found to be .71. Sümer and Güngör (1999) found the Cronbach's alpha value of the scale to be .85.

Çuhadaroğlu (1985) used Symptom Check List Revised (SCL -90-R) to examine the concurrent validity of the scale and reported that the correlation between Rosenberg Self -Esteem Scale and the depression subscale of SCL – 90 – R was .66 and .70 for the psychosomatic symptoms subscale and .45 for the feeling threatened during interpersonal relationships subscale.

3.2.7 Multidimensional Scale of Perceived Social Support

The scale was developed by Zimet, Dahlem, Zimet and Farley (1988). It is a 7-point Likert type questionnaire ranging from "very strongly disagree (1)" to "very strongly agree (7)" consists of 12 items. The scale assesses the source and the level of the social support provided by family, friends and a significant other. Higher scores indicate higher levels of perceived social support.

Zimet, Dahlem, Zimet and Farley (1988) tested the reliability of the scale and they reported the internal reliabilities of the subscale of significant other to be .91, subscale of family to be .87 and the subscale of friends to be .85. They also found the internal consistency of the total scale to be .88. And the test –

retest reliability of the total scale was reported as .85 and in details the test-retest reliability coefficient for the subscale of the significant other was reported as .72, for the family subscale .85, for the friends subscale .75. The reliability and validity study of the scale was conducted by Eker, Arkar and Yaldız (2001) and Cronbach's alpha of the MSPSS was reported as .89.

3.3 Procedure

Participants of the study were patients with schizophrenia who were in the treatment process. Both inpatients and outpatients took part in this study. Mentally retarted patients did not participate to the study. This exclusion criteria was necessary because it was aimed all of the participants could easily understand and fill out the scales that were given in accordance with the aims of the study.

First of all necessary permissions were taken from the ethical committee of human researches of Middle East Technical University. Necessary permissions were also taken from the relevant departments of hospitals in which the participants of the study were treating. Data collection process started on the September of 2010 and finished on February of 2011.

Participants were given the battery of the scales after filling out the informed consent form in the hospitals they were treated. It took one to two hours to fill out the scales for the patients with schizophrenia. Demographic information form 2 was filled out by the researcher and demographic information form 1 and the other scales were given to the participants respectively. According to the research's aim, only the first ten items of the scale were used in order to assess self -esteem. Suicidal Ideation Scale and

Rosenberg's Self-Esteem Scale's items were mixed in order to prevent an undesirable harm which may comprise by reading the Suicidal Ideation Scale's items in sequence.

3.4 Data Analysis

All data were examined through various programs of the sixteenth version of Statistical Package for Social Sciences (SPSS). Prior to analysis, descriptive statistics conducted in order to define descriptive characteristics of the data. Assessment of accuracy of data entry, missing values and multivariate outliers were conducted. There were no cases that identified as missing value which were higher than 5% of the data. No cases identified through Mahalanobis distance as multivariate outliers. Correlations among the variables were examined and whether multicollinearity among them exists was also checked. The linearity, normality and homoscedastisity assumptions were found to be satisfactory for the current sample.

In order to identify the differences among patients with schizophrenia with and without suicide attempt on the dimensions of self-esteem, problem solving, problem focused coping, emotion focused coping, indirect coping, social support and suicide attempt, Multivariate Analyses of Variances was conducted. To explore the relationship among self-esteem, problem solving ability, problem focused coping, emotion focused coping, indirect coping, social support and suicidal ideation of patients with schizophrenia, correlational analysis conducted. In order to predict suicidal ideation from self-esteem, problem solving ability, problem focused coping, emotion focused coping,

indirect coping and social support, a standard multiple regression analysis was conducted.

CHAPTER 4

RESULTS

In this section, firstly sample characteristics of the patients with schizophrenia who participated to the present study are given. Secondly, comparison of patients with and without suicide attempt on self-esteem, problem solving, ways of coping, social support and suicidal ideation is given. Lastly, prediction of suicidal ideation explained by the help of the data that was composed to analyse the aims of the current study.

4.1 Demographic Characteristics of the Participants

The characteristics of the patients with schizophrenia are summarized in Table 2. Thirty eight (42.2 %) of the participants were female and 52 (57.8 %) of the participants were male. The mean of the age of the participants was 37.46 and standard deviation was 9.71. Most of the participants were bachelors (61.1 %), followed by married people (26.7 %), divorced (7.8 %), widowers (1.1 %) and living apart from their partners (3.3 %). Most of them graduated from high school (50 %), followed by primary school (22.2 %), middle school (16.7 %), college (10 %) and left the primary school (1.1 %). 45 (50 %) of the participants were living in İstanbul, followed by Kocaeli 38 (42.2 %) and Ankara 7 (7.8 %). Most of the participants were living with their families 83 (92.2 %), 5 (5.6 %) of the participants were living alone, 1 (1.1 %) of the participants was living with friends and 1 (1.1 %) of them was living with relatives.

Participants were also asked about their mother's and father's education level. Most of the participants' mothers graduated from primary school (47, 52.2

%), followed by not literates (16, 17.8 %), literates (11, 12.2 %), graduates from high school (7, 7.8 %), graduates from middle school (7, 7.8 %) and graduates from college (2, 2.2 %). 43 (47.8 %) of the participants' fathers were graduated from primary school, 15 (16.7 %) of them were graduated from high school, 11 (12.2 %) of them were graduated from middle school, 9 (10 %) of them were literates, 6 (6.7 %) of them were graduated from college and 6 (6.7 %) of them were not literates.

Participants were asked about their occupation. Of the 90 patients with schizophrenia 27 (30 %) of them were self-employed, followed by laborers 26 (28.9 %), housewives 23 (25.6 %), state workers 7 (7.8 %), students 2 (2.2 %), retireds 2 (2.2 %) and 3 (3.3 %) of them were without a trade. However, only 16 (17.8 %) of the participants were on employment at that moment, the rest of the participants 74 (82.2 %) were not working.

Table 2. Demographic characteristics of the patients with schizophrenia ($N = 90$)

Variable	Mean	SD	Range	f	%
Gender					
Female				38	42.2
Male				52	57.8
Age	37.46	9.71	18-63		
Female	37.55	11.09			
Male	37.40	8.68			
Marital Status					
Bachelors				55	61.1
Married				24	26.7
Divorced				7	7.8
Widower				1	1.1
Living apart from the partner				3	3.3
Education Level					
Left the primary school				1	1.1
Primary school				20	22.2
Middle school				15	16.7
High school				45	50
College				9	10

Table 2. Continued

Variable	Mean	SD	Range	f	%
City					
İstanbul				45	50
Kocaeli				38	42.2
Ankara				7	7.8
Living with					
Family				83	92.2
Alone				5	5.6
Friends				1	1.1
Relatives				1	1.1
Mother's Education Level					
Not Literate				16	17.8
Literate				11	12.2
Primary School				47	52.2
Middle School				7	7.8
High School				7	7.8
College				2	2.2
Father's Education Level					
Not Literate				6	6.7
Literate				9	10
Primary School				43	47.8
Middle School				11	12.2
High School				15	16.7
College				6	6.7

Table 2. Continued

Variable	Mean	SD	Range	f	%
Occupation					
Laborer				26	28.9
State Workers				7	7.8
Self - employed				27	30
Student				2	2.2
Housewive				23	25.6
Retired				2	2.2
Without a trade				3	3.3
Employment at the moment					
Working				16	17.8
Not working				74	82.2

As can be seen in the Table 3, 50 (55.6 %) of the 90 schizophrenic patient participants were diagnosed with schizophrenia more than 10 years ago, 24 (26.7 %) of them were diagnosed between 5 and 10 years ago, 13 (14.4 %) of them were diagnosed between 1 and 5 years ago and 3 (3.3 %) of them were diagnosed between 6 and 12 months ago. Most of the patients with schizophrenia were diagnosed with the paranoid subtype 43 (47.8 %), followed by residual subtype 36 (40 %), undifferentiated subtype 10 (11.1 %) and desorganised subtype 1 (1.1 %). Only 3 (3.3 %) of the patients with schizophrenia were diagnosed with comorbid disorders such as anxiety disorders, rest of the patients 87 (96.7 %) were not diagnosed with any comorbid disorders.

Of the patients with schizophrenia, 51 (56.7 %) of them were treated with both psychotherapy and antipsychotic drugs and 39 (43.3 %) of the participants were treated only with antipsychotic drugs. Most of the participants 49 (54.4 %) were taking treatment more than 10 years, followed by 25 (27.8 %) between 5 and 10 years, 13 (14.4 %) between 1 and 5 years and 3 (3.3 %) of them were taking trearment between 6 and 12 months.

Most of the participants 24 (26.7 %) once lied in hospital for the treatment of schizophrenia however, 9 (10 %) of the participants had never lied in hospital for the treatment of schizophrenia. Rest of the participants 57 (63.3 %) lied in hospital for the treatment of schizophrenia differs between 2 and 15 times. Of the 81 (90 %) participants who were treated in hospital for the treatment of schizophrenia, 44 (54.3 %) of them were treated in hospital for less

than a month. Seventeen (20.9 %) of them were treated in hospital for a month and the rest of them 20 (24.6 %) were treated in hospital for more than a month.

Table 3. Information about diagnosis of schizophrenia of the patients with schizophrenia ($N = 90$)

Variable	f	%
Duration of diagnosis of schizophrenia		
6 – 12 months	3	3.3
1 – 5 years	13	14.4
5 – 10 years	24	26.7
+ 10 years	50	55.6
Subtype of schizophrenia		
Paranoid Subtype	43	47.8
Residual Subtype	36	40
Undifferantiated Subtype	10	11.1
Desorganized Subtype	1	1.1
Comorbid Disorder		
Anxiety Disorders	3	3.3
None	87	96.7
Treatment Method		
Antipsychotic Drugs	39	43.3
Antipsychotic Drugs + Psychotherapy	51	56.7
Duration of Treatment		
6 – 12 months	3	3.3
1 – 5 years	13	14.4
5 – 10 years	25	27.8
+ 10 years	49	54.4

Table 3. Continued

Variable	f	%
Hospitalization Frequency		
Never	9	10
Once	24	26.7
2 – 15 times	57	63.3
Duration of treatment in hospital		
Less than a month	44	54.3
1 Month	17	20.9
More than 1 month	20	24.6

Most of the participants 60 (66.3 %) had never attempted suicide before and 30 (33.7 %) of them committed suicide at least once (see Table 4). Of the 30 participants who committed suicide, 18 (60 %) of them attempted suicide once in their lives, 8 (26.7 %) of them attempted suicide twice, 3 (10 %) of them attempted suicide three times and 1 (3.3 %) attempted suicide four times. Most of the participants who attempted suicide 26 (86.7 %) posits the psychiatric disorder for the reason of suicide as, 2 (6.7 %) of them posits family problems for the reason of suicide, 1 (3.3 %) of them posits inoccupation for the reason of suicide and 1 (3.3 %) of them posits trauma for the reason of suicide. Of the 30 patients who attempted suicide, 18 (60 %) of them took drugs, 5 (16.7 %) of them hang up themselves, 2 (6.7 %) of them used cutter, 2 (6.7 %) of them jumped from a high building, 2 (6.7 %) of them did not specify the method of suicide and 1 (3.3 %) of them attempted suicide by bottled gas.

Most of the patients with schizophrenia who attempted suicide 19 (63.3 %) were treated after the suicide attempt, however 11 (36.7 %) of them were not treated after this attempt of suicide. Of the 19 patients with schizophrenia who were treated after the suicide attempt 15 (78.9 %) of them were treated by medication and 4 (21.1 %) of them were treated by both medication and psychotherapy.

Table 4. Information about suicide attempts of patients with schizophrenia ($N = 90$)

Variable	f	%
Suicide Attempt		
Attempted	30	33.7
Not Attempted	60	66.3

Table 5. Specific information about the suicide attempts of patients with schizophrenia ($N = 30$)

Variable	f	%
Frequency of Suicide Attempt		
Once	18	60
Twice	8	26.7
Third	3	10
Four	1	3.3
Reason of Suicide Attempt		
Psychiatric Disorder	26	86.7
Family Problems	2	6.7
Innocupation	1	3.3
Trauma	1	3.3

Table 5. Continued

Variable	f	%
Method of Suicide Attempt		
Taking Drugs	18	60
Hanging up	5	16.7
Using Cutter	2	6.7
Jumping	2	6.7
Bottled Gas	1	3.3
Not Specified	2	6.7
Treatment after Suicide		
Treated	19	63.3
Not Treated	11	36.7
Treatment Method of Suicide (*N* = 19)		
Medication	15	78.9
Medication + Psychotherapy	4	21

4.2 Comparison of Patients with and without Suicide Attempt on the Variables of Interest

In order to identify the differences among patients with schizophrenia who were with and without suicide attempt on the dimensions of self-esteem, problem solving, problem focused coping, emotion focused coping, indirect coping, social support and suicidal ideation, Multivariate Analyses of Variances was conducted. As can be seen in Table 6, MANOVA results yielded no significant main effect for suicide attempt on self-esteem, problem solving, problem focused coping, emotion focused coping, indirect coping, social support and suicidal ideation of patients with schizophrenia Wilk's Lambda= .94, F (7, 83) = 0.72, $p > .05$, $\eta^2 = .06$. All of the individual between subjects effects were also found not to be significant. The only variable that was close to significance level in univariate ANOVAs was found to be self-esteem F (1, 89) = 2.88, $p = .09$, indicating that patients whit schizophrenia who attempted suicide (M = 25.93, SD = 4.59) reported lower levels of self-esteem than patients with schizophrenia who did not attempt suicide (M = 28, SD = 5.8).

Table 6. MANOVA results of suicide attempt in terms of variables of interest

IV	Groups	Self-esteem	Problem Solving	Problem F.C.	Emotion F.C.	Indirect C.	Social Support	Suicidal Ideation	Multivariate F	df	η^2	Wilk's Lambda
Suicide	Attempted	25.93	112.93	95	63.43	39.10	61.13	6.83	0.72	7,83	.06	.94
Attempt	Not Attempted	28	113.66	95.52	61.89	38.07	60.91	5.39				

Note: Problem F.C.: Problem Focused Coping, Emotion F.C.: Emotion Focused Coping, Indirect C.: Indirect Coping

4.3 Predicting Suicidal Ideation

The correlation between the variables of the study and suicidal ideation can be found in Table7. Suicidal ideation found to be negatively correlated with self-esteem (r = -.66, p < .01), social support (r = -.21, p < .05), and problem focused coping (r = -.48, p < .01). Suicidal ideation found to be positively correlated with emotion focused coping (r = .29, p < .01) and lack of problem solving ability (r = .49, p < .01) means that patients who evaluated their problem solving ability inadequate, reported high suicidal ideation. There was not a significant correlation between indirect coping and suicidal ideation (r = .02, p > .05).

In order to predict suicidal ideation from self-esteem, problem solving ability, problem focused coping, emotion focused coping, indirect coping and social support, a standard multiple regression analysis was conducted. Suicidal ideation was entered as the criterion variable and self-esteem, problem solving ability, problem focused coping, emotion focused coping, indirect coping and social support were entered into the regression equation at once as the predictor variables.

The overall model explained .46 (adjusted R^2) of the variance in criterion and was significant F(6, 83) = 13.55, p < .001. Results of regression analyses indicated that the only variable that contributed significantly to prediction of suicidal ideation of patients with schizophrenia was self-esteem: β = -,49, t(83) = -4.89, p < .001 , (sr_i^2 = -.47) (see Table 7).

Table 7. Bivariate pearson correlations and regression coefficients of self-esteem, social support, problem solving ability and ways of coping on suicidal ideation

Suicidal Ideation	Self-esteem	Social Support	Problem Solving	Problem F. C.	Emotion F. C.	Indirect Coping	*B*	*SE B*	*β*	*sr i*^{2}
Suicidal Ideation										
Self-esteem -.66**							-.41	.08	-.49***	-.47***
Social Support -.21*	.14						-.03	.03	-.11	-.14
Problem Solving .49**	-.54**	-.28**					.02	.02	.11	.11
Problem F. C. -.48**	.50**	.28**	-.61**				-.05	.04	-.16	-.16
Emotion F. C. .29**	-.37**	.02	.26*	-.11			.02	.04	.04	.05
Indirect Coping .02	-.01	.39**	-.21*	.21	.25*		.08	.06	.11	.14
Means 5.84	27.29	61.01	11.31	95.47	62.39	38.32			R^2 = .49	
									Adjusted R^2 = .46	
									R = .70	
Standard Deviations 4.47	5.46	14.89	13.20	12.79	11.36	6.36				

* $p < .05$

** $p < .01$

***$p<.00$

CHAPTER 5

DISCUSSION

Present study was an attempt to examine the relationship of suicidal ideation with problem solving ability, self-esteem, social support, ways of coping among patients with schizophrenia. In this chapter, results which were obtained by statistical analyses in the previous chapter will be evaluated regarding the prior findings mentioned in the literature. Furthermore, implications of these findings of the present study discussed and limitations of the study were mentioned with an emphasis on recommendations for future research.

5.1 Evaluation of the Results

5.1.1 Comparison of Patients with and without Suicide Attempt on the Variables of Interest

MANOVA results indicated that the combination of variables did not distinguish between patients who attempted and not attempted suicide. The only variable that the two groups were close to being different was self-esteem. There is a need to increase self-esteem of patients with schizophrenia in order to protect them from suicidal ideation and suicide attempt.

In literature, it was mentioned that self-esteem was a powerful internal protective factor against suicide behaviors (Sharaf, Thompson & Walsh, 2009), for instance research conducted on patients who attempted suicide and have a history of suicidal ideation resulted to have low self-esteem than those who did

not (Palmer, 2004; Tarrier et al., 2004). In the present study patients who attempted suicide in the past reported lower self-esteem at the moment than patients who did not attempt suicide in the past although this difference was only marginally significant.

The other variables of interest such as suicidal ideation, problem solving ability, social support, problem focused coping, emotion focused coping and indirect coping of patients with schizophrenia who attempted suicide before and who did not attempt suicide, were not significantly different from each other at the moment. This result can be explained by filling out the scales after a long time from the suicide attempt of patients with schizophrenia. So it can be concluded that the past suicide attempts did not affect these variables at the moment.

Even the suicidal ideation of patients with schizophrenia did not significantly different for patients who attempted suicide and who did not attempt suicide. All of the patients were treating with drugs when they participated to the study and this result can be explained by this reason. All of the patients who attempted suicide were treated with medication and some of them were treated both with medication and psychotherapy. Taking medication and psychotherapy after the suicide attempt may protected these patients from the suicidal ideation so that a difference among patients who attempted and did not attempt suicide was not found.

5.1.2. Predicting Suicidal Ideation

Analysis of correlations of the study variables indicated that self-esteem, problem focused coping, social support, were negatively correlated with suicidal

ideation. Emotion focused coping and lack of problem solving ability were positively correlated with suicidal ideation.

If self-esteem, problem focused coping and social support of the patients with schizophrenia increase, suicidal ideation of these patients decreases. In this manner, evaluation of the treatment designs to protect these patients from suicidal ideation and later suicidal acts should include these areas. Self-esteem boosting techniques, improvement of problem focused coping methods and social support should be used in order to develop protective psychotherapy designs for suicidality of patients with schizophrenia.

If the patients with schizophrenia evaluate their problem solving ability inadequate, they tend to score higher on problem solving inventory. So when the patients' scores of problem solving ability increase, suicidal ideation also increases. This result is compatible with the literature because research show that deficits in problem solving ability is an important predisposing factor for the development of suicidal behavior for patients with schizophrenia (Falloon, Barbieri, Boggian & Lamonaca, 2007). It is necesseary to improve patients' problem solving ability in order to decrease their suicidal ideation and protect them from suicide attempt.

Emotion focused coping also found to be positively correlated with suicidal ideation. If the patients with schizophrenia use more emotion focused coping strategies, the more suicidal ideation they have. Montross, Zisook and Kasckow (2005) also found that factors to protect patients with schizophrenia against suicide include problem focused coping strategies and efficacious problem solving skills. In accordance with these results, it is necessary to design

treatment methods which include couraging the patient to increase their problem solving ability and use more problem focused coping strategies in order to decrease their suicidal ideation.

According to the regression analyses, all of the predictor variables explain a high amount of variance of suicidal ideation but no single variable uniquely contributed to the prediction of suicidal ideaiton except self-esteem. In other words even though the collection of predictor variables explain a high amount of variance in prediction of suicidal ideation, the unique contribution of individual predictors were not significant. For this prediction, it is important to note that there is a high overlapping variance of independent variables so that the only unique variance that explains suicidal ideation of patients with schizophrenia found to be self-esteem. The correlations of independent variables were also strong so it is difficult to differentiate these variables.

According to the results of regression analyses, greater the self-esteem that patients with schizophrenia report, less the suicidal ideation that they also report. This finding is compatible with the literature because self-esteem was found to be a powerful internal protective factor against suicide behaviors and resiliency to suicidal behaviors was found to be associated with increased self-esteem (Sharaf, Thompson, & Walsh, 2009). Because of emphasizing the importance of self-esteem in prevention of suicide for patients with schizophrenia, treatment methods should also include boosting these patients' self-esteem.

5.2. Implications of the Results

It was mentioned before that to protect patients with schizophrenia from suicidal ideation, it is essential to increase patients' self-esteem. So if the clinical therapy includes boosting self-esteem, in the therapy programme it will be beneficial to direct these patients to increase their self-esteem. For this purpose every patients own case conceptualisation have to involve patients with schizophrenia's unique qualities which vary according to the subtype of schizophrenia. Because of being a team-work, this therapy programmes should include both patients' families and close friends. If the patients' families and close friends know the symptoms of the patient, they could help these patients to improve both their social support and self-esteem.

Another aspect of the present study is to capture attention on the importance of problem solving ability. Results indicated that patients with schizophrenia who scored higher on suicidal ideation, evaluated their problem solving ability inadequate. For taking protective steps for these patients from suicide, in the therapy programme, problem solving techniques should be included via group or individual therapy sessions.

By the help of learning problem solving techniques, patients with schizophrenia will have the chance to evaluate their problem solving ability adequate and they could put these techniques into practice. Patients with schizophrenia should be supported to put problem solving techniques into practice by role playing in the therapy sessions and later on they could be given as homework to use these techniques in their daily lives in suitable situations.

Learning and using these techniques will both help to decrease their suicidal ideation and evaluate their problem solving ability adequate.

Besides, patients with schizophrenia's therapy programme should also include teaching them how to cope with stressful situations. They should be couraged to use problem focused coping strategies besides emotion focused and indirect coping strategies. By the help of teaching and couraging patients with schizophrenia to use problem solving techniques and problem focused coping strategies would both minimize the suicidal ideation of these patients and help them to struggle with their daily problems. All of these techniques which will be used in the clinical psychotherapy also have to aim to decrease patients with schizophrenia's suicidal risk.

5.3 Limitations and Recommendations for Future Research

In the study there are some limitations that affect the generalizability of the results. Because of being the first study which combines the study variables for suicidal risk of Turkish patients with schizophrenia; a limited number of patients who attempted suicide reached. For future research, it is suggested to reach more patients with schizophrenia who attempted suicide so that more comparable studies can be conducted.

Another limitation of the study is that only volunteered patients joined the study whose education level, age, the other demographic variables were not representative. Therefore, it is hard to generalize the study's results to all of the patients with schizophrenia. For future studies, it is recommended to select a representative sample in which the patients' education level, age and the other demographic variables are similar.

The other limitation of the study is that only pen and pencil applications conducted in the present study. However, if other applications for example measuring problem solving ability with applicable methods, more behavior focused results could be gathered. Another limitation of the study is that information about the study variables was taken only from the patients with schizophrenia. For future research, it is recommended to gather information about the study variables both patients' families and close friends that compose patients' social environment.

Another limitation of the study is that all of the volunteered patients with schizophrenia who conducted the present study were using neuroleptic drugs in accordance with the treatment of their symptoms. It can be concluded that it is necessary to conduct a study by excluding drug effects so that the effect of drugs can be compared for the study variables.

The other limitation of the present study is that the information was taken after a long time from the suicide attempt of the patients with schizophrenia. Because of this the past suicide attempts' effects may be ignored by the patients. For future research it is suggested to take information immediately afterwards the suicide attempt of the patients so that the effects of the variables can be gathered without deemphasizing their importance.

For future research, evaluating new therapy programmes for patients with schizophrenia which aim to help these patients to learn adaptive problem solving methods and increase their problem solving ability are recommended. By the way it is recommended to teach these patients to learn suitable ways of coping for instance problem focused coping when stressfull situations arise.

These methods should be supported with research which aims to measure the effectiveness of these therapy programmes that evaluated special for patients with schizophrenia. With the help of these research it should be aimed to help these patients use these techniques that they learnt in these therapy programmes. It is also aimed to make clinicians who are working with patients with schizophrenia alerted about the suicidal risk of these patients in the whole of the process.

5.4 Conclusion

The study was an attempt to explore the relationship of self-esteem, problem solving, ways of coping, social support and suicidal ideation among patients with schizophrenia. In accordance with the aim of the present study, it was studied if there was a difference between patients with schizophrenia's suicidal ideation, self-esteem, problem solving ability, ways of coping, and social support in terms of suicide attempt of the patient. Analyses of MANOVA results yielded no significant main effect for suicide attempt on self-esteem, problem solving, problem focused coping, emotion focused coping, indirect coping, social support and suicidal ideation of patients with schizophrenia.

In order to predict suicidal ideation from self-esteem, problem solving ability, problem focused coping, emotion focused coping, indirect coping and social support, a standard multiple regression analysis was conducted. It was found that only self-esteem significantly predicted suicidal ideation. In addition, correlational analysis results yielded that suicidal ideation found to be negatively correlated with self-esteem, social support, problem focused coping. Suicidal ideation found to be positively correlated with emotion focused coping

and problem solving ability means that patients who evaluated their problem solving ability inadequate, reported high suicidal ideation. There was not a significant correlation between indirect coping and suicidal ideation.

REFERENCES

Aksoy, C. A. (1992). Lise son sınıf öğrencilerinin özsaygı ve denetim odağını etkileyen bazı değişkenlerin incelenmesi, *Hacettepe Üniversitesi Sağlık Bilimleri Enstitüsü Yayınlanmamış Doktora Tezi*, Ankara.

Alaräisänen, A., Heikkinen, J., Kianickova, Z., Miettunen, J., Räsänen, P., & Isohanni, M. (2007). Pathways leading to suicide in schizophrenia. *Current Psychiatry Reviews*, 3*,* 233–242.

Allebeck, P. & Wistedt, B. (1986). Mortality in schizophrenia: A ten-year follow-up based on the Stockholm County inpatient register. *Archives of General Psychiatry,* 43, 650–653.

American Psychiatric Association. (2000). Diagnostic and statistical manual of mental disorders (4th ed., text revision). Washington, DC: American Psychiatric Association.

Arenofsky, J. (2001). Developing your problem-solving skills (Problem-solving techniques and approaches: Brief article). *Career World*. Retrieved: January 27, 2010 from www. findarticles.com

Baumeister, R. F., Tice, D. M., & Hutton, D. G. (1989). Self-presentational motivations and personality differences in self-esteem. *Journal of Personality*, 57, 547-579.

Beck, A.T., Steer, R.A., Kovacs, M., Garrison, B.(1985). Hopelessness and eventual suicide: A 10-year prospective study of patients hospitalized with suicidal ideation. *American Journal of Psychiatry,* 142, 559–563.

Belzer, K. D., D'Zurilla, T. J., & Maydeu-Olivares, A. (2002). Social problem solving and trait anxiety as predictors of worry in a college student population. *Personality and Individual Differences*, 33, 573-585.

Bingham, A. (1998). *Çocuklarda problem çözme yeteneklerinin geliştirilmesi* [Improving children's facility in problem-solving]. (Translator: A. Ferhan Oğuzhan). İstanbul: Milli Eğitim Basımevi.

Bolton, C., Gooding, P., Kapur, N., Barrowclough, C., & Tarrier, N. (2007). Developing psychological perspectives of suicidal behaviour and risk in people with a diagnosis of schizophrenia:We know they kill themselves but do we understand why? *Clinical Psychology Review*, 27, 511–536.

Breier, A. & Astrachan, B. M. (1984). Characterization of patients with schizophrenia who commit suicide. *American Journal of Psychiatry,* 141, 206–209.

Breier, A., Schreiber, J. L., Dyer, J. & Pickar, D. (1991). National Institute of Mental Health longitudinal study of chronic schizophrenia: Prognosis and predictors of outcome. *Archives of General Psychiatry,* 48, 239–246.

Bright, J.A. & Hayward, P. (1997). Dealing with chronic stress: Coping strategies, self-esteem and service use in mothers of handicapped children. *Journal of Mental Health*, 6(1), 67-75.

Bulut, N. (2007). Relations between school psychological counselors' life satisfaction, strategies of coping with stress and negative automatic thoughts. *Turkish Psychological Counseling and Guidance Journal*, 27(3), 1-13.

Caldwell, C. B. & Gottesman, I. I. (1992). Schizophrenia- a high risk factor for suicide: Clues to risk reduction., *Suicide* and *Life-Threatening Behavior,* 22, 479–493.

Caldwell, C.B. & Gottesman, I.I. (1990). Patients with schizophrenia kill themselves too: A review of risk factors for suicide. *Schizophrenia Bulletin,* 16, 571–589.

Cannon, M., Buckley, P. & Larkin C. (1991). Suicide in schizophrenia. *Irish Journal of Psychological Medicine,* 8, 19–21.

Chan, R. C., Chen, E. Y., Cheung, E. F., Cheung, H. K. (2004). Executive dysfunctions in schizophrenia. Relationships to clinical manifestation. *Euopean Archives of Psychiatry and Clinical Neuroscience*, 254, 256–262.

Chang, E. C. (2002). Predicting suicide ideation in an adolescent population: examining the role of social problem solving as a moderator and a mediator. *Personality and Individual Differences*, 32, 1279- 1291.

Cheng, K.K., Leung, C.M., Lo, W. H. & Lam, T.H. (1990). Risk factors of suicide among patients with schizophrenia. *Acta Psychiatrica Scandinavica,* 81, 220–224.

Clum, G. A., Patsiokas,A., & Luscomb, R. (1979). Empirically based comprehensive treatment program for parasuicide. *Journal of Consulting and Clinical Psychology*, 47, 937- 945.

Cotton, P.G., Drake, R.E. & Gates, C. (1985). Critical treatment issues in suicide among schizophrenics. *Hospital and Community Psychiatry,* 36, 534–536.

Çuhadaroğlu, F. (1985). Gençlerde benlik saygısı ile ilgili bir araştırma. *XXI. Ulusal Psikiyatri ve Nöroloji Bilimleri Kongresi Bilimsel Çalışmaları*, 107 – 108.

Çuhadaroğlu, F. (1986). Adolesanlarda benlik saygısı. Yayımlanmamış yüksek lisans tezi. Ankara: Hacettepe Üni. Sosyal Bilimler Enstitüsü.

D'Zurilla, T. J., & Chang, E. C. (1995). The relations between social problem solving and coping. *Cognitive Therapy and Research*, 19(5), 547-562.

D'Zurilla, T. J., & Goldfried, M. (1971). Problem solving and behavior modification. *Journal of Abnormal Psychology*, 78, 107 – 126.

D'Zurilla, T. J., & Nezu, A. (1982). Social problem-solving in adults. In P. C. Kendall (Ed.), *Advances in cognitive-behavioral research and therapy* (Vol. 1, pp. 201-274). New York: Academic Press.

D'Zurilla, T. J., & Nezu, A. M. (1999). Problem-solving therapy: A social competence approach to clinical intervention. New York: Springer

D'Zurilla, T. J., Chang, E. C., & Sanna, L. J. (2003). Self-esteem and social problem-solving as predictors of aggression in college students. *Journal of Social and Clinical Psychology*, 22, 424-440

Deniz, M. E. (2004). Investigation of the relation between decision making self-esteem, decision making style and problem solving skills of university students. *Eurasian Journal of Educational Research*, 15, 23-35.

Dieserud, G., Roysamb, E., Ekeberg, O., & Kraft, P. (2001). Toward an integrative model of suicide attempt: A cognitive psychological approach. *Suicide and Life-Threatening Behavior,* 31, 153–168.

Dilbaz, N., Holat, H., Bayam, G. ve ark. (1995) İntihar düşüncesi ölçeğinin geçerlilik ve güvenirliği. *31. Ulusal Psikiyatri Bilimler Kongresi Bilimsel Çalışma Kitabı*, 40-41.

D'Zurilla, T. J. (1988) Problem solving therapies. Handbook of Cognitive Behaviour Therapies, Guilford Publications, London, 85-135.

Eker, D., Arkar, H. & Yaldız, H. (2001). Çok boyutlu algılanan sosyal destek ölçeğinin gözden geçirilmiş formunun faktör yapısı, geçerlik ve güvenirliği. *Türk Psikiyatri Dergisi,* 12 (1), 17 – 25.

Emsley, R. A., Oosthuizen, P.P., & Joubert, A. F. (1999): Depressive and anxiety symptoms in patients with schizophrenia and schizophreniform disorder. *Journal of Clinical Psychiatry,* 60, 747 – 751.

Evren, E. C., Evren, B., & Erkıran, M. (2002) Suicidal Ideation in Schizophrenia Relationship With Positive and Negative Symptoms, Depression and Insight. *Türk Psikiyatri Dergisi*, 13(4), 255 – 264.

Falloon, I. R. H., Barbieri, L., Boggian, I. & Lamonaca, D. (2007) Problem solving training for schizophrenia: Rationale and review. *Journal of Mental Health,* 16 (5): 553 – 568.

Fenton, W. S. (2000). Depression, suicide, and suicide prevention in schizophrenia. *Suicide and Life-Threatening Behaviour*, 30, 34–49.

Fenton, W. S., McGlashan, T. H., Victor, B. J. & Blyler, C. R. (1997). Symptoms, subtype, and suicidality in patients with schizophrenia spectrum disorders. *American Journal of Psychiatry,* 154, 199–204.

Fidan, T., Ceyhun, H. E., & Kırpınar, İ. (2009). Gençlerin kullandığı başa çıkma tutumlarının intihar girişimi ile ilişkisi. *Klinik Psikofarmakoloji Bülteni,* 19, 214 – 216.

First, M. & Tasman, A. (2004). DSM – IV – TR Mental Disorders: Diagnosis, Etiology and Treatment. New Jersey: Wiley & Sons.

Folkman, S. & Lazarus, R.S. (1985). Is if changes it must be a process: Study of emotion and coping during three stages of college examination. *Journal of Personality and Social Psychology,* 48, 150 – 170.

Folkman, S. (1984). Personal control and stress and coping processes: A theoretical analysis. *Journal of Personality and Social Psychology*, 46, 839–852.

Folkman, S., & Lazarus, R. S. (1991). Coping and emotion. In: Monat, A., & Lazarus, R.S. (Ed) Stress and coping: an anthology. Columbia University Press, New York, 207 – 227.

Gallagher, A. G., Dinan, T. G., Sheehy, N. P., & Baker, L. J. V. (1995) Chronic auditory hallucinations and suicide risk factors in schizophrenia. *Irish Journal of Psychology,* 16, 346 – 355.

Gençöz, F., Gençöz, T. & Bozo, Ö. (2006). Hierarchical dimensions of coping styles: a study conducted with Turkish university students. *Social Behavior and Personality*, 34, 525 – 534.

Hamarta, E. (2009) A prediction of self – esteem and life satisfaction by social problem solving. *Social Behavior and Personality,* 37(1), 73 – 82.

Harris, E. C. & Barraclough, B. (1997). Suicide as an outcome for mental disorders: A meta-analysis. *British Journal of Psychiatry,* 170, 205–228.

Harris, T. L., & Molock, S. D. (2000) Cultural orientation, family cohesion, and family support in suicide ideation and depression among African American college students. *Suicide and Life-Threatening Behavior*, 30, 341–353.

Hatfield, A.B. (1989). Patient's accounts of stress and coping in schizophrenia. *Hospital and Community Psychiatry*, 40, 1141-1145.

Hawton, K., Sutton, L., Haw, C., Sinclair, J., & Deeks, J. J. (2005). Schizophrenia and suicide: Systematic review of risk factors. *British Journal of Psychiatry*, 187, 9–20.

Heila, H., Isometsa, E. T., Henriksson, M. M., Heikkinen, M. E., Marttunen, M. J. & Lonnqvist, J. K. (1997). Suicide and schizophrenia: A nationwide psychological autopsy study on age- and sex-specific clinical characteristics of 92 suicide victims with schizophrenia. *American Journal of Psychiatry,* 154, 1235–1242.

Heppner, P. P., & Anderson, W. P. (1985). The relationship between problem-solving self- appraisal and psychological adjustment. *Cognitive Therapy and Research*, 4, 415-427.

Heppner, P. P., & Peterson, C. H. (1982). The development and implications of a personal problem-solving inventory. *Journal of Counseling Psychology*, 29, 66 – 75.

Heppner, P.P. (1988). *The Problem Solving Inventory (PSI): Research manual.* Palo Alto, CA: Consulting Psychologists Press.

Holahan, C.J., & Moos, R.H. (1987). Personal and contextual determinants of coping strategies. *Journal of Personality and Social Psychology*, 52, 946-954.

Johnson, J., Gooding, P. & Tarrier, N. (2008). Suicide risk in schizophrenia: Explanatory models and clinical implications, The Schematic Appraisal Model of Suicide (SAMS). *Psychology and Psychotherapy: Theory, Research and Practice*, 81, 55–77.

Kaplan, K. J. , & Harrow, M. (1999). Psychosis and functioning as risk factors for later suicidal activity among schizophrenia and schizoaffective patients: A disease – based interactive model. *Suicide and Life – Threatening Behavior,* 29, 10 – 24.

Kerlinger, F. (1986). Foundation of behavioral research. New York: Holt, Rinehart and Winston.

Kontaxakis, V., Hovaki – Kontaxaki, B., Margariti, M., Stamouli, S., Kollia, C. G. (2004) Suicidal ideation in patients with acute schizophrenia. *Canadian Journal of Psychiatry*, 49 (7): 476 – 479.

Kraepelin, E. (1920). Die Erscheinungsformen des Irreseins. *Zeitschrift für Neurologie und Psychiatrie,* 62, 1 – 29.

Kumar, R. (1996). Research Methodology: A Step – by – step Guide for Beginners. Malaysia: Sage Production.

Kuyken, W., & Brewin, C. R. (1995). Autobiographical memory functioning in depression and reports of early abuse. *Journal of Abnormal Psychology*, 104, 585–591.

Laing, R. D. (1993). Bölünmüş benlik [The divided self]. (Translator: Selçuk Çelik). İstanbul: Kabalcı Yayınevi.

Lazarus, R. S. (2000). Toward better research on stress and coping. *American Psychologist*, 55, 665-673.

Lazarus, R.S., and Folkman, S. (1984). Stress, Appraisal, and Coping. New York, NY: Springer.

Lindenmayer, J. P. & Khan, A. (2006). Psychopathology. In Lieberman, J. A., Stroup, T.S., & Perkins, D.O. (2006) . The american psychiatric publishing textbook of schizophrenia. Washington D. C.: American Psychiatric Publishing, Inc.

Lindenmayer, J.P. (2003) Assessment of suicidality in schizophrenia. In: Meltzer, H. Y., Conley, R. R., De Leo, D., Green, A. I., Kane, J. M., Knesevich, M. A., Lieberman, J. A., Lindenmayer, J.P., & Potkin, S. G. (2003) Intervention strategies for suicidality. *J Clin Psychiatry*, 6: 1-16 [audiograph series].

Linehan, M. M. & Nielsen S. L. (1981) Assessment of suicide ideation and parasuicide: Hopelessness and Social Desirability. *Journal of Consulting and Clinical Psychology*, 49: 773 - 775.

Magliano, L., Fadden, G., Economou, M., Held, T., Xavier, M., Guarneri, M., Malangone, C., Marasco, C., & Maj, M. (2000). Family burden and coping strategies in schizophrenia: 1-year follow-up data from the BIOMED I study. *Social Psychiatry and Psychiatric Epidemiology*, 35: 109 – 115.

Mann, J. J., Apter, A., Bertolote, J., Beautrais, A., Currier, D., Haas, A., Hegerl, U., Lonnqvist, J., Malone, K., Marusic, A., Mehlum, L., Patton, G., Phillips, M., Rutz, W., Rihmer, Z., Schmidtke, A., Shaffer, D., Silverman, M., Takahashi, Y., Varnik, A., Wasserman, D., Yip, P., & Hendin, H. (2005). Suicide prevention strategies: a systematic review**.** *Journal of the American Medical Association,* 294, 2064–2074.

Maxmen, J. & Ward, N. (1995). Essential Psychopathology and Its Treatment (2 nd ed.). New York: W.W. Norton & Co.

McCabe, R. E., Blankstein, K. R., & Mills, J. S. (1999). Interpersonal sensitivity and social problemsolving: Relations with academic and social self-esteem, depressive symptoms, and academic performance. *Cognitive Therapy and Research*, 23(6), 587-604.

McGorry, P. D., Edwards, J., & Mihalopoulos, C. (1996). EPPIC: an evolving system of early detection and optimal managment. *Schizophrenia Bulletin*, 22, 305 – 326.

Montross, L. P., Zisook, S. & Kasckow, J. (2005). Suicide among patients with schizophrenia: A consideration of risk and protective factors. *Annals of Clinical Psychiatry,* 17:3, 173 – 182.

Morgan, C. T. (1999). Psikolojiye Giriş [Introduction to psychology]. (Translator: H. Arıcı et. al.). Ankara: Meteksan.

Mueser, K. T. & Gingerich, S. (2006). The complete family guide to schizophrenia: helping your loved one get the most out of life. New York: The Guilford Press.

National Center for Health Statistics (1968-1991).Vital statistics of the United States, 2. Mortality- Part A, Washington D.C.: U.S. Government Printing Office

Nezu, A. M., & Ronan, G. F. (1985). Life stress, current problems, problem solving, and depressive symptoms: An integrative model. *Journal of Consulting and Clinical Psychology,* 53, 693- 697.

Nir, Z. & Neuman, L. (1995). Relationship among self- esteem, internal-external locus of control and weight change after participation in a weight reduction program. *Journal of Clinical Psychology*, 51, 482- 490.

O'Connor, R. C. (2003). Suicidal behaviour as a cry of pain: Test of a psychological model. *Archives of Suicide Research*, 7, 1–12.

O'Connor, R. C., & Sheehy, N. P. (2001). Suicidal behaviour. *Psychologist,* 14, 20–24.

Palmer, C. J. (2004). Suicide attempt history, self-esteem, and suicide risk in a sample of 116 depressed voluntary inpatients. *Psychological Reports*, 95, 1092–1094.

Pinikahana, J., Happell, B. & Keks, N. A. (2003). Suicide and schizophrenia: A review of literature for the decade (1990–1999) and implications for mental health nursing. *Issues in Mental Health Nursing,* 24, 27–43.

Pollock, L. R., &Williams, J. M. G. (2001). Effective problem solving in suicide attempters depends on specific autobiographical recall. *Suicide and Life-Threatening Behaviour*, 31, 386–396.

Pompili, M., Girardi, P., Ruberto, A., & Tatarelli, R. (2004). Toward a new prevention of suicide in schizophrenia. *World Journal of Biological Psychiatry*, 5, 201-210.

Pompili, M., Mancinelli, I., Ruberto, A., Kotzalidis, G. D., Girardi, P., & Tatarelli, R. (2005). Where patients with schizophrenia commit suicide: a review of suicide among inpatients and former inpatients. *International Journal of Psychiatry in Medicine*, 35, 171–190.

Raymont, V. (2001). Suicide in schizophrenia — how can research influence training and clinical practice? *Psychiatric Bulletin,* 25, 46–50.

Reinecke, M. A., DuBois, D. L., & Schultz, T. M. (2001). Social problem solving, mood, and suicidality among inpatient adolescents. *Cognitive Therapy and Research*, 25, 743- 756.

Rosenberg, M. (1965). Society and the adolescent self-image. Princeton, NJ: Princeton University Press.

Rosenberg, M. (1979). Conceiving the Self. New York: Basic Books.

Ross, C. E., & Mirowsky, J. (1989). Explaining the social patterns of depression: control and problem solving- or support and talking? *Journal of Health and Social Behavior*, 30, 206- 219.

Rossau, C.D. & Mortensen, P. B. (1997). Risk factors for suicide in patients with schizophrenia: Nested case-control study. *British Journal of Psychiatry,* 171, 355–359.

Roy, A. (1982). Suicide in chronic schizophrenia. *British Journal of Psychiatry*, 141, 171–177.

Roy, A. (1986). Depression, attempted suicide, and suicide in patients with chronic schizophrenia. *Psychiatric Clinics of North America,* 9, 193-206.

Şahin, N., Şahin, N. H., & Heppner, P. P. (1993). Psychometric properties of the problem solving inventory in a group of Turkish university students. *Cognitive Therapy and Research,* Vol. 17, Number 4, 379 – 396.

Schotte, D., & Clum, G. (1987). Problem- solving skills in suicidal psychiatric patients. *Journal of Consulting and Clinical Psychology*, 55, 49- 54.

Sevinçok, L., & Uslu, A. (2001). Bir grup şizofrenik hastada intihar düşünceleri ve depresyon. Yayınlanmamış araştırma raporu.

Sharaf, A. Y., Thompson, E. A. & Walsh, E. (2009). Protective effects of self – esteem and family support on suicide risk behaviors among at – risk adolescents. *Journal of Child and Adolescent Psychiatric Nursing,* Vol. 22, Number 3, 160 – 168.

Silverman, M. M. , Berman, A. L., Sanddal, N. D., O'Carroll, P.W. & Joiner, T. E. (2007). Rebuilding the tower of babel: A Revised Nomenclature for the study of suicide and suicidal behaviors. *Suicide and Life-Threatening Behavior,* 37 (3), 264 – 277.

Siris, S. G. (2001). Suicide and schizophrenia. *J Psychopharmacol,* 15, 127– 135.

Siva, A. N. (1991). *Infertilite'de stresle başetme, öğrenilmiş güçlülük ve depresyonun incelenmesi [Coping with stress, learnedpowerfulness, and depression among infertile people]*. Unpublished doctoral dissertation, Hacettepe University, Ankara.

Solomon, P., & Draine, J. (1995). Subjective burden among family members of mentally ill adults: relation to stress, coping and adaptation. *American Journal of Orthopsychiatry*, 65, 419 – 427.

Sümer N. & Güngör, D. (1999) Yetişkin Bağlanma Stilleri Ölçeklerinin Türk Örneklemi Üzerinde Psikometrik Değerlendirilmesi ve Kültülerarası Bir Karşılaştırma. *Türk Psikoloji Dergisi*, 14(43): 71- 106.

Tandon, R. & Jibson, M. D. (2003). Suicidal behavior in schizophrenia: Diagnosis, neurobiology, and treatment implications. *Current Opinion in Psychiatry,* 16, 193–197.

Tarrier, N., Barrowclough, C., Andrews, B., & Gregg, L. (2004). Suicide risk in recent onset schizophrenia: The influence of clinical. Social, self-esteem and demographic factors. *Social Psychiatry and Psychiatric Epidemiology*, 39, 927–937.

Tarrier, N., Haddock, G., Lewis, S., Drake, R., Gregg, L. & the Socrates Trial Group. (2006). Suicide behaviour over 18 months in recent onset patients with schizophrenia: The effects of CBT. *Schizophrenia Research*, 83, 15–27.

Tatarelli, R., Pompili, M., & Girardi, P. (2007). *Suicide in schizophrenia.* New York: Nova Science Publishers, Inc.

Tice, D. M. (1993). The social motivations of people with low self-esteem. In R. F. Baumeister (Ed.), Self-esteem: The puzzle of low self-regard. New York: Plenum Press.

Tiihonen, J., Walhbeck, K., Lonnqvist, J., (2006) Effectiveness of antipsychotic treatments in a nationwide cohort of patients in community care after first hospitalisation due to schizophrenia and schizoaffective disorder: observational follow-up study.*British Medical Journal,* 333: 224.

Torucu, Koçak, B. (1990). 13-14 Yaşındaki gençlerin sosyo-ekonomik düzeyi ve anne-baba tutumlarındaki farklılıkların belirlenip benlik saygısına etkisinin araştırılıp, karşılaştırılması, *Dokuz Eylül Üniversitesi, Sosyal Bilimler Enstitüsü Yayınlanmamış Yüksek Lisans Tezi*, İzmir.

Üçok, A., Çakır, S., Duman, Z. Ç., Dişçigil, A., Kandemir, P., & Atlı, H. (2006). Cognitive predictors of skill acquisition on social problem solving in patients with schizophrenia. *European Archives of Psychiatry and Clinical Neuroscience*, 256, 388–394.

Westermeyer, J. F., Harrow, M., & Marengo, J. T. (1991). Risk for suicide in schizophrenia and other psychotic and nonpsychotic disorders. *Journal of Nervous and Mental Disease*, 179, 259–266.

Williams, J. M. G., Ellis, N. C., Tyers, C., Healy, H., Rose, G., & MacLeod, A. K. (1996). The specificity of autobiographical memory and imageability of the future. *Memory and Cognition*, 24, 116–125.

Wing, J. K. & Agrawal, N. (2003). Concepts and classification in schizophrenia. In Hirsch, S. R. & Weinberger, D. R. (2003) Schizophrenia. Massachusetts: Blackwell Publishing company.

World Health Organization, (2010). Suicide. Internet Resources; www.who.int retrieved on, 25. 08.2010

Yörükoğlu, A. (1986). Gençlik çağı [Youth age]. Ankara: Türkiye İş Bankası Kültür Yayınları Sosyal ve Felsefi Eserler Dizisi. No: 26.

Zimet, G.D., Dahlem, N.W., Zimet, S.G., & Farley, G.K. (1988). The Multidimensional Scale of Perceived Social Support. *Journal of Personality Assessment*, 52, 30–41.

APPENDICES

APPENDIX A

DIAGNOSTIC CRITERIAS of SCHIZOPHRENIA on DSM IV – TR

A. Characteristic symptoms: Two (or more) of the following, each present for a significant portion of time during a 1 – month period (or less if successfully treated):

1. Delusions
2. Hallucinations
3. Disorganized speech (e.g., frequent derailment or incoherence)
4. Grossly disorganized or catatonic behavior
5. Negative symptoms (i.e., affective flattening, alogia, or avolotion)

Note. Only one criterion A symptom is required if delusions are bizarre or hallucinations consist of a voice keeping up a running commentary on the person's behavior or thoughts, or two or more voices are conversing with each other.

B. Social / occupational dysfunction: For a significant portion of the time since the onset of the disturbance, one or more major areas of functioning such as work, interpersonal relations, or self – care are markedly below the level achieved prior to the onset (or when the onset is in childhood or adolescence, failure to achieve the expected level of interpersonal, academic, or occupational achievement).

C. Duration: Continuous signs of the disturbance persist for at least 6 months. This 6 month period must include least 1 month of symptoms (or less if successfully treated) that meet Criterion A (i.e., active – phase symptoms) and may include periods of prodromal and residual symptoms. During these prodromal or residual periods, the signs of the disturbance may be manifested by only negative symptoms or two or more symptoms listed in criterion A present in an attenuated form (e.g., odd beliefs, unusual perceptual experiences).

D. Schizoaffective and mood disorder exclusion: Schizoaffective disorder and mood disorder with psychotic features have been ruled out because either 1) no major depressive, manic, or mixed episodes have occurred concurrently with the active – phase symptoms; or 2) if mood episodes have occurred during active – phase symptoms, their total duration has been brief relative to the active and residual periods.

E. Substance / general medical condition exclusion: The disturbance is not due to the direct physiological effects of a substance (e.g., a drug of abuse, a medication) or a general medical condition.

F. Relationship to a pervasive developmental disorder: If there is history of autistic disorder or another pervasive developmental disorder, the additional diagnosis of schizophrenia is made only if prominent delusions or hallucinations are also present for at least a month (or less if successfully treated).

APPENDIX B

INFORMED CONSENT FORM

Değerli Katılımcı;

Bu çalışma, Orta Doğu Teknik Üniversitesi Psikoloji Bölümü Klinik Psikoloji yüksek lisans öğrencisi R. Kıvılcım Uçar tarafından, bitirme tezi kapsamında yürütülmektedir. Bu çalışmanın amacı, şizofren hastalarda intihar düşüncesinin; problem çözme becerileri, stresle başa çıkma tarzları, benlik saygısı ve sosyal destek ile ilişkisini araştırmaktır. Çalışmaya katılım tamamen gönüllülük esasına dayanmaktadır. Çalışmadaki sorularda kesinlikle kimlik belirleyici bilgiler istenmemektedir ve rahatsızlık verecek sorular bulunmamaktadır. Çalışmayı istediğiniz zaman bırakmakta serbestsiniz. Bununla birlikte, sorulara samimi cevaplar vermeniz araştırmada elde edilen sonuçların geçerli ve güvenilir olmasını sağlayacaktır. Verdiğiniz tüm cevaplar gizli tutulacak ve elde edilen bilgiler sadece araştırma amaçları doğrultusunda kullanılacaktır. Ayrıca çalışmayla ilgili her türlü sorularınız cevaplandırılacaktır.

Çalışma hakkında bilgi almak için ODTÜ Klinik Psikoloji yüksek lisans öğrencisi R. Kıvılcım Uçar (e-posta: kvlcmucar@yahoo.com) ile iletişim kurabilirsiniz.

Katılımınız için teşekkür ederiz.

Bu çalışmaya tamamen gönüllü olarak katılıyorum ve istediğim zaman yarıda kesip çıkabileceğimi biliyorum. Verdiğim bilgilerin bilimsel amaçlı yayımlarda kullanılmasını kabul ediyorum. (Formu doldurup imzaladıktan sonra uygulayıcıya geri veriniz).

Adı Soyadı **Tarih** **İmza**

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APPENDIX C

DEMOGRAPHIC INFORMATION FORM - 1

Yaş : _____

Cinsiyet: Kadın ( ) Erkek ( )

Medeni Durum: a) Bekâr
b) Evli
c) Boşanmış
d) Dul
e) Nişanlı
f) Eşinden ayrı yaşıyor

Eğitim Durumu: a) Okur-yazar değil
b) Okur-yazar veya ilkokul terk
c) İlkokul mezunu
d) Ortaokul mezunu
e) Lise mezunu
f) Üniversite
g) Master/ doktora

Mesleğiniz:

Şu anda bir işte çalışıyor musunuz? :

Şu anda yaşadığınız şehir/ kasaba:

Kiminle yaşıyorsunuz? a) Ailemle
b) Arkadaşlarımla
c) Akrabalarımla
d) Yalnız

Ailenizin eğitim durumu:

Anne:	Baba:
a) Okur-yazar değil	a) Okur-yazar değil
b) Okur-yazar veya ilkokul terk	b) Okur-yazar veya ilkokul terk
c) İlkokul mezunu	c) İlkokul mezunu
d) Ortaokul mezunu	d) Ortaokumezunu
e) Lise mezunu	e) Lise mezunu
f) Üniversite	f) Üniversite

APPENDIX D

DEMOGRAPHIC INFORMATION FORM – 2

Hastanın Şizofreni Tanısı Aldığı Zaman Aralığı: a) 0 – 6 ay
b) 6 – 12 ay
c) 1 – 5 yıl
d) 5 – 10 yıl
e) 10 yıldan fazla

Hastanın Şizofreni Alt Tipi: a) Paranoid Tip
b) Dezorganize Tip
c) Katatonik Tip
d) Farklılaşmamış, Diferansiye Olmamış Tip
e) Rezidüel Tip

Komorbid Tanı (Varsa) Belirtiniz:_____

Tedavi Yöntemi: a) İlaç Kullanımı
b)Bireysel Psikoterapi
c)Grup Psikoterapisi
d)Aile Terapisi
d)İlaç Kullanımı ve Psikoterapi

Tedavi Zaman Aralığı: a) 0 – 6 ay
b) 6 – 12 ay
c) 1 – 5 yıl
d) 5 – 10 yıl
e) 10 yıldan fazla

Kaç Kez Hastaneye Yatırılmış? :_____

Hastaneye Yatış / Yatışlar Ortalama Kaç gün Sürmüş? :_____

Daha Önce İntihar Girişimi Var mı? a)Evet
b)Hayır

Varsa Kaç Kere? :_____

İntihar Girişim Nedenleri:_____

İntihar Girişiminde Kullanılan Yöntem:
a) İlaç – toksik madde
b) Kendini asma
c) Suya atlama
d) Tüp gaz - doğalgaz
e) Kesici alet kullanma
f) Ateşli silah
g) Kendini yakma
h) Araç altına atlama
i) Yüksekten atlama
j)Diğer

Tedavi Almış mı? a) Evet
b) Hayır

Tedavi Yöntemi: a) İlaç Kullanımı
b)Bireysel Psikoterapi
c)Grup Psikoterapisi
d)Aile Terapisi
e)İlaç Kullanımı ve Psikoterapi

APPENDIX E
SUICIDAL IDEATION SCALE and ROSENBERG'S SELF ESTEEM SCALE

Lütfen aşağıda yer alan ifadelerin size ne ölçüde uygun olduğunu, aşağıdaki ölçeği dikkate alarak ifadenin altındaki bölmede işaretleyin. Teşekkürler.

1.Kendimi en az diğer insanlar kadar değerli buluyorum.

a) Çok doğru b) Doğru c) Yanlış d) Çok yanlış

2. Kontrol edemeyeceğim kadar öfkelenirim.

a) Doğru b)Yanlış

3.Geçen yıl içinde başkalarına hayatıma son verebileceğimden bahsettim.
a) Doğru b)Yanlış

4.Bazı olumlu özelliklerim olduğunu düşünüyorum.

a) Çok doğru b) Doğru c) Yanlış d) Çok yanlış

5.Her zamankinden daha yavaş düşünüyorum.

a) Doğru b)Yanlış

6. Bazen başkalarını incitme isteği duyuyorum.

a) Doğru b)Yanlış

7.Genelde kendimi başarısız bir kişi olarak görme eğilimindeyim.

a) Çok doğru b) Doğru c) Yanlış d) Çok yanlış

8. İncinmem veya yaralanmam umurumda değil.

a) Doğru b)Yanlış

9.Ben de diğer insanların birçoğunun yapabildiği kadar bir şeyler yapabilirim.

a) Çok doğru b) Doğru c) Yanlış d) Çok yanlış

10.Kendim için bir şeyleri daha iyi yapacağım konusunda umudumu kesebilirim.

a) Doğru b)Yanlış

11.Kendimde gurur duyacak fazla bir şey bulamıyorum.

a) Çok doğru b) Doğru c) Yanlış d) Çok yanlış

12. Geleceğim bana karanlık görünüyor.

a) Doğru b)Yanlış

13.Kendime karşı olumlu bir tutum içindeyim.

a) Çok doğru b) Doğru c) Yanlış d) Çok yanlış

14.Her zamankinden daha yavaş konuşuyorum.

a) Doğru b)Yanlış

15. İşlerin kötü gitmesi konusunda kendimi suçluyorum.

a) Doğru b)Yanlış

16. Zaman zaman kendimi öldürme konusunda karşı konulmaz bir istek duyarım.

a) Doğru b)Yanlış

17. İlerisi için yalnızca hoş olmayan şeyler düşünüyorum.

a) Doğru b)Yanlış

18.Genel olarak kendimden memnunum.

a) Çok doğru b) Doğru c) Yanlış d) Çok yanlış

19.Kötü bir şeyler yapmışım gibi geliyor.
a) Doğru b)Yanlış

20. İstediğim hiçbir şeyi elde edemiyorum.
a) Doğru b)Yanlış

21.Kendime karşı daha fazla saygı duyabilmeyi isterdim.

a) Çok doğru b) Doğru c) Yanlış d) Çok yanlış

22. Hiçbir şey istediğim gibi değil.
a) Doğru b)Yanlış

23.Sık sık hayatıma son verme fikri aklıma geliyor.
a) Doğru b)Yanlış

24.Bazen kesinlikle bir işe yaramadığımı düşünüyorum.

a) Çok doğru b) Doğru c) Yanlış d) Çok yanlış

25. Ölümü hak etmiş olduğumu düşünüyorum.
a) Doğru b)Yanlış

26. Bazen hiç de iyi bir insan olmadığımı düşünüyorum.

a) Çok doğru b) Doğru c) Yanlış d) Çok yanlış

27. İntihar girişiminde bulunacak olsam, öncesinde en az üç saat bunu düşünürdüm.
a) Doğru b)Yanlış

APPENDIX F

PROBLEM SOLVING SCALE

Bu envanterin amacı, günlük yaşantınızdaki problemlerinize (sorunlarınıza) genel olarak nasıl tepki gösterdiğinizi belirlemeye çalışmaktır. Sözünü ettiğimiz bu problemler, matematik ya da fen derslerindeki alışmış olduğumuz problemlerden farklıdır. Bunlar, kendini karamsar hissetme, arkadaşlarla geçinmeme, bir mesleğe yönelme konusunda yaşanan belirsizlikler ya da boşanıp boşanmama gibi karar verilmesi zor konularda ve hepimizin başına gelebilecek türden sorunlardır. Lütfen aşağıdaki maddeleri elinizden geldiğince samimiyetle ve bu tür sorunlarla karşılaştığınızda tipik olarak nasıl davrandığınızı göz önünde bulundurarak cevaplandırın. Cevaplarınızı, bu tür problemlerin nasıl çözülmesi gerektiğini düşünerek vermeniz gerekmektedir. Bunu yapabilmek için kolay bir yol olarak her soru için kendinize şu soruyu sorun: " Burada sözü edilen davranışı ben ne sıklıkla yaparım?"

Yanıtlarınızı aşağıdaki ölçeğe göre değerlendirin:

1. Her zaman böyle davranırım.
2. Çoğunlukla böyle davranırım.
3. Sık sık böyle davranırım.
4. Arada sırada böyle davranırım.
5. Ender olarak böyle davranırım.
6. Hiçbir zaman böyle davranmam.

Ne kadar sıklıkla böyle davranırsınız?

	Her Zaman					Hiçbir zaman
1. Bir sorunumu çözmek için kullandığım çözüm yolları başarısız ise bunların neden başarısız olduğunu araştırmam.	**(1)**	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**
2. Zor bir sorunla karşılaştığımda ne olduğunu tam olarak belirleyebilmek için nasıl bilgi toplayacağımı uzun boylu düşünmem.	(1)	(2)	(3)	(4)	(5)	(6)

3. Bir sorunumu çözmek için gösterdiğim ilk çabalar (1) (2) (3) (4) (5) (6)
başarısız olursa o sorun ile başa çıkabileceğimden
şüpheye düşerim.

4. Bir sorunumu çözdükten sonra bu sorunu çözerken (1) (2) (3) (4) (5) (6)
çözerken neyin işe yaradığını, neyin yaramadığını
ayrıntılı olarak düşünmem.

5. Sorunlarımı çözme konusunda genellikle yaratıcı (1) (2) (3) (4) (5) (6)
ve etkili çözümler üretebilirim.

6. Bir sorunumu çözmek için belli bir yolu denedikten (1) (2) (3) (4) (5) (6)
sonra durur ve ortaya çıkan sonuç ile olması gerektiğini
düşündüğüm sonucu karşılaştırırım.

7. Bir sorunum olduğunda onu çözebilmek için (1) (2) (3) (4) (5) (6)
başvurabileceğim yolların hepsini düşünmeye
çalışırım.

8. Bir sorunla karşılaştığımda neler hissetiğimi anlamak için duygularımı incelerim. (1) (2) (3) (4) (5) (6)

9. Bir sorun kafamı karıştırdığında duygu ve düşüncelerimi somut ve açık –seçik terimlerle ifade etmeye uğraşmam. **(1) (2) (3) (4) (5) (6)**

10. Başlangıçta çözümünü farketmesem de sorunlarımın çoğunu çözme yeteneğim vardır. (1) (2) (3) (4) (5) (6)

11. Karşılaştığım sorunların çoğu, çözebileceğimden daha zor ve karmaşıktır. **(1) (2) (3) (4) (5) (6)**

12. Genellikle kendimle ilgili kararları verebilirim ve bu kararlardan hoşnut olurum. (1) (2) (3) (4) (5) (6)

13. Bir sorunla karşılaştığımda onu çözmek için genellikle aklıma gelen ilk yolu izlerim. **(1) (2) (3) (4) (5) (6)**

14. Bazen durup sorunlarım üzerinde düşünmek yerine gelişigüzel sürüklenip giderim. (1) (2) (3) (4) (5) (6)

15. Bir sorunla ilgili olası bir çözüm yolu üzerinde karar vermeye çalışırken seçeneklerimin başarı olasılığını tek tek değerlendirmem. **(1) (2) (3) (4) (5) (6)**

16. Bir sorunla karşılaştığımda, başka konuya geçmeden önce durur ve o sorun üzerinde düşünürüm. (1) (2) (3) (4) (5) (6)

17. Genellikle aklıma il gelen fikir doğrultusunda hareket ederim. **(1) (2) (3) (4) (5) (6)**

18. Bir karar vermeye çalışırken her seçeneğin (1) (2) (3) (4) (5) (6)
sonuçlarını ölçer, tarar, birbirleriyle karşılaştırır,
sonra karar veririm.

19. Bir sorunumu çözmek üzere plan yaparken o (1) (2) (3) (4) (5) (6)
planı yürütebileceğime güvenirim.

20. Belli bir çözüm planını uygulamaya koymadan önce, (1) (2) (3) (4) (5) (6)
nasıl bir sonuç vereceğini tahmin etmeye çalışırım.

21. Bir soruna yönelik olası çözüm yollarını (1) (2) (3) (4) (5) (6)
düşünürken çok fazla seçenek üretmem.

22. Bir sorunumu çözmeye çalışırken sıklıkla kullandığım (1) (2) (3) (4) (5) (6)
bir yöntem; daha önce başıma gelmiş benzer sorunları
düşünmektir.

23. Yeterince zamanım olur ve çaba gösterirsem karşılaştığım sorunların çoğunu çözebileceğime inanıyorum.	**(1)**	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**
24. Yeni bir durumla karşılaştığımda ortaya çıkabilecek sorunları çözebileceğime inancım vardır.	(1)	(2)	(3)	(4)	(5)	(6)
25. Bazen bir sorunu çözmek için çabaladığım halde, bir türlü esas konuya giremediğim ve gereksiz ayrıntılarla uğraştığım duygusunu yaşarım.	**(1)**	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**
26. Ani kararlar verir ve sonra pişmanlık duyarım.	(1)	(2)	(3)	(4)	(5)	(6)
27. Yeni ve zor sorunları çözebilme yeteneğine güveniyorum.	**(1)**	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**

28. Elimdeki seçenekleri karşılaştırırken ve karar verirken kullandığım sistematik bir yöntem vardır. (1) (2) (3) (4) (5) (6)

29. Bir sorunla başa çıkma yollarını düşünürken çeşitli fikirleri birleştirmeye çalışmam. **(1) (2) (3) (4) (5) (6)**

30. Bir sorunla karşılaştığımda bu sorunun çıkmasında katkısı olabilecek benim dışımdaki etmenleri genellikle dikkate almam. (1) (2) (3) (4) (5) (6)

31. Bir konuyla karşılaştığımda, ilk yaptığım şeylerden biri, durumu gözden geçirmek ve konuyla ilgili olabilecek her türlü bilgiyi dikkate almaktır. **(1) (2) (3) (4) (5) (6)**

32. Bazen duygusal olarak öylesine etkilenirim ki, sorunumla başa çıkma yollarından pek çoğunu dikkate bile almam. (1) (2) (3) (4) (5) (6)

33. Bir karar verdikten sonra, ortaya çıkan sonuç genellikle benim beklediğim sonuca uyar. **(1) (2) (3) (4) (5) (6)**

34. Bir sorunla karşılaştığımda, o durumla başa çıkabileceğimden genellikle pek emin değilimdir. (1) (2) (3) (4) (5) (6)

35. Bir sorunun farkına vardığımda, ilk yaptığım şeylerden biri, sorunun tam olarak ne olduğunu anlamaya çalışmaktır. **(1) (2) (3) (4) (5) (6)**

APPENDIX G
MULTIDIMENSIONAL SCALE OF SOCIAL SUPPORT

Aşağıda 12 cümle ve her birinde de cevaplarınızı işaretlemeniz için 1 den 7 ye kadar rakamlar verilmiştir. Her cümlede söyleneni sizin için ne kadar çok doğru olduğunu veya olmadığını belirtmek için o cümle altındaki rakamlardan yalnız bir tanesini daire içine alarak işaretleyiniz. Bu şekilde 12 cümlenin her birinde bir işaret koyarak cevaplarınızı veriniz.

1. İhtiyacım olduğunda yanımda olan özel bir insan var.

Kesinlikle hayır	1	2	3	4	5	6	7	Kesinlikle evet

2. Sevinç ve kederimi paylaşabileceğim özel bir insan var.

Kesinlikle hayır	1	2	3	4	5	6	7	Kesinlikle evet

3. Ailem bana gerçekten yardımcı olmaya çalışır.

Kesinlikle hayır	1	2	3	4	5	6	7	Kesinlikle evet

4. İhtiyacım olan duygusal yardımı ve desteği ailemden alırım.

Kesinlikle hayır	1	2	3	4	5	6	7	Kesinlikle evet

5. Beni gerçekten rahatlatan bir insan var.

Kesinlikle hayır	1	2	3	4	5	6	7	Kesinlikle evet

6. Arkadaşlarım bana gerçekten yardımcı olmaya çalışırlar.

Kesinlikle hayır	1	2	3	4	5	6	7	Kesinlikle evet

7. İşler kötü gittiğinde arkadaşlarıma güvenebilirim.

Kesinlikle hayır	1	2	3	4	5	6	7	Kesinlikle evet

8. Sorunlarımı ailemle konuşabilirim.

Kesinlikle hayır	1	2	3	4	5	6	7	Kesinlikle evet

9. Sevinç ve kederlerimi paylaşabileceğim arkadaşlarım var.

Kesinlikle hayır	1	2	3	4	5	6	7	Kesinlikle evet

10. Yaşamımda duygularıma önem veren özel bir insanım.

Kesinlikle hayır	1	2	3	4	5	6	7	Kesinlikle evet

11. Kararlarımı vermede ailem bana yardımcı olmaya isteklidir.

Kesinlikle hayır	1	2	3	4	5	6	7	Kesinlikle evet

12. Sorunlarımı arkadaşlarımla konuşabilirim.

Kesinlikle hayır	1	2	3	4	5	6	7	Kesinlikle evet

APPENDIX H

TURKISH WAYS OF COPING INVENTORY

AÇIKLAMA

Çeşitli sorunlarla karşılaşıyor ve bu sorunlarla başa çıkabilmek için çeşitli duygu, düşünce ve davranışlardan yararlanıyor olabilirsiniz. Sizden istenilen karşılaştığınız sorunlarla başa çıkabilmek için neler yaptığınızı göz önünde bulundurarak, aşağıdaki maddeleri cevap kağıdı üzerinde işaretlemenizdir. Lütfen her bir maddeyi dikkatle okuyunuz ve cevap formu üzerindeki aynı maddeye ait cevap şıklarından birini daire içine alarak cevabınızı belirtiniz. Başlamadan önce örnek maddeyi incelemeniz yararlı olacaktır.

ÖRNEK:

Madde 4. İyimser olmaya çalışırım.

	Hiç uygun değil	Pek uygun değil	Uygun	Oldukça uygun	Çok uygun
Madde 4.	**1**	**2**	**3**	**(4)**	**5**

	Hiç uygun değil	Pek uygun değil	Uygun	Oldukça uygun	Çok uygun
1.Aklımı kurcalayan şeylerden kurtulmak için değişik işlerle uğraşırım…….	1	2	3	4	5
2. Bir sıkıntım olduğunu kimsenin bilmesini istemem ……...	1	2	3	4	5
3. Bir mucize olmasını beklerim..…….	1	2	3	4	5
4. İyimser olmaya çalışırım……..	1	2	3	4	5
5. “ Bunu da atlatırsam sırtım yere gelmez ” diye düşünürüm…….	1	2	3	4	5
6. Çevremdeki insanlardan problemi çözmede bana yardımcı olmalarını beklerim	1	2	3	4	5
7. Bazı şeyleri büyütmemeye üzerinde durmamaya çalışırım……..	1	2	3	4	5
8. Sakin kafayla düşünmeye ve öfkelenmemeye çalışırım……...	1	2	3	4	5
9. Bu sıkıntılı dönem bir an önce geçsin isterim……..	1	2	3	4	5

10. Olayın değerlendirmesini yaparak en iyi kararı vermeye çalışırım…… 1……2……..3……..4……..5
11. Konuyla ilgili olarak başkalarının ne düşündüğünü anlamaya çalışırım…… 1……2……..3……..4……..5
12. Problemin kendiliğinden hallolacağına inanırım…… 1……2……..3……..4……..5
13. Ne olursa olsun kendimde direnme ve mücadele etme gücü hissederim……. 1…….. ….2……..3……..4……..5
14. Başkalarının rahatlamama yardımcı olmalarını beklerim…….. 1……2……..3……..4……..5
15. Kendime karşı hoşgörülü olmaya çalışırım……... 1……2……..3……..4……..5
16. Olanları unutmaya çalışırım……... 1……2……..3……..4……..5
17. Telaşımı belli etmemeye ve sakin olmaya çalışırım…… 1……2……..3……..4……..5
18. “ Başa gelen çekilir ” diye düşünürüm…….. 1……2……..3……..4……..5
19. Problemin ciddiyetini anlamaya çalışırım……. 1……2……..3……..4……..5
20. Kendimi kapana sıkışmış gibi hissederim…….. 1……2……..3……..4……..5
21. Duygularımı paylaştığım kişilerin bana hak vermesini isterim……. 1……2……..3……..4……..5
22. Hayatta neyin önemli olduğunu keşfederim…….. 1……2……..3……..4……..5
23. “Her işte bir hayır vardır ” diye düşünürüm…… 1……2……..3……..4……..5
24. Sıkıntılı olduğumda her zamankinden fazla uyurum…… 1……2……..3……..4……..5
25. İçinde bulunduğum kötü durumu kimsenin bilmesini istemem……. 1……2……..3……..4……..5
26. Dua ederek Allah’tan yardım dilerim……... 1……2……..3……..4……..5
27. Olayı yavaşlatmaya ve böylece kararı ertelemeye çalışırım……. 1……2……..3……..4……..5
28. Olanla yetinmeye çalışırım…… 1……2……..3……..4……..5
29. Olanları kafama takıp sürekli düşünmekten kendimi alamam……... 1……2……..3……..4……..5
30. İçimde tutmaktansa paylaşmayı tercih ederim…… 1……2……..3……..4……..5
31. Mutlaka bir yol bulabileceğime inanır, bu yolda uğraşırım…… 1……2……..3……..4……..5
32. Sanki bu bir sorun değilmiş gibi davranırım……. 1……2……..3……..4……..5
33. Olanlardan kimseye söz etmemeyi tercih ederim…….. 1……2……..3……..4……..5
34. “ İş olacağına varır ” diye düşünürüm……. 1……2……..3……..4……..5
35. Neler olabileceğini düşünüp ona göre davranmaya çalışırım…… 1……2……..3……..4……..5
36.İşin içinden çıkamayınca “ elimden bir şey gelmiyor ” der,
durumu olduğu gibi kabullenirim……... 1……2……..3……..4……..5
37. İlk anda aklıma gelen kararı uygularım…….. 1……2……..3……..4……..5
38. Ne yapacağıma karar vermeden önce arkadaşlarımın fikrini alırım…….. 1……2……..3……..4……..5
39. Herşeye yeniden başlayacak gücü bulurum……... 1……2……..3……..4……..5
40. Problemin çözümü için adak adarım…….. 1……2……..3……..4……..5

41. Olaylardan olumlu birşey çıkarmaya çalışırım…….. 1……2……..3……..4……..5
42. Kırgınlığımı belirtirsem kendimi rahatlamış hissederim……... 1……2……..3……..4……..5
43. Alın yazısına ve bunun değişmeyeceğine inanırım……... 1……2……..3……..4……..5
44. Soruna birkaç farklı çözüm yolu ararım…… 1……2……..3……..4……..5
45. Başıma gelenlerin herkesin başına gelebilecek şeyler olduğuna inanırım…… 1……2……..3……..4……..5
46. “ Olanları keşke değiştirebilseydim ” derim……. 1……2……..3……..4……..5
47. Aile büyüklerine danışmayı tercih ederim…… 1……2……..3……..4……..5
48. Yaşamla ilgili yeni bir inanç geliştirmeye çalışırım……. 1……2……..3……..4……..5
49. “ Herşeye rağmen elde ettiğim bir kazanç vardır ” diye düşünürüm…… 1……2……..3……..4……..5
50. Gururumu koruyup güçlü görünmeye çalışırım…… 1……2……..3……..4……..5
51. Bu işin kefaretini (bedelini) ödemeye çalışırım…….. 1……2……..3……..4……..5
52. Problemi adım adım çözmeye çalışırım…… 1……2……..3……..4……..5
53. Elimden hiç birşeyin gelmeyeceğine inanırım…….. 1……2……..3……..4……..5
54. Problemin çözümü için bir uzmana danışmanın en iyi yol olacağına inanırım 1……2……..3……..4……..5
55. Problemin çözümü için hocaya okunurum……... 1……2……..3……..4……..5
56. Herşeyin istediğim gibi olmayacağına inanırım……... 1……2……..3……..4……..5
57. Bu dertten kurtulayım diye fakir fukaraya sadaka veririm……... 1……2……..3……..4……..5
58. Ne yapılacağını planlayıp ona göre davranırım……..... 1……2……..3……..4……..5
59. Mücadeleden vazgeçerim……..... 1……2……..3……..4……..5
60. Sorunun benden kaynaklandığını düşünürüm……... 1……2……..3……..4……..5
61. Olaylar karşısında “ kaderim buymuş ” derim……..... 1……2……..3……..4……..5
62. Sorunun gerçek nedenini anlayabilmek için başkalarına danışırım…….. 1……2……..3……..4……..5
63. “ Keşke daha güçlü bir insan olsaydım ” diye düşünürüm…… 1……2……..3……..4……..5
64. Nazarlık takarak, muska taşıyarak benzer olayların olmaması
için önlemler alırım…… 1……2……..3……..4……..5
65. Ne olup bittiğini anlayabilmek için sorunu enine boyuna düşünürüm…….. 1……2……..3……..4……..5
66. “ Benim suçum ne ” diye düşünürüm……..... 1……2……..3……..4……..5
67. “ Allah’ın takdiri buymuş ” diye kendimi teselli ederim……... 1……2……..3……..4……..5
68. Temkinli olmaya ve yanlış yapmamaya çalışırım……. 1……2……..3……..4……..5
69. Bana destek olabilecek kişilerin varlığını bilmek beni rahatlatır…….. 1……2……..3……..4……..5
70. Çözüm için kendim birşeyler yapmak istemem……. 1……2……..3……..4……..5
71. “ Hep benim yüzümden oldu ” diye düşünürüm…… 1……2……..3……..4……..5

72. Mutlu olmak için başka yollar ararım…… 1……2……..3……..4……..5
73. Hakkımı savunabileceğime inanırım……. 1……2……..3……..4……..5
74. Bir kişi olarak iyi yönde değiştiğimi ve olgunlaştığımı hissederim……. 1……2……..3……..4……..5