LIFE EVENTS, DEPRESSION AND ANXIETY IN A UNIVERSITY POPULATION

by

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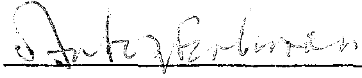

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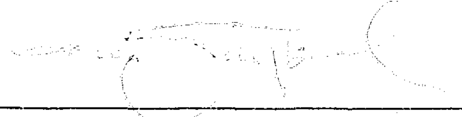

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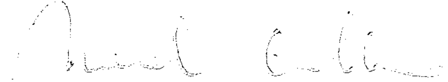

Yard.Doç.Dr.Meral Ü.Çulha

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A B S T R A C T

LIFE EVENTS, DEPRESSION AND ANXIETY IN A UNIVERSITY POPULATION

This study investigated mainly relationships among perception of life events, depression and anxiety in a university population. Additionally, prevalence of depression and level of trait anxiety of the medical faculty students have been investigated.

The theoretical framework of the study was based on cognitive theory of depression (Beck, 1967). The general hypothesis of the investigation was that there is positive relationship between negative perception of life events, depression and anxiety.

The participants of the study were 306 medical faculty students at Istanbul Faculty of Medicine. The instruments were the Life Experiences Survey, the Beck Depression Inventory and the STAI A-Trait scale.

Pearson Product-Moment Correlation Coefficient was used to analyze the data. The results confirmed the general and operational hypotheses.

ÖZET

BİR GRUP ÜNİVERSİTE ÖĞRENCİSİNDE YAŞAM OLAYLARI, DEPRESYON, VE KAYGI

Bu çalışmada bir grup üniversite öğrencisinde yaşam olaylarının algılanması ile depresyon ve kaygı arasındaki ilişki araştırılmıştır. Ayrıca yine tıp fakültesi öğrencilerinde depresyonun sıklığı ve sürekli kaygı düzeyi de araştırılmıştır.

Bu çalışmanın kuramsal çerçevesi Beck'in bilişsel kuramına dayandırılmıştır (1967). Çalışmanın genel varsayımı yaşam olaylarının olumsuz algılanışı ile depresyon ve kaygı arasında pozitif bir ilişki olduğudur.

İstanbul Tıp Fakültesinden 306 öğrenci çalışmanın örneklem grubunu oluşturmuştur. Çalışmada Yaşam Olayları Anketi, Beck Depresyon Envanteri ve Durumluk-Sürekli Kaygı Envanteri Sürekli Kaygı Ölçeği araç olarak kullanılmıştır.

Veriler "Pearson Product-Moment-Correlation Coefficient" yöntemi ile değerlendirilmiştir. Sonuçlar çalışmanın varsayımlarını doğrulamıştır.

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I. INTRODUCTION

The present study aimed to investigate three main topics; life events, depression and anxiety. The subject population was medical faculty students.

Investigation of life events has become a major field of research recently, due to their relation to such states as stress, depression, anxiety and quality of life (Brown, 1972; Cadoret, et al., 1972; Dunner, et al., 1979; Grant, et al., 1981; Monroe, et al., 1983; Paykel, et al., 1969; Reawley, 1974; Sarason, et al., 1976, 1978; Schless, et al., 1978; Warheit, 1979).

The assessment and evaluation of life events among the student population is of utmost importance in terms of its guiding value for remedial and preventive counseling intervention. The value of studying the existence of depression and anxiety among students for the purpose of enhancement of mental health cannot be denied either.

Yet, data about neither the prevalence of depression nor existence and evaluation of life events for student populations in Turkey does not exist. Anxiety is the only area among these three that has been explored (Öner and Le Compte, 1983).

Thus, the present author set out to investigate the frequency and perceived evaluation of life events; prevalence of depression and trait anxiety and their relationship to each other for medical faculty students.

The following sections will cover a survey of the theoretical and empirical literature on life events, depression and anxiety and their relationship to each other. The chapter will end with implications of the literature and hypotheses.

II. REVIEW OF THE LITERATURE

A. THEORETICAL REVIEW OF THE LITERATURE

1- Life Events

Holmes and Rahe (1967) defined life events as a series of events which refer to changes in a person's life. For instance, marriage, death of spouse, beginning a new job and a vocation.

Baltes, Cornelius and Nesselroade (1980) discussed life-span human development and identified three influences. The influences are as follows: normative age-graded (ontogenetic) influences, normative history graded (evolutionary) influences, and non-normative life events. They described age-graded influences as biological and environmental determinants. These determinants are strongly related with chronological age. For instance, biological maturation and age-graded socialization events. Normative history-graded influences are the biological and environmental determinants which are associated with the historical era. For example, wars, major epidemics, economic depressions, and changes in the demographic and occupational structure of a given society. Finally, non-normative life events are defined as biological and environmental determinants that do not occur in any normative age-graded or history-graded manner for most

individuals. However, non-normative life events have a higher probability of occurence for each individual. Moreover, Baltes, Reese and Lipsitt (1980) proposed that there is an interaction among these three kinds of influences (i.e., normative age-graded, normative history-graded and non-normative life events). They assumed that the effects of age-graded influences are mostly seen during childhood; the effects of history-graded influences are strongly seen in adolescence and early adulthood, and the non-normative events are seen to increase in importance through the life span.

Pearlin and Leiberman (1979) also divided life events into two classes: normative and nonnormative. Normative events in their view refer to the events which are regular in occurrance and are expected. For instance, first job, getting married, retirement, death of spouse, etc. Non-normative events generally refer to the events which are not easily predicted by people, and are irregular occurrences in the life span. For example, being fired from a job, getting divorced, etc. Normative events taking place at very irregular times and places can be regarded to be in the non-normative category, as well.

Life events are generally conceived in conjunction with the term stress in the literature. The concept stress is defined in various ways. Some investigators think that life stresses are always undesirable events, while others regard stress as any positive or negative event or change which requires an adjustment of some sort (Dohrenwend, 1973; Gersten, Langer, Eisenberg, and Orzek, 1974; Holmes and Rahe, 1967; Mueller, Edwards, and Yarvis, 1977; Selye, 1976; Vinokur and Selzer, 1975).

There are a number of definitions and theories about the term stress such as psychological, neurobiological,

sociological, etc. In this section, within the boundaries of the present investigation, some of the theories will be summarized.

Selye (1976) defined stress as the "nonspecific response of the body to any demand" (Selye, 1976, p.472)[1].

Selye (1981) classified stress as eustress and distress. The term eustress is defined as pleasant or curative stress. The term distress refers to unpleasant or disease - producing stress. Selye (1976, 1981) discussed the physiological mechanisms of stress in detail.

Coyne and Lazarus (1981), in their cognitive-phenomenological model, argued how the person appraises his experiences and how he copes with stressful events. In their views, environmental demands, cognitive appraisal processes, coping and emotional response interact with each other. According to Coyne and Lazarus (1981), the term cognitive appraisal refers to the person's reevaluations which depend on the person - environment transaction. The person continually judges the demands of the environment and his resources of stress management. The authors classified stressful appraisals in three categories: harm-loss, threat, and challenge. Harm-loss refers to the judgement that damage has already occurred. On the other hand, threat refers to the anticipation of imminent harm. The third category is challenge which refers to the judgement that the outcome can be affected by the individual. Lazarus (1981) defined the term "coping" as the efforts of the person to manage environmental and internal demands. Coyne and Lazarus (1981) proposed that coping can be classified in

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(1) Hans Selye. The Stress of Life, 2nd. edn. New York, Mc Graw Hill, 1976, p.472.

two ways: problem-oriented coping and emotion-oriented coping. In problem-oriented coping, the person attempts to deal with the sources of stress. In emotion-oriented coping, the person tries to decrease emotional distress and to maintain satisfactory internal state.

Different people experiencing life conditions are not necessarily affected in the same manner. Individuals' appraisals of the causes and consequences of the events play a significant role in determining various affective and behavioral responses to stressful events. Such concepts as appraisal, coping, perception are strongly related to life events and stress.

Thus, the literature shows that the perception of life events is as much important as the prevalence and frequency of life events in terms of coping and healthy adjustment and growth.

2- Depression

The term depression may be conceptualized in various ways. For instance, an affective state, a symptom, a syndrome or a disease. Depression is also classified in different ways such as primary, secondary, bipolar, unipolar, major depression, etc., (Andreasen, 1982; DSM III, 1980; Kielholz, 1972). There are a number of biochemical, neurological, and psychological theories of depression which present a variety of etiological and therapeutic approaches. In the following section, descriptive views and psychological theories of depression will be presented.

a) Descriptive Aspects of Depression

i. Definitions and Symptomatology

The early descriptions of depression are found in even the most ancient medical records. In the fourth century B.C., Hippocrates described depression as "melancholia". He defined it as a mental disease along with epilepsy, mania, and paranoia. He emphasized a physiological cause for the disease that is "black bile" (Beck, 1967). Since Hippocrates, many authors defined depression as a disease or fluctuation in mood. Clinicians like Kraepelin have considered depression to be a disease, not a normal response. On the other hand, other investigators have recognised depression as a normal response to unhappy events. Some others have defined depression quite broadly and view it as a constellation of characteristic symptoms. Beck (1972) pointed that the term has been applied to designate: a particular type of feeling (or symptom); a symptom complex (or syndrome); and a disease entity. When a person experiences a transient sadness or loneliness, he may say that he is depressed. Thus, the term refers to a subjective state. In other instances, the term depression is used to indicate a complex deviations pattern in feelings, behavior and cognition. This pattern is regarded as a syndrome in which the intensity of symptoms ranges from mild to severe. Finally, the term depression is conceptualized as a specific clinical disorder. As a clinical entity, depression has a specifiable type of onset, course, duration, and outcome. There is currently no agreement among investigators interested in depression about the boundaries between depression and normal fluctuations in mood.

Hamilton (1982) defined depression as basically a decrease of vital activity. It appears as changes in cognitive affective and physiological functioning. The three most common

symptoms of depression are depressed mood, loss of interest and anxiety.

Depression may manifest itself in many different patterns of symptoms. Beck (1967) has brought some order and clarity in conceptualizing depression.

Beck (1967) presented the symptoms of depression in three main categories. These symptom categories are as follows.

I. Emotional Manifestations

1- Dejected mood
2- Self-dislike
3- Loss of gratification
4- Loss of attachments
5- Crying spells
6- Loss of mirth response

II. Cognitive and Motivational Manifestations

1- Low self-evaluation
2- Negative expectation
3- Self-blame and self-criticism
4- Indecisiveness
5- Distorted self-image
6- Loss of motivation
7- Suicidal wishes

III. Vegetative and Physical Manifestations

1- Loss of appetite
2- Sleep disturbance
3- Loss of libido
4- Fatigability

Depressives tend to manifest disturbance of judgement. They consider their activities as worthless. They feel helpless. Loss of interest indicates itself objectively in reducing of daily activities. Anxiety is another common symptom of depression. Depressives feel tense and are unable to relax. They complain about their lack of attention span and inability to concentrate. Sleep disturbance is an inability to fall asleep or waking up early in the morning unrefreshed.

ii. Classifications of Depression

Depressed patients are often diagnosed with several terms such as neurotic depression, reactive depression, endogenous depression, psychogenic depression, psychotic depression, unipolar depression, etc. There is no international agreement in terms of classification of depression.

Andreasen's view (1982) is that many of these terms mean different things to different researchers or clinicians in each country. Since classification systems for affective disorders have not been consensually established a large number of systems is currently used.

Kielholz's (1972) nosological classification of depressive states is presented in figure 1. (Kielholz, 1972, p.12).

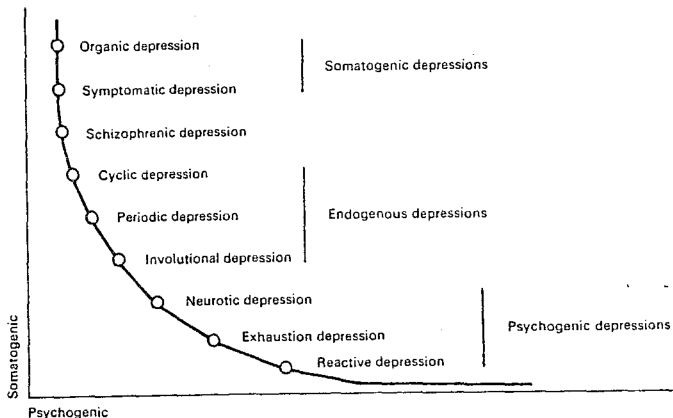

Figure 1. Nosological classification of depressive states

There are two major systems of classification which are currently used clinically. ICD-9 (The Ninth International Classification of Diseases) was developed by the World Health Organization in 1978. The other system is the DSM-III (The Third Diagnostic and Statistical Manual) which was developed by the American Psychiatric Association in the 1980.

The other several systems of classification of depressive disorders such as bipolar, unipolar, reactive, psychotic, etc., will be summarized mainly based on the Handbook of Affective Disorders (Paykel, 1982).

The Primary-secondary distinction:

Primary depression is defined as a depressive syndrome occurring in a person with no prior history of any other psychiatric illness. Secondary depression is defined as a depressive syndrome occurring in a person who had an antecedent illness. This classification system was based on the recognition that depressive syndromes are frequent accompaniments or consequences of particular psychiatric disorders, such as anxiety disorder, alcoholism or hysteria (Paykel, 1982).

The bipolar-unipolar distinction:

It can be considered that throughout the world most widely accepted system of classification is the bipolar and unipolar distinction. Instead of grouping all forms of affective disorders under the heading "Manic-Depressive Illness", the distinction refers to presence or absence of mania. If the persons had had a history of mania, they are diagnosed as bipolar depression. If they had had a history of depression merely, they are diagnosed as unipolar depression.

The endogenous-reactive distinction

Endogenous depressions are a response to some unknown internal or endogenous process. These depressions are not triggerred by any external event. Many investigators explain endogenous depression in terms of biochemical changes. Endogenous depression usually cycles regularly in time, and may be either bipolar or unipolar. Reactive depression is defined as a disorder of relatively acute onset triggerred by some external life event. Such events as death of spouse: retirment, etc., may cause reactive depression.

b) Theories of Depression

Different viewpoints including biochemical, psychological, neurological are about etiology and treatment of depression is present. Only main psychological theories of depression will be summarized due the boundaries of this study and relevance for the purposes.

i. The Psychoanalytic View

Freud (1927, 1957) argued that melancholia (depression) is similar to mourning. According to Freud, the environmental causes of both depression and mourning was the same. In his view, depression occurs after the loss of a loved object. Freud (1927, 1957) considered depression to be the result of unconscious agressive impulses that were turned inward against the self through the defense of introjection. Thus, depression is the result of self-reproaches that are actually reproaches against a lost of loved object that has been introjected. Consequently, the depressives have a low opinion of themselves and are angry with loved object, for abondaning them. Depression in short can be said to be anger toward inward in his view.

According to the psychoanalytic view, the therapy of depression follows the general strategy and tactics of the theory. Therapy is carried out mainly by the use of free association and development of transference neurosis. The resistence of the client are interpreted and the gaining of insight is slowly achieved (Dewald, 1971).

ii. Behavioral (reinforcement) Views

The first attempt to behavioral analysis of depression is made by Skinner (1953). In Skinner's view, depression is a weakening of behavior due to the interruption of established sequences of behavior which have been positively reinforced by the social environment.

According to Ferster (1966), various factors such as sudden environmental changes, punishment and aversive control and shifts in reinforcement contingencies can give rise to depression. Therefore, the therapeutic approach is to increase positive reinforcement.

Lewinsohn et al., (1974, 1984) proposed some general hypotheses about the relationship between reinforcement and depression. Depression and reinforcement are assumed to be related phenomena. Lewinsohn identified a vicious cycle occurs in depression. Lewinsohn proposed that infrequent environmental rewards for responses cause to decrease the activity of the depressive. The decreased activity of depressive takes to fewer rewards in the future. Lewinsohn's theory (1974) is based on three major assumptions. The primary hypothesis refers to a low rate of response contingent positive reinforcement leads a person to depression. Reinforcement is defined as the quality of the person's interactions with his environment.

The term contingent is defined as the connection between a particular behavior and its results. If a person obtains positive outcomes as a result of interactions with the environment, a positive reinforcement arrangement is available. Lewinsohn (1974) also assumed that a low rate of positive reinforcement causes the dysphoric feelings. As related to the primary hypothesis, Lewinsohn (1974) also proposed a corallary hypothesis stating that a high rate of punishing experience causes depression. Punishment is described as person-environment interactions with the environment, a positive reinforcement arrangement is available. Lewinsohn (1974) also assumed that a low rate of positive reinforcement causes the dysphoric feelings. As related to the primary hypothesis, Lewinsohn (1974) also proposed a corallary hypothesis stating that a high rate of punishing experience causes depression. Punishment is described as person-environment interactions with aversive outcomes.

Lewinsohn (1984) offerred three general reasons why a person may experience low rates of positive reinforcement and/ or high rates of punishments:

1) There may be few positive reinforcers or may be many punishments in the person's immediate environment; 2) the person may have less than enough of the skills to obtain available positive reinforcers and/or to cope effectively with aversive events; 3) The positive impact of reinforcing events may be decreased and/or the negative impact of punishing events may be increased.

On the basis of the above mentioned theoretical aspects, Lewinsohn's treatment theory of depression aims to increase the quantity and quality of the positively reinforcing person-environment interactions and to decrease the quality and quantity of the punishing person-environment interactions.

iii. Cognitive Views

Cognitive theorists such as Beck (1967), Ellis and Harper (1961), Rehm (1977), and Seligman (1974, 1975, 1978) have each proposed hypotheses which are based on the role of cognitions in the etiology of depression but they differ in respect to the specific nature of cognitions.

Ellis and Harper (1961) emphasized the role of irrational beliefs for the occurrence of depression. In Ellis's view, when a particular situation triggers an irrational belief then depression develops. An irrational belief is hypothesized to cause the person to over-react emotionally to the situation. For instance, the person may become depressed after being rejected because he believes that he is unlovable.

Rehm (1977) developed a self-control theory of depression. He proposed that negative self-evaluations, low rates of self-reinforcement, and high rates of self-punishment leads a person to depression. Rhem postulated three processes which are important in self-control; self-evaluation, self-monitoring, and self-reinforcement. According to Rehm, depressives attend selectively to negative events and evaluate themselves negatively. The self-control therapy is also based on these three processes (i.e., self-evaluation, self-monitoring, self-reinforcement).

Seligman's (1974, 1975) view on depression is rooted in laboratory experiments with dogs. In an experiment with dogs, they were put in a situation where their behavior could not help them avoid a noxious stimuli. They were made powerless, lacking control over their environment. Later the dogs could not avoid an aversive stimulus by behaving passively they were placed in a new aversive context where a

response would allow them escape from the painful situation. According to Seligman, the prior experience with lack of control over the noxious stimulus causes learned helplesness. Seligman hypothesized that reactive depression in humans is essentially a state of learned helplessness, characterized mostly by the perception of non-control. The four main psychological phenomena of learned helplessness are passivity; retarded learning; lack of aggressiveness and competitiveness; weight loss and under-eating. Critical antecedent for learned helplessness is having no control over noxious stimulus, the stimulus itself is not the critical reason.

Abramson, Seligman and Teasdale reformulated the learned helplessness theory in 1978. They classified dimensions of attributions as follows: 1) internality-externality; 2) generality-specificity; and 3) stability-instability. They assumed that if a person's attributions for failure and lack of control are internal, global and stable, he is more likely to be depressed.

Garber and Seligman (1980) presented some strategies of therapeutic intervention of helplessness and depression. These strategies are based on change of the person's unrealistic attributions to more realistic attributions; change of the person's expectations from uncontrollability to controllability; and change of the environment of the person in such a way as to reduce the probability of aversive outcomes and to increase the probability of desirable outcomes.

Beck (1972) conceives of depression as a thinking disorder rather than an affective disorder. He does not consider the cognitive manifestations of depression to be secondary to the affective disturbance. Beck asserts that cognitions determine affect. Unlike normal cognitions, depressive cognitions are dominated by idiosyncratic processes

and content. These cognitions are distorted and unrealistic because depressives tend to exaggerate their faults and the obstacles in their path. The signs and symptoms of depression are assumed to be a consequence of the activation of distorted cognitive patterns.

Beck (1972) postulated several specific cognitive structures as central for the development of depression. These cognitive patterns are the cognitive triad, schemata and cognitive errors. The cognitive triad consists of three cognitive patterns. These three patterns are a negative view of oneself, a negative view of the world, and a negative view of the future. Beck also postulated the existence of superordinate schemata or cognitive biases which lead to distortion of perception and memory. Such distortions are automatic and involuntary and they include arbitrary inference, selective abstraction, over-generalization, magnification and minimization, and personalization. To wit:

Arbitrary inference is defined as the process of drawing a conclusion from a situation, event or experience, when there is no evidence to support the conclusion or when the conclusion is contrary to the evidence.

Selective abstraction refers to the process of focusing on a detail taken out of context, ignoring other more salient features of the situation and conceptualizing the whole experience on the basis of this element.

Over generalization is the person's pattern of drawing a general conclusion about his ability, his performance, or his worth on the basis of a single incident.

Magnification and minimization refer to errors in evaluation so gross as to constitute distortions. These

processes are manifested by under estimation of the individuals' performance, achievement, or ability and inflation of the magnitude of his problems and tasks. Other instances are the exaggeration of the intensity or significance of a traumatic event. It is frequently observed that the depressives' initial reaction to an unpleasant event is to regard it as a catastrophe.

Personalization refers to attaching subjective significance to external events when no basis exists for making such a connection.

Beck's cognitive therapy aims to assist the patient in identifying assumptions and schemata which are factors of depressives' stereotypical negative thinking and in pointing out specific errors in thinking.

3- Descriptive Aspects and Theories of Anxiety

Anxiety is defined in various ways. In the present section some definitions and theories of anxiety will be presented.

The term anxiety like intelligence, motivation, etc., is partially an abstract construct. The range of possible definitions is very broad. There are operational definitions of anxiety as well as purely abstract definitions. Anxiety is not a unitary phenomenon. Many clinicians and theorists defined the term anxiety in various ways.

Freud made the first attempt to explicate the meaning of anxiety within the context of psychological theory. Freud's concept of anxiety changed considerably over time.

In the beginning, Freud (1959) proposed that anxiety is a consequence of inadequately discharged libidinal energy.

Later on, Freud considered that anxiety is an ego function which alerts individuals to sources of danger, that must be avoided. Again in early formulation of anxiety Freud identified three types of anxiety which are realistic, neurotic and moral anxiety. Realistic anxiety is assumed to be caused by the perception of real dangers in the external environment (e.g., wild animals, earthquakes) and is also synonymous with fear. Neurotic anxiety is considered to be the consequence of impulses of the id without adequate gratification. When the ego is not able to control the id instincts, neurotic anxiety occurs. When the superego threatens the ego with punishment, consequent emotional response is called moral anxiety. According to Freud, neurotic anxiety is experienced by everyone to some extent, from time to time, but when it occurs in pathological amounts, it is defined as anxiety neurosis.

In the later version of the theory (Freud, 1959), anxiety is considered to play an essential role in psychic conflict and to precede and motivate repression. Freud suggested that anxiety is the reaction to the anticipation of danger. When persons anticipate or experience danger, they perceive the likelihood of an undesirable outcome, and they become anxious.

According to Sullivan (1953), anxiety is an intensely unpleasant state of tension arising from experiencing disapproval in interpersonal relations.

In the views of Dollard and Miller (1950), anxiety is a powerful secondary drive which is learned. The organism learns to fear objects or situations through stimulus similarity When individuals encounter a stimulus previously associated with pain, they will react with anxiety. According to Dollard and Miller (1950), the second way in which anxiety arises is

through conflict. When the organism is motivated simultaneously by two strong drives, conflict occurs. Dollard and Miller identified conflict as deriving from two tendencies; approach and avoidance. Approach is the tendency to do something. On the contrary, avoidance is the tendency not to do something. For an organism, when two desirable but incompatible goals are available, this is called approach-approach conflict. In general, such kinds of conflicts do not give rise to anxiety. When the organism simultaneously wishes to approach and to avoid a goal, approach-avoidance conflict occurs. When the organism must choose between two undesirable goals avoidance-avoidance conflict occurs. Approach-avoidance conflict gives rise to anxiety.

Spielberger (1970) defined two distinct anxiety concepts: state anxiety (A-State) and trait anxiety (A-Trait). State anxiety is conceptualized as

> "a transitory emotional state or condition of human organism that is characterized by subjective, consciously perceived feelings of tension and apprehension, and heightened autonomic nervous system activity. A-States may vary in intensity and fluctuate over time" (Spielberger, 1970, p.3).

Spielberger defined trait anxiety (A-Trait) as

> "relatively stable individual differences in anxiety proneness, that is, the differences between people in the tendency to respond to situations perceived as threatening with elevations in A-State intensity" (Spielberger, 1970, p.3)[2].

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(2) Charles D.Spielberger, et.al. Manual for the State - Trait Anxiety Inventory. Palo Alto; Consulting Psychologist, 1970, p.3.

B. REVIEW OF THE EMPIRICAL LITERATURE

1- Research on Life Events, Depression, and Anxiety, and Their Relationship

A number of investigators have searched an association between stressful life events and various forms of psychological and physical disorder (Barrett, 1979; Depue, 1979; Dohrenwend and Dohrenwend, 1974; Rabkin and Struening, 1976).

Empirical research on life events have been carried out by various investigators. Sarason (1976) administered the LES to 345 university students in order to investigate the likelihood of differences in response due to sex. Values were obtained for positive, negative and total life change scores. Sarason found no significant differences between males and females on any of the three change measures. The life change scores of this sample were found low.

Sarason (1978) found a significant relationship between perception of change negatively and high scores on the BDI, in a sample of 64 college students.

Vinokur and Selzer (1975) also found a significant relationship between perception of change in a negative manner and self-rating scores of depression. Sarason (1976) reported that both total and negative change scores on the LES correlated with state and trait anxiety. There was no significant correlation between positive change score and both state and trait anxiety.

Hammen and Cochran (1981) administered the BDI and a life stress inventory to 400 undergraduates in order to investigate cognitive correlates of life stress and depression. They found that depressed students reported themselves

as significantly more upset by their personal events in general.

The reformulated learned helplessness model of depression (Abramson, Seligman, and Teasdale, 1978) predicted that depression-prone persons attribute negative events to internal, stable, and global causes. Harvey (1981) tested the theory using the BDI and Life Stage Study Questionnaire in a sample of 129 female undergraduates. Depressed students were found different from nondepressed students in their internal causal attributions while they were not significantly different in the stability dimension.

Hammen and Mayol (1982) investigated depression and cognitive characteristics of stressful life-event types. The subjects were 400 freshmen in introductory psychology course. The BDI and a life events inventory were administered to the subjects. Life events were categorized in four dimensions: 1- desirable-responsible; 2- undesirable-responsible; 3- undesirable-not responsible; and, 4- ambigious. They found that depression was directly associated with undesirable-responsible events while desirable-responsible and ambiguous events were negatively associated with depression.

Monroe et al. (1983) examined life events, perceived dimensions of events, and social support in predicting the symptoms of anxiety and depression. They administered the BDI, the STAI, the LES and a social support questionnaire to 167 university students. The results indicated that total raw-event score was significantly and positively related to depressive symptoms. The undesirability dimensional ratings was found positively related to depression and anxiety.

Mitchell et al. (1983) investigated stress, coping, and depression among married couples. The subjects were 157

community couples and 157 couples in which one of the partners was clinically depressed. The results showed that depressed patients experienced more stress and possessed fewer coping abilities. Negative life events, coping, and family support were found primarily directly related to depression.

Coyne et al. (1981) examined how depressed persons cope with the stresses of everyday life, 15 depressed and 72 nondepressed middle-aged persons were examined over a 1-year period with respect to the thoughts and actions they used in coping with specific stressful episodes. They found that depressed persons were characterized by emotion-oriented coping.

Several studies have examined depression from cognitive-behavioral point of view.

Nelson and Craighead (1977) tested cognitive-behavioral theories of depression. They reported that the depressed recalled less positive and more negative feedback than did the controls.

Krantz and Hammen (1979) investigated depressive distortion. They found that there was a significant relation between the scores of the BDI and depressive distortion scores across samples of university students, outpatients in therapy for depression, and inpatients.

Monbreun and Craighead (1977) found that the clinically depressed subjects recalled having received less positive feedback than did the controls.

Lewinsohn et al. (1982) reported that depressives have higher expectancies for negative and lower expectancies for

negative and lower expectancies for positive events pertaining to the self but not for the "world" events.

Norman et al. (1983) assessed cognitive distortions of a clinically depressed population. Results indicated that there was a significant correlation between depressed distortion scores from the Cognitive Bias Questionnaire and cognitive distortion scores from the BDI.

Gong-Guy and Hammen (1980) examined cognitions about the causes and consequences of recent personally stressful life events of depressed and nondepressed outpatients. Results showed that depressed individuals attributed bad outcomes to internal, stable, and global causes.

Miller III et al. (1982) assessed depressed and nondepressed inpatients' cognitions for three types of situations; stressful life events, hypotheetical events, and experimental tasks. They found that the attributional style of depressed subjects was significantly higher than the nondepressed subjects for life events, while there was no significant difference between depressed and nondepressed subjects in their attributions of hypothetical events and experimental tasks.

With a clinical approach, it is stated that depressed patients report more life events than do normal controls, especially immediately before the onset of illness (Paykel, 1979; Lloyd, 1980).

2- Reserach on Prevalance Studies on Depression and Anxiety

The prevalence of depression is quite high in the world. The prevalence of clinical depression has been esti-

mated at 3 to 4 per cent (Lehman, 1971 ; Levitt and Lubin, 1975).

Boyd and Weissman (1982) reported that the prevalence of depressive symptoms ranges from 13 to 20 per cent of the population as determined by self-report questionnaires in nine community surveys conducted between 1957 and 1979 in the United States and England.

Depression is widely viewed as the most frequently occurring psychic disorder among university students.

Oliver, Croghan, and Katz (1976) estimated the prevalence of depression in college students using the BDI. They reported that 23 per cent of the respondents were at least mildly depressed.

Hatzenbuehler, et al., (1983) classified 22 per cent of the 207 university students as moderately depressed screening with the BDI and the Zung Self-Rating Depression Scale. There is no data about the prevalence of depression for the student population in Turkey.

Spielberger reported (1970) that trait anxiety mean scores of college students range from 37.68 to 38.22.

In Turkey, Öner and Le Compte (1983) found that trait anxiety mean scores of university students range from 36.76 to 41.26.

III. IMPLICATIONS OF THE LITERATURE

The findings of Hammen and Cochran (1981); Monroe, et al., (1983); Sarason (1976, 1978), and the other investigators mentioned above, show that there are undeniable relationships among life events, depression, and anxiety. Also, moving from Beck's theory (1967), it can be assumed that depressives perceive their life events negatively compared to nondepressives.

Additionally, the prevalence of depression and level of anxiety are investigated for student populations in Western countries.

These findings are all based on subject populations mainly from the U.S.A. Few isolated studies (Öner and Le Compte, 1983; Sorias, 1982; Teğin, 1980) in Turkey and observations of the present author strongly suggest that the same trends exist in Turkey for our student population, as well.

BOĞAZİÇİ ÜNİVERSİTESİ KÜTÜPHANESİ

IV. STATEMENT OF THE PROBLEM AND HYPOTHESES

The specific purpose of this study was to investigate mainly the relationship between the perception of life events and depression, the perception of life events and anxiety, and also depression and anxiety.

The secondary purpose of the present research was to investigate the perception and frequency of life events, prevalence of depression and level of trait anxiety among medical faculty students.

In the light of the literature, the following hypotheses and questions were derived.

GENERAL HYPOTHESIS

There is a positive relationship between negative perception of life events, depression and anxiety.

Operational Hypotheses

HYPOTHESIS I: There is a positive correlation between depression scores on the BDI and the self rating of negative perception of life events.

HYPOTHESIS II: There is a positive correlation between trait anxiety assessed by the STAI A-Trait scale and self rating of negative perception of life events.

HYPOTHESIS III: There is a positive correlation between depression scores and trait anxiety scores as assessed by the BDI and the STAI, respectively.

This study attempted to answer the following questions, as well:

1- What are the most frequent life events that are experienced by the medical faculty students?

2- How are the life events generally perceived and rated by the medical faculty students?

3- What is the prevalence of depression among the medical faculty students as measured by the BDI?

4- What is the level of anxiety among the medical faculty students as measured by the STAI A-Trait scale?

V. METHOD

A. SUBJECTS

The participants of the study were 306 male and female students at the Istanbul Faculty of Medicine, Istanbul University. The total number of the students in the faculty is 3065 for the academic year 1984-1985. The subjects were drawn from each academic level with a proportion of one tenth. The actual numbers and sample size of the students are shown in Table 1.

Table 1

The number of student population for each academic level in the Faculty of Medicine and sample size

	Actual No. of Students	Proportion	Sample Size
Grade Level I	463	1/10	46
Grade Level II	489	1/10	49
Grade Level III	488	1/10	49
Grade Level IV	522	1/10	52
Grade Level V	421	1/10	42
Grade Level VI	682	1/10	68
T O T A L	3065		306

The students of the faculty are divided into several laboratory and educational sections, and the students in these sections comprised the subject population.

The characteristics of the subjects along major demographic variables are detailed in Table 2.

Table 2

Demographic characteristics of the participants in terms of age, sex and marital status

Academic Level	Characteristics									
	N	Age M	Sex				Marital Status			
			Male		Female		Single		Married	
			No	%	No	%	No	%	No	%
1st year	46	18.3	33	72	13	28	46	100	-	-
2nd year	49	19.4	34	69	15	31	49	100	-	-
3rd year	49	20.4	29	59	20	41	48	98	1	2
4th year	52	21.8	35	67	17	33	51	98	1	2
5th year	42	23.4	36	86	6	14	39	93	3	7
6th year	68	23.8	42	62	26	38	59	87	9	13
	306	21.3	209	68	97	32	292	95	14	5

Sixty eight per cent of the subject population consisted of male students with 32 per cent female students. Only 5 per cent of the subjects were married, with the majority of 95 per cent being single. The age of the subjects were between 17-28 years (Table 3).

Table 3

Number and percentage of the subjects in each age level

Ss	Age											
	17	18	19	20	21	22	23	24	25	26	27	28
No.of Ss	7	38	37	34	39	48	42	36	18	4	2	1
% of Ss	2.3	12.4	12.1	11.1	12.7	15.7	13.7	11.8	5.9	1.4	0.6	0.3

B. INSTRUMENTS

Three instruments were used in this study. The Beck Depression Inventory (BDI) was used to measure existence and severity of depressive symptomatology. The Life Experiences Survey (LES) was used as a measure for assessing frequency and impact of life events. The State-Trait Anxiety Inventory A-Trait Scale (STAI) was used to assess persistent anxiety levels of the participants.

1- The Life Experiences Survey (LES)

The LES was originally developed by Sarason (1976). Events listed in the LES were derived from the Schedule of Recent Experiences (SRE) (Holmes and Rahe, 1967). The original form of the LES has two portions. The first section consists of a list of 47 specific events plus three blank spaces in which subjects can indicate unlisted events that they have experienced. Events listed in this section refer to life changes common to individuals in a variety of situations. The second section consists of 10 items designed for subjects who are students. Those items specifically relate to changes in the environment of students and their impact on them. The instrument designed to assess life stress yields three separate life change scores; a Positive, a Negative, and a Total change score.

Subjects responding to the LES are asked to indicate those events which they have experienced during the past year (0-6 mos. or 7 mos. - 1 yr.). The subjects are asked to indicate: (1) whether they viewed the event as a Positive or Negative one at the time of occurrence, and (2) the impact of the particular event on their lives.

The LES yields three life change scores: A Positive change score can be obtained by summing the ratings of those

events pointed as positive by the subject. A Negative change score can be obtained by summing the ratings of those events experienced as negative by the subject. The sum of Negative and Positive values indicate Total change score which represents the total amount of rated change (desirable and undesirable) experienced by the subject in the past year.

The events are rated by the subject on a scale of -3 to +3 to assess the perceived affect on the person.

Reliability and validity data are provided by Sarason (1976) himself. Sarason (1976) reported test-retest reliability of the LES. The subjects consisted of 34 undergraduates in psychology. Sarason found test-retest reliability coefficients of 0.19, 0.88 ($p<.001$) and 0.64 ($p<.001$) for Positive, Negative and Total change scores, respectively, with a 5 to 6 weeks interval. In order to investigate the validity of the LES, Sarason (1976) administered the LES and the STAI to 100 male and female students with a mean age of 20. The correlations between Total and Negative change scores correlate significantly with State and Trait anxiety. There is no significant correlation between Positive change score and the two anxiety measures.

In this study, the form translated into Turkish and adapted by Aslanoğlu (1978) was used. Aslanoğlu added new items such as "daughter escaping from home with boy friend", "major change in closeness with relatives". She did not use the second section of the survey. In the present study, the second section was included due to the character of subject population. In addition, since the present investigation was with students such events as retirement, son or daughter leaving home, ending of formal schooling, etc., were excluded. The excluded events are not appropriate for the sample under study. Several items were added to the LES to cover additional

events of potential relevance such as, divorce of parents, leaving home for education, etc. Hence, the final measure consisted of 67 items plus three blanks for other events not included in the list (See Apendix A).

2- The Beck Depression Inventory (BDI)

The Beck Depression Inventory was developed by A.T. Beck (1961). The inventory was designed to included all symptoms in the depression. The items of the inventory were clinically derived. The inventory consists of 21 categories of symptoms and attitudes. Each category describes a specific behavioral manifestation of depression. In each category, a series of statements reflect varying degrees of severity. The statements are ranked from 0 to 3.

The symptom-attitude categories are as follows:

1- Mood
2- Pessimism
3- Sense of failure
4- Lack of satisfaction
5- Guilty feeling
6- Sense of punishment
7- Self-dislike
8- Self-accusations
9- Suicidal wishes
10- Crying spells
11- Irritability
12- Social withdrawal
13- Indecisiveness
14- Distortion of body image
15- Work inhibition
16- Sleep disturbance
17- Fatigability

18- Loss of appetite
19- Weight loss
20- Somatic preoccupation
21- Loss of libido

In the literature, scores for defining various levels of depression are different. The criteria for not depressed groups ranged from less than 2 (Carson and Adams, 1980) to equal to or less than 13 (Roth and Rehm, 1980) on the standard length of inventory. Beck's (1972) original system for categorizing individuals' depression level based on their BDI scores is as follows: 0-13: not depressed; 14-24: medium level of depression; and 25 ≧: severly depressed. On the other hand, Oliver et. al's (1976) categorization system is that scores from 0 to 9 indicate non depression, scores between 10 to 15 show mild depression; scores from 16 to 23 indicate moderate level of depression and scores from 24 to 63 show severe depression.

In this investigation, Beck's (1972) original categorization system was used as criterion to assess level of depression.

The reliability information available for BDI is as follows:

Internal consistency of the inventory was demonstrated by significant relationships between each item and the BDI score and by an odd-even item correlation of .86, Spearman - Brown corrected to .93 (Beck, et al., 1961).

Beck (1967) found Pearson Product-Moment Correlation Coefficient as r = .86 with the split-half technique. No test - retest reliability data are reported in the original reports. Miller and Seligman (1973) report a test-retest reliability of 0.74 for 31 normal undergraduates with a 3 - month interval.

In terms of validity, Beck (1972) himself attempted to collect data for concurrent validity. With a sample of 606 patients, Beck found a correlation of 0.72 between the BDI and clinicians' ratings of depression, but only 0.14 between the BDI and clinicians' anxiety ratings. Concurrent validity is moderate to good.

In Turkey, the BDI has been translated and adapted by Teğin (1980). Teğin also tried to determine the BDI's reliability and validity for a Turkish sample. Teğin found a test-retest reliability of 0.65 for 40 normal undergraduates with a 15 day interval. Internal consistency was found by a split-half correlation of 0.78 for the undergraduates and 0.61 for depressive patients. Validity of the instrument was determined concurrently. Patients previously labeled as "depressive" were correctly identified with the BDI. Teğin also found 0.52 ($p<.01$) correlation coefficient between the BDI and the instrument she developed namely the Scale of Cognitive Reactions in Depression for 30 depressives.

In the present study, the BDI form provided by Teğin's work (1980) was used (See Appendix B). Both Beck's (1972) and Oliver, et al.'s (1976) categorization system were utilized to evaluate the existence of depression among the subject population.

3- The State-Trait Anxiety Inventory (STAI)

The State-Trait Anxiety Inventory was originally developed by Spielberger et al. (1970). The STAI is a self - evaluation questionnaire. The inventory consists of two portions and 40 items.

The STAI A-Trait scale consists of 20 statements, which ask subjects to indicate <u>how they generally feel</u>. A-trait

(trait anxiety) refers to "relatively stable individual differences in anxiety proneness. People respond to psychological stress with different levels of A-State intensity" (Spielberger, 1970; p.3).

The STAI A-State scale consists of 20 items which ask subjects to indicate how they feel at a particular moment in time. The A-State refers to "the level of transitory anxiety experienced by people" (Spielberger, 1970; p.3)(3).

The STAI may be administered either individually or to groups. Subjects rate themselves on a four point scale. The range of total scores can very from a minimum score of 20 to a maximum score of 80 on both the A-State and A-Trait scales.

Normative data are repoted for college and high school students. Normative data are available for psychiatric, general medical and surgical patients, and young prisoners, as well (Spielberger, 1970).

For the A-Trait scale, Spielberger (1970) reported the test-retest reliability ranges from .73 to .86 for 197 college undergraduates with a 20-day and 104-day interval. Test-retest correlations for A-State scale are reported with a range from .16 to .54. With alpha-coefficients, internal consistency of STAI ranges from .83 to .92. Both A-Trait and A-State scales have a high degree of internal consistency.

The concurrent validity of the STAI A-Trait scale is reported. The correlations between the STAI and IPAT (Institute for Personality and Ability Testing). Anxiety Scale (Cattell and Scheier) range from .75 to .77 for college students and patients (Spielberger, 1976).

In this study, A-Trait scale translated and adapted by

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(3) Charles D.Spielberger, et al. Manual for the State-Trait Anxiety Inventory, Palo Alto: Consulting Pscyoholgist, 1970, p.3.

Öner and Le Compte (1983) was used (See Appendix C). Normative data are available for high school and university students, and psychiatric and surgical patients. Öner and Le Compte (1983) found that test-retest correlations for the Turkish form of A-State scale range from .26 to .68 for university students. Test-retest correlations of A-Trait scale range from .71 to .86. These reliability coefficients are available for 10, 15, 30, 120 and 365 days interval. Kuder - Richardson reliability coefficients range from .94 to .96 for A-State scale, and from .83 to .87 for A-Trait scale (Öner and Le Compte, 1983). Item-remainder correlation coefficients range from .34 to .72 for A-State scale, and from .42 to .85 for A-Trait scale (Öner and Le Compte, 1983).

Öner (Öner and Le Compte, 1983) tested the construct validity of the STAI on a total of 226 subjects who were selected from normal and surgical patient population in Turkey. She found that the construct validity of the STAI was supported. Öner compared normal subjects with psychiatric patients in order to investigate current validity of the STAI. Öner found that both state and trait anxiety scores of psychiatric patients were significantly higher than those of normals.

C. PROCEDURE

Initially, the teachers of the randomly selected sections were contacted and their permission was taken.

The questionnaires were administered during the normal class hours at the Istanbul Faculty of Medicine. The researcher herself was present during each of the sessions. Which were held at different periods and classes. The subjects were given a brief information about the study and asked to volunteer for participation. In all of the 12 classes, none of the students declined.

The instructions were given in oral and written form before the administration of each questionnaires. The subjects were asked to fill out the questionnaires which included some major demographic variables, such as age, sex, and marital status. Then the participants were asked to complete the BDI. Secondly, the LES was given. Finally, the STAI A-Trait Scale was administered. The whole administration took about 30 minutes for each class.

D. ANALYSIS

The statistical analyses of the data were carried out by applying the Pearson Product-Moment Correlation Coefficient.

VI. RESULTS

A. THE RELATIONSHIP OF LIFE EVENTS, DEPRESSION AND ANXIETY

The results of the Pearson Product-Moment Correlation Coefficients indicated that there was a positive correlation between depression and the self rating of negative impact of life events ($r = 0.534$, $p < .001$) (See Table 4, and 5).

There was a positive correlation between trait anxiety and the self rating of negative impact of life events ($r = 0.327$, $p < .001$) (See Table 4, and 5).

A positive correlation between depression and trait anxiety was also found to be $r=0.617$, p .001 (See Table 4 and 5).

Additionally, there was a negative correlation between depression and self ratings of positive impact of life events ($r = -0.129$, $p < .05$), and between trait anxiety and self ratings of positive impact of life events ($r = -0.243$, $p < .001$) (See Table 4 and 5).

Both depression and anxiety indicated positive correlation with the number of negative events (with depression $r = 0.484$, $p < .001$, and with anxiety $r = 0.289$, $p < .001$) (See Table 4).

There was a negative correlation between the number of positive events and trait anxiety ($r = -0.202$, $p < .001$) (See Table 4).

A positive correlation was found between the number of total events and depression ($r = 0.279$, $p < .001$) (See Table 4).

B. THE FREQUENCY OF LIFE EVENTS, PREVALENCE OF DEPRESSION AND LEVEL OF ANXIETY

The most frequent 15 items on the LES and their frequency and percentage were indicated in Table 6. The most frequently rated item was "change of social activities". This item was rated by 46.4 per cent of the subjects (See Table 6). Such items as "change of sleeping habits", "change in eating habits", "changed financial status", "fall in love", change in residence followed the most frequent item with a percentage of 34.3, 31.7, 25.5, 24.1, 23.8, respectively (See Table 6).

Some of these events were perceived very differently by the subjects. For example, "changed social activities" were perceived as "positive" by 22.8 per cent and as "negative" by 20.9 per cent (See Table 6). Some events including "fall in love", "change in residence", "joining a social or sport club", "beginning university", "outstanding personal achievement" were perceived as positive by the majority of those who experienced it (See Table 6).

Some others were rated as negative by almost all of the subjects. These events include "change of sleeping habits", "changed closeness of family members, and relatives" "failing and exam" or "a course" (See Table 6).

In this study, prevalence of depression was measured by the BDI. According to Beck's original system (1972), 13.4 per cent of the subjects were found as having medium level of depression and 4.2 per cent of the sample were found to be severely depressed (See Table 7). According to Oliver et al. (1976)'s system, 24.6 per cent of the subjects were at least mildly depressed; 7.8 per cent of the subjects were moderately depressed; and 4.2 per cent of the subjects were found to be severely depressed (See Table 8). The range of depression scores for the present sample population was found to be from 0 to 32 with a mean score of 9.1 and standard deviation of 6.12 (See Table 9).

The trait anxiety scores of the subjects ranged from 22 to 71 with a mean score of 40.8 and standard deviation of 8.54 (See Table 9).

There is no significant difference among the students in each acedemic level in terms of the scores on the BDI, except fourth year students. Their mean scores were higher than fifth year students ($t=2.225$, $p<.05$). Mean scores of fourth year students were also higher than sixth year ($t=2.932$, $p<.01$)(See Table 10). Trait anxiety scores of fourth year students were found to be higher than sixth year, as well ($t=2.470$, $p<.02$)(See Table 11).

As it is stated previously depression and anxiety were found to be positively correlated ($r=0.617$, $p<.001$). When the data is observed more closely it is seen that; 22 of the subjects have the highest level of depression and anxiety, that is, they are 2 SD above the mean on both measures (See Table 12). The frequency distribution of all the subjects on the BDI and STAI A-Trait Scale scores according to standard deviation intervals, with 2 SD below and above the mean is presented in Table 12.

Table 4

Pearson Product-Moment Correlation Coefficients of all the measures

Measures	BDI	STAI A-Trait Scale	No.of Total Events	No.of Negative Events	No.of Positive Events	Negative Scores	Positive Scores	Total Scores
BDI	1.00							
STAI A-Trait Scale	0.617[3]	1.00						
No.of Total Events	0.279[3]	0.088	1.00					
No.of Negative Events	0.484[3]	0.289[3]	0.777[3]	1.00				
No.of Positive Events	-0.094	-0.202[3]	0.668[3]	0.140[1]	1.00			
Negative Scores	0.534[3]	0.327[3]	0.746[3]	0.938[3]	0.149[2]	1.00		
Positive Scores	-0.129[1]	-0.243[3]	0.624[3]	0.122[1]	0.954[3]	0.142[1]	1.00	
Total Scores	0.516[3]	0.431[3]	0.129[1]	0.649[3]	-0.583[3]	0.682[3]	-0.622[3]	1.00

[1] $p<.05$

[2] $p<.01$

[3] $p<.001$

Table 5

Pearson Product-Moment Correlation Coefficients of BDI, STAI and negative, positive and total scores of LES

Measures	BDI	STAI A-Trait Scale	Negative Scores on LES	Positive Scores on LES	Total Scores on LES
BDI	1.00				
STAI A-Trait Scale	0.617[3]	1.00			
Negative Scores on LES	0.534[3]	0.327[3]	1.00		
Positive Scores on LES	-0.129[1]	-0.243[3]	0.142[1]	1.00	
Total Scores on	0.516[3]	0.431[3]	0.682[3]	-0.622[3]	1.00

[1] $p<.05$

[2] $p<.01$

[3] $p<.001$

Table 6

The most frequent 15 items in the LES and frequency and percentage of their impacts

Item's No	Items	Negative Impact		No Impact		Positive Impact		Total	
		Frequency	%	Frequency	%	Frequency	%	Frequency	%
40	Changed social activities	64	20.9	8	2.6	70	22.8	142	46.4
6	Change of sleeping habits	70	22.8	13	4.2	22	7.1	105	34.3
8	Change in eating habits	48	15.7	16	5.2	33	10.8	97	31.7
23	Changed financial status	42	13.7	5	1.6	31	10.1	78	25.5
51	Fall in love	25	8.1	4	1.3	45	14.7	74	24.1
27	Change in residence	21	6.8	17	5.5	35	11.4	73	23.8
24	Changed closeness of family members	41	13.4	6	1.9	17	5.5	64	20.9
25	Changed closeness with relatives	31	10.1	10	3.2	16	5.2	57	18.6
65	Join a social or sport club			4	1.3	48	15.7	52	16.9
58	Begin university	4	1.3	2	0.6	40	13.0	46	15.0
11	Outstanding personal achievement	3	0.9	1	0.3	41	13.4	45	14.7
62	Fail important exam	34	11.1	5	1.6	2	0.6	41	13.4
64	Fail course	32	10.4	6	1.9			38	12.4
2	Marriage of a family member	9	2.9	7	2.3	19	6.2	35	11.4
45	Leaving home for education	19	6.2	5	1.6	10	3.2	34	11.1

Table 7

Prevalence of depression among the medical faculty students

BDI Scores	No.of Ss	%
0-13 Nondepression	252	82.4
14-24 Medium level of depression	41	13.4
25≥ Severe depression	13	4.2
T O T A L	306	100.0

Table 8

Prevalence of depression among the medical faculty students

BDI Scores	No.of Ss	%
0-9 Not-depressed	194	63.4
10-15 Mildly depressed	75	24.6
16-23 Moderately depressed	24	7.8
24-63 Severly depressed	13	4.2
T O T A L	306	100.0

Table 9

The mean scores and standard deviations of the BDI, the STAI A-Trait Scale and the LES of the students in each academic level

Academic Level of the Students	N (T=306)	BDI		STAI A-Trait Scale		LES					
						Negative Scores		Positive Scores		Total Scores	
		M	SD	M	SD	M	SD	M	SD	M	SD
1st year	46	9.4	7.23	41.5	8.44	5.47	4.82	7.80	5.08	2.3	7.69
2nd year	49	9.8	6.27	41.3	9.39	4.22	3.67	4.02	5.58	-0.20	6.89
3rd year	49	8.9	6.37	41.4	9.28	3.30	3.75	2.97	3.76	-0.32	5.44
4th year	52	10.8	6.02	42.4	7.95	4.63	4.69	2.53	2.77	-2.09	4.61
5th year	42	7.9	6.54	39.5	8.18	4.28	5.98	3.52	3.19	-0.76	6.19
6th year	68	7.9	4.40	38.9	7.35	4.17	6.11	4.55	5.05	0.38	6.38
		9.1	6.12	40.8	8.54	4.33	5.02	4.23	4.69	-0.67	6.38

Table 10

Comparisons of the students in each academic level in terms of the scores on the BDI

Academic Level of the Students	1st year N=46	2nd year N=49	3rd year N=49	4th year N=52	5th year N=42	6th year N=68
1st year	0	t=0.317	t=0.393	t=1.125	t=1.116	t=1.451
2nd year		0	t=0.704	t=0.776	t=1.408	t=1.823
3rd year			0	t=1.539	t=0.736	t=0.948
4th year				0	t=2.225[1]	t=2.932[2]
5th year					0	t=0
6th year						0

[1] $p<.05$

[2] $p<.01$

Table 11

Comparisons of the students in each academic level in terms of the scores on the STAI A-Trait Scale

Academic Level of the Students	1st year N=46	2nd year N=49	3rd year N=49	4th year N=52	5th year N=42	6th year N=68
1st year	0	t=0.109	t=0.055	t=0.541	t=1.128	t=1.820
2nd year		0	t=0.053	t=0.634	t=0.977	t=1.492
3rd year			0	t=0.580	t=1.038	t=1.565
4th year				0	t=1.675	t=2.470[1]
5th year					0	t=0.389
6th year						0

[1] $p<.02$

Table 12

The Frequency Distribution of the Subjects on the BDI and STAI A-Trait Scale according to Standard Deviation intervals, with 2 SD below and above the mean.

BDI	STAI A-Trait				TOTAL
	0-30	31-39	40-48	49	
0- 1	3	5	6		14
2- 8	21	85	46	4	156
9-15	2	24	49	25	100
16>		6	8	22	36
Total	26	120	109	51	306

VII. DISCUSSION

It is a basic assumption of Beck's theory (1967) that depressives' thinking and preoccupation represent distorted and exaggerated ways of viewing oneself and events. Moving from Beck's theory, the general hypothesis of the present investigation was that there is positive relationship between negative perception of life events, depression, and anxiety. The general hypothesis of the study has been confirmed by the results.

There were three operational hypotheses in the present study. These operational hypotheses were as follows:

I- There is a positive correlation between depression scores on the BDI and the self rating of negative perception of life events (i.e., the higher the depression score, the higher the negative self rating of life events will be).

II- There is a positive correlation between level of trait anxiety assessed by the STAI A-Trait scale and self rating of negative perception of life events (i.e., the higher the trait anxiety scores, the higher the negative self rating of life events will be).

III- There is a positive correlation between depression scores and level of trait anxiety as assessed by the BDI and the STAI, respectively (i.e., the higher the depression scores, the higher the trait anxiety scores will be).

The results have shown that all three hypotheses were supported. It can be seen that the higher the positive scores of life events, the lower the anxiety scores were found to be (See Table 4). Then it may be assumed that through increasing positive life events, level of trait anxiety may be reduced. On the other hand, the higher the negative perception scores on life events, the higher the depression scores on the BDI were. Then, through decreasing the negative perception of life events, level of depression may be reduced.

The results related to the general and the operational hypotheses indicated that the findings of this study are parallel to the studies conducted in the U.S.A. (Hammen and Cochran, 1981; Hammen and Mayol, 1982; Mitchell, et al., 1983; Monroe, et al., 1983; Nelson and Craighead, 1977; Sarason, 1976, 1978).

There were also some questions that were posed in the present research, The questions were as follows:

1- What are the most frequenet life events that are experienced by the medical faculty students?

2- How are the life events generally perceived and rated by the medical faculty students?

3- What is the prevalence of depression among the medical faculty students as measured by the BDI?

4- What is the level of trait anxiety among the medical faculty students as assessed by the STAI A-Trait Scale?

As presented in the section of results, in the LES the most frequently rated item was "changed social activities". "change of sleeping" and "eating habits" followed "social activities". The most frequently rated 15 items were very similar to Sarason's findings (1976) (See Table 13). In his study, the most frequently rated five items were as follows: beginning new schooling experience; change in residence; changed social activities; changed work situation, and change of sleeping habits. Therefore, it may be predicted that there is little cross-cultural variation in terms of perception of life events among university students.

Using Beck's (1972) original categorization system, about 18 per cent of the subjects were found to have at least medium level of depression. Although, previous data about the prevalence of depression in the university population in Turkey is not available, the prevalence obtained in this investigation is similar to prevalence of depression among college students and also the general population in the U.S.A. and England (Oliver, Croghan, and Katz, 1976; Boyd and Weissman, 1982).

On the other hand, trait anxiety scores as measured by the STAI A-Trait scale were found to be between 22 to 71 with a mean score of 40.8 and standard deviation of 8.54. Spielberger (1970) reported that mean scores of trait anxiety of college students ranged from 37.68 to 38.22 with standard devitaions of 9.69 and 8.20, respectively. In Turkey, Öner and Le Compte (1983) found that mean scores of trait anxiety range from 36.76 to 41.26 with standard deviations of 7.47 and 11.12, respectively, among university students.

Table 13

The most frequently rated 15 items in the Sarason's (1976) study and percentage of subjects (N=345)

Items' No	I t e m	% Responding
51	Begin new schooling experience	75
22	Change in residence	51
13	Changed work situation	48
36	Changed social activities	48
4	Change of sleeping habits	39
9	Outstanding personal achievement	37
46	Leaving home first time	36
10	Minor law violation	35
29	Change in recreation	35
6	Change in eating habits	34
14	New job	34
20	Changed closeness of family members	31
19	Changed financial status	28
45	Breaking up with boyfriend or girlfriend	27
59	Join fraternity sorority	25

The results about trait anxiety in the present study seem to be fairly consistent with both the findings of Öner and Le Compte (1983) and Spielberger (1970).

As a conclusion, this study aimed to investigate mainly, relationships among negative perception of life events, depression, and anxiety. It was confirmed that there are positive correlations among these three concepts. In addition, the results about depression and level of anxiety imply that, the prevalence of depression and level of trait anxiety are of considerable importance among the university students. The present author strongly suggests that in every university there should be active counseling services providing preventive and remedial help to the university students after a screening process. In these services, both for prevention and remediation of depression such programs as Lewinsohn's "Coping with Depression Course" can be carried out. Anxiety among students can be alleviated by group relaxation programs and the impact of life events can be turned into to be more positive through organizing discussion groups.

Further research is suggested in relation to frequency and perception of life events, in the direction of assessing the perception of present and aspired quality of life among university students.

B I B L I O G R A P H Y

1- Abramson,L.Y., Seligman,M.E.P., and Teasdale,J.D.: "Learned Helplessness in Humans: Critique and Reformulation," Journal of Abnormal Psychology, Vol.87, pp.49-74, 1978.

2- American Psychiatric Association: Diagnostic and Statistical Manual of Mental Disorders, 3rd edn. Washington,D. C. 1980.

3- Andreasen,N.C.: "Concepts, Diagnosis and Classification," in E.S.Paykel (Ed.), Handbook of Affective Disorders, New York: Guilford Press, 1982.

4- Aslanoğlu,S.: "Habis Tümörlerin Oluşumunda Stresin Rolü", Bilim Uzmanlığı Tezi, Hacettepe Üniversitesi, 1978.

5- Baltes,P.B., Cornelius,S.W., and Nesselroade,J.R.: "Cohort Effects in Developmental Psychology," in J.R. Nesselroade and P.B.Baltes (Eds.), Longitudinal Research in the Study of Behavior and Development. New York: Academic Press, 1980.

6- Baltes,P.B., Reese,H.W., and Lipsitt,L.P.: "Life-Span Developmental Psychology," Annual Review of Psychology, Vol.31, pp.65-110, 1980.

7- Barrett,J.E. (Ed.): Stress and Mental Disorder. New York: Raven Press, 1979.

8- Beck,A.T.: Depression: Clinical, Experimental, and Theoretical Aspects. New York: Hoeber, 1967.

9- Beck,A.T.: Depression: Causes and Treatment. Pennsylvania University of Pennsylvania Press, 1972.

10- Boyd,J.H., and Weissman,M.M.: "Epidemiology," in E.S. Paykel (Ed.), Handbook of Affective Disorders. New York: Guilford Press, 1982.

11- Brown,G.W.: "Life Events and Psychiatric Illness: Some Thoughts on Methodology and Causality," Journal of Psychosomatic Research, Vol.16, p.311, 1972.

12- Bumberry,W., Oliver,J.M., and McClure,J.N.: "Validation of the Beck Depression Inventory in a University Population Using Psychiatric Estimate as the Criterion," Journal of Consulting and Clinical Psychology, Vol.46, No.1, pp.150-155, 1978.

13- Cadoret,J., Winokur,G., Dorzab,J. et al.: "Depressive Disease: Life Events and Onset of Illness," Archives of General Psychiatry, Vol.26, p.133, 1972.

14- Carson,T.P., and Adams,H.E.: "Activity Valence as a Function of Mood Change," Journal of Abnormal Psychology, Vol.89, pp.368-377, 1980.

15- Coyne,J.C., Aldwin,C., and Lazarus,R.S.: "Depression and Coping in Stressful Episodes," Journal of Abnormal Psychology, Vol.90, No.5, pp.439-447, 1981.

16- Coyne,J.C., and Lazarus,R.S.: "Cognitive Style, Stress Perception, and Coping,"in I.L.Kutash and L.B.Schlesinger (eds.), Handbook on Stress and Anxiety: Contemporary Knowledge, Theory, and Treatment. San Francisco: Jossey-Bass, 1981.

17- Depue,R.A. (Ed.): The Psychobiology of the Depressive Disorders: Implications for the Effects of Stress. New York: Academic Press, 1979.

18- Dewald,P.A.: Psychotherapy: A Dynamic Approach. 2nd edn. New York: Basic Books, 1971.

19- Dohrenwend,B.S.: "Life Events as Stressors: A Methodological Inquiry," Journal of Health and Social Behavior, Vol.14, pp.167-175, 1973.

20- Dohrenwend,B.S., and Dohrenwend,B.P.: Stressful Life Events: Their Nature and Effects. New York: Wiley, 1974.

21- Dollard,J., and Miller,N.E.: Personality and Psychotherapy. New York: McGraw Hill, 1950.

22- Dunner,D.L., Patrick,V., and Fieve,R.R.: "Life Events at the Onset of Bipolar Affective Illness," American Journal of Psychiatry, Vol.136, p.508, 1979.

23- Ellis,A., and Harper,R.A.: A Guide to Rational Living. Hollywood, California: Wilshire, 1961.

24- Ferster,C.B.: "Animal Behavior and Mental Illness," Psychological Record, Vol.16, pp.345-356, 1966.

25- Freud,S.: "Mourning and Melancholia," in J.Strachey (Ed. and trans.), Standard Edition of the Complete Psychological Works of Sigmund Freud, Vol.14, London: Hogarth Press, 1957 (Originally Published, 1917).

26- Freud,S.: "Inhibitions, Symptoms, and Anxiety," in J. Strachey (Ed.), Standard Edition of the Complete Psychological Works of Sigmund Freud, Vol.20, London: Hogarth Press, 1959 (Originally published 1926).

27- Garber,J. and Seligman,M.E.P.: Human Helplessness. New York:PH: Academic Press, 1980.

28- Gersten,J.C., Langner,T.S., Eisenberg,J.G., and Orzek,L.: "Child Behavior and Life Events: Undesirable Change or Change per se?," in B.S. Dohrenwend and B.P. Dohrenwend (Eds.), Stressful Life Events: Their Nature and Effects. New York: Wiley, 1974.

29- Gong-Guy,E., and Hammen,C.: "Causal Perceptions of Stressful Events in Depressed and Nondepressed Outpatients," Journal of Abnormal Psychology, Vol.89, No.5, pp.662-669, 1980.

30- Grat,I., Sweetwood,H.L., Yager,J., et al.: "Quality of Life Events in Relation to Psychiatric Symptoms," Archives of General Psychiatry, Vol.38, p.335, 1981.

31- Hamilton,M.: "Symptoms and Assessment of Depression," in E.S.Paykel (Ed.), Handbook of Affective Disorders. New York: Guilford Press, 1982.

32- Hammen,C.L., and Cochran,S.D.: "Cognitive Correlates of Life Stress and Depression in College Students," Journal of Abnormal Psychology, Vol.91, No.1, pp.23-27, 1981.

33- Harvey,D.M.: "Depression and Attributional Style: Interpretations of Important Personal Events," Journal of Abnormal Psychology, Vol.90, No.2, pp.134-142, 1981.

34- Hatzenbuehler,L.C., Parpal,M., and Leroy,M.: "Classifying College Students as Depressed or Nondepressed Using the Beck Depression Inventory: An Empirical Analysis," Journal of Consulting and Clinical Psychology, Vol.51, No.3, pp.360-366, 1983.

35- Holmes,T.H., and Rahe,R.H.: "The Social Readjustment Rating Scale," Journal of Psychosomatic Research, Vol.11, pp.213-218, 1967.

36- Kielholz,P.: "Opening address," in P.Kielholz, Depression in Everyday Practice. Basle: Basler Druck- und Verlags-anstalt, 1974.

37- Krantz,S., and Hammen,C.: "Assessment of Cognitive Bias in Depression," Journal of Abnormal Psychology, Vol.88, No.6, pp.611-619, 1979.

38- Lazarus,R.S.: The Stress and Coping Paradigm". In C. Eidorfer,D.Cohen, A.Kleinman and P.Maxim (eds.), Theoretical Bases for Psychopathology. New York: Spectrum 1981.

39- Lehman,H.E.: "Epidemiology of Depressive Disorders," in R.R.Fieve (Ed.), Depression in the 70s: Modern Theory and Research. Princeton,N.J.: Excerpta Medica, 1971.

40- Levitt,E.G., and Lubin,B.: Depression. New York: Springer, 1975.

41- Lewinsohn,P.M.: "A Behavioral Approach to Depression," in R.J.Friedman and M.M.Katz (Eds.), The Psychology of Depression: Contemporary Theory and Research. Washington D.C.: V.H.Winston, 1974.

42- Lewinsohn,P.M., Larson,D.W., and Munoz,R.F.: "The Measurement of Expectancies and Other Cognitions in Depressed Individuals," Cognitive Therapy and Research, Vol.6, No.4, pp.437-446, 1982.

43- Lewinsohn,P.M., Antonuccio,D.O., Steinmetz,J.L., and Teri,L.: The Coping with Depression Course. Oregon: Castalia, 1984.

44- Lloyd,C.: "Life Events and Depressive Disorder Reviewed," Archives of General Psychiatry, Vol.37, pp.529-548, 1980.

45- Miller III,I.W., Klee,S.H., and Norman,W.H.: "Depressed and Nondepressed Inpatients' Cognitions of Hypothetical Events, Experimental Tasks, and Stressful Life Events," Journal of Abnormal Psychology, Vol.91, No.1, pp.78-81, 1982.

46- Mitchell,R.E., Cronkite,R.C., and Moos,R.H.: "Stress, Coping, and Depression Among Married Couples," Journal of Abnormal Psychology, Vol.92, No.4, pp.433-448, 1983.

47- Monbreun,B.G., and Craighead,W.E.: "Distortion of Perception and Recall of Positive and Neutral Feedback in Depression," Cognitive Therapy and Research, Vol.1, No.4, pp.311-329, 1977.

48- Monroe,S.M., Imhoff,D.F., Wise,B.D., and Harris,J.E.: "Prediction of Psychological Symptoms Under High-Risk Psychosocial Circumstances; Life Events, Social Support, and Symptom Specificity," Journal of Abnormal Psychology, Vol.92, No.3, pp.338-350, 1983.

49- Mueller,D.P., Edwards,D.W., and Yarvis,R.M.: "Stressful Life Events and Psychiatric Symptomatology: Change or Undesirability?" Journal of Health and Social Behavior, Vol.18, pp.307-317, 1977.

50- Nelson,R.E., and Craighead,W.E.: "Selective Recall of Positive and Negative Feedback, Self-Control Behaviors, and Depression," Journal of Abnormal Psychology, Vol.86, No.4, pp.379-388, 1977.

51- Norman,W.H., Miller III,I.W., and Klee,S.H.: "Assessment of Cognitive Distortion in a Clinically Depressed Population," Cognitive Therapy and Research, Vol.7, No.2, pp. 133-140, 1983.

52- Öner,N., and Le Compte,A.: Süreksiz Durumluk/Sürekli Kaygı Envanteri El Kitabı. İstanbul: Boğaziçi Üniversitesi Yayınları, 1983.

53- Paykel,E.S.: "Causal Relationships Between Clinical Depression and Life Events," in J.E.Barrett (Ed.), Stress and Mental Disorder. New York: Raven, 1979.

54- Paykel,E.S. (Ed.): Handbook of Affective Disorders. New York: Guilford Press, 1982.

55- Paykel,E.S., Myers,J.K., Dienelt,M.N. et al.: "Life Events and Depression: A Controlled Study," Archives of General Psychiatry, Vol.21, p.753, 1969.

56- Pearlin,L.I., and Leiberman,M.A.: "Social Sources of Emotional Distress," in R.G.Simmons (Ed.), Research in Community Mental Health. Greenwich, Conn.: JAI Press, 1979.

57- Rabkin,J.G., and Struening,E.L.: "Life Events, Stress, and Illness," Science, Vol.194, pp.1013-1020, 1976.

58- Reawley,W.: "The Relationship of Life Events to Several Aspects of Anxiety," Journal of Psychosomatic Research, Vol.18, p.421, 1974.

59- Rehm,L.P.: "A Self-control Model of Depression," Behavior Therapy, Vol.8, pp.787-804, 1977.

60- Roth,D., and Rehm,L.P.: "Relationships among Self-monitoring Processes, Memory, and Depression," Cognitive Therapy and Research, Vol.4, 149-157, 1980.

61- Sarason,I.G., and Johnson,J.H.: The Life Experiences Survey: Preliminary Findings. Technical Report, Seattle, Washington, 1976.

62- Sarason,I.G., Johnson,J.H., and Siegel,J.M.: "Assessing the Impact of Life Changes: Development of the Life Experiences Survey," Journal of Consulting and Clinical Psychology, Vol.46, No.5, pp.932-946, 1978.

63- Schless,A.P., Schwartz,L., Goetz,C. et al.: "How Depressives View the Significance of Life Events," British Journal of Psychiatry, Vol.35, p.565, 1978.

64- Seligman,M.E.P.: Depression and Learned Helplessness. In R.J. Friedman and M.M.Katz (Eds.), The Psychology of Depression: Contemporary Theory and Research. Washington D.C.: V.H.Winston, 1974.

65- Seligman,M.E.P.: Helplessness: On Depression, Development, and Death. San Francisco: W.H.Freeman, 1975.

66- Selye,H.: The Stress of Life, 2nd edn. New York: Mc Graw Hill, 1976.

67- Selye,H.: "The Stress Concept Today," in I.L.Kutash, L.B. Schlesinger et al. (Eds.), Handbook on Stress and Anxiety. San Francisco: Josey-Bass, 1981.

68- Skinner,B.F.: Science and Human Behavior. New York: Free Press, 1953.

69- Sorias,S.: "Hasta ve Normallerde Yaşam Olaylarının Stres Verici Etkilerinin Araştırılması," Doçentlik Tezi, Ege Üniversitesi, 1982.

70- Spielberger,C.D., Gorsuch,R.L., and Lushene,R.E.: Manual for the State-Trait Anxiety Inventory. Palo Alto: Consulting Psychologist, 1970.

71- Sullivan,H.S.: The Interpersonal Theory of Psychiatry. New York: Norton, 1953.

72- Teğin,B.: Depresyonda Bilişsel Bozukluklar: Beck Modeline Göre Bir İnceleme. Doktora Tezi, Hacettepe Üniversitesi, 1980.

73- Vinokur,A., and Selzer,M.L.: "Desirable versus Undesirable Life Events: Their Relationship to Stress and Mental Distress," Journal of Personality and Social Psychology, Vol.432, pp.329-337, 1975.

74- Warheit,G.J.: "Life Events, Coping, Stress and Depressive Symptomatology," American Journal of Psychiatry, Vol.136, p.502, 1979.

REFERENCES NOT CITED

Beck,A.T.: Cognitive Therapy and the Emotional Disorders. New York: New American Library, 1976.

Beck,A.T., Rush,A.J., Shaw,B.F., and Emery,G.: Cognitive Therapy of Depression. New York: Guilford Press, 1984.

Danish,S.J.: "Life-Span Human Development and Intervention: A Necessary Link," The Counseling Psychologist, Vol.9, No.2, pp.40-43, 1981.

Emery,G., Hollon,S.D., and Bedrosian,R.C.: New Directions in Cognitive Therapy: A Case Book. New York: Guilford Press, 1981.

Guilford,J.P., and Fruchter,B.: Fundamental Statistics in Psychology and Education. New York: McGraw Hill, 1973.

Hjelle,L.A., and Ziegler,D.J.: Personality Theories: Basic Assumptions, Research, and Applications. Tokyo: McGraw Hill, 1981.

Lewinsohn,P.M., Steinmetz,J.L., Antonuccio,D.O., and Teri,L.: "A Behavioral Group Therapy Approach to the Treatment of Depression," in D.Upper and S.M.Ross (Eds.), Handbook of Behavioral Group Therapy. New York: Plenum Press, 1984.

Meichenbaum,D.: Cognitive-Behavior Modification: An Integrative Approach. New York: Plenum Press, 1977.

O'Connell,A., and O'Connell,V.: Choice and Change: The Psychology of Adjustment, Growth, and Creativity. Englewood Cliffs,N.J.: Prentice-Hall, 1980.

APPENDIX A

YAŞAM DEĞİŞİMLERİ ANKETİ

İsim: Cinsiyet: Yaş: Medeni Durum:

YÖNERGE: Aşağıdaki listede kişilerin hayatına değişiklik getiren ve yeniden sosyal uyum sağlamayı gerektiren bazı olaylar bulunmaktadır. Yakın bir geçmişte yani son bir yıl içerisinde başınızdan geçen olayları ve her olayın başınızdan geçiş tarihini (0-6 ay ya da 7-12 ay şeklinde) işaretleyiniz. Koyduğunuz her işaretin ilgili olduğu maddenin karşısına gelmesine dikkat ediniz.

Aşağıda işaretleyeceğiniz her madde için, olayın meydana geldiği sırada, hayatınıza olumlu veya olumsuz nasıl bir etki yaptığını düşünüyorsanız lütfen ilgili rakkamı daire içine alarak belirleyin. (-3) değerinde bir dereceleme, olayın çok olumsuz bir etkisi olduğunu; (0) değerde bir dereceleme, olayın olumlu veya olumsuz hiçbir etkisi olmadığı, (+3) değerde bir derceleme ise olayın çok olumlu bir etkisi olduğu anlamına gelmektedir. Olayın hem olumlu hem de olumsuz etkisi olduğuna inanıyorsanız en önemli olanını işaretleyiniz.

	0-6 ay	7 ay - 1 sene	Çok olumsuz	Oldukça olumsuz	Az olumsuz	Etkisiz	Az olumlu	Oldukça olumlu	Çok olumlu
1- Evlilik			-3	-2	-1	0	+1	+2	+3
2- Aileden çok yakın birinin evlenmesi (kardeşlerden birinin veya anne veya babanın evlenmesi			-3	-2	-1	0	+1	+2	+3
3- Hapishanede tutuklu kalma			-3	-2	-1	0	+1	+2	+3
4- Yakın bir aile üyesinin hapishanede tutuklu kalması			-3	-2	-1	0	+1	+2	+3
5- Eşin ölümü			-3	-2	-1	0	+1	+2	+3
6- Uyku alışkanlığında önemli değişmeler (daha fazla veya daha az uyuma)			-3	-2	-1	0	+1	+2	+3

	0-6 ay	7 ay - 1 sene	Çok olumsuz	Oldukça olumsuz	Az olumsuz	Etkisiz	Az olumlu	Oldukça olumlu	Çok olumlu
7- Yakın bir aile üyesinin ölümü			-3	-2	-1	0	+1	+2	+3
a) anne			-3	-2	-1	0	+1	+2	+3
b) baba			-3	-2	-1	0	+1	+2	+3
c) erkek kardeş			-3	-2	-1	0	+1	+2	+3
d) kız kardeş			-3	-2	-1	0	+1	+2	+3
e) büyük anne			-3	-2	-1	0	+1	+2	+3
f) büyük baba			-3	-2	-1	0	+1	+2	+3
g) diğerleri(belirtin)			-3	-2	-1	0	+1	+2	+3
8- Yemek alışkanlıklarında önemli değişmeler (daha fazla veya daha az yemek yeme)			-3	-2	-1	0	+1	+2	+3
9- İpoteğin kaldırılması			-3	-2	-1	0	+1	+2	+3
10- Yakın bir arkadaşın ölümü			-3	-2	-1	0	+1	+2	+3
11- Yüksek kişisel başarı			-3	-2	-1	0	+1	+2	+3
12- Küçük çapta yasa ihlali			-3	-2	-1	0	+1	+2	+3
13- Erkek için: Karısının hamile kalması			-3	-2	-1	0	+1	+2	+3
14- Erkek için: Flörtünün ya da nişanlısının hamile kalması			-3	-2	-1	0	+1	+2	+3
15- Kadın için: Kendisinin hamile kalması			-3	-2	-1	0	+1	+2	+3
16- Kadın için: Kocasının diğer bir kadını hamile bıraktığını öğrenmesi			-3	-2	-1	0	+1	+2	+3
17- İş durumunda değişiklik (farklı iş sorumluluğu, iş şartlarında, iş saatlerinde vs. değişiklikler)			-3	-2	-1	0	+1	+2	+3
18- Yeni bir işe girme			-3	-2	-1	0	+1	+2	+3

	0-6 ay	7 ay - 1 sene	Çok olumsuz	Oldukça olumsuz	Az olumsuz	Etkisiz	Az olumlu	Oldukça olumlu	Çok olumlu
19- Yakın aile üyelerinden birinin ciddi bir hastalığa yakalanması, kaza geçirmesi veya sakatlanması			-3	-2	-1	0	+1	+2	+3
a) baba			-3	-2	-1	0	+1	+2	+3
b) anne			-3	-2	-1	0	+1	+2	+3
c) kız kardeş			-3	-2	-1	0	+1	+2	+3
d) erkek kardeş			-3	-2	-1	0	+1	+2	+3
e) büyük anne			-3	-2	-1	0	+1	+2	+3
f) büyük baba			-3	-2	-1	0	+1	+2	+3
g) diğerleri(belirtin)			-3	-2	-1	0	+1	+2	+3
20- Cinsel sorunlar (eş ile anlaşamama)			-3	-2	-1	0	+1	+2	+3
21- İşverenle anlaşmazlık (işini kaybetme tehlikesi, çalışma koşullarında olanakların kısıtlanması, terfi edememe)			-3	-2	-1	0	+1	+2	+3
22- Kayınvalide, kayınpeder, kayınbirader veya görümce ile anlaşmazlık			-3	-2	-1	0	+1	+2	+3
23- Maddi olanaklarda önemli değişmeler (daha iyi maddi olanaklara sahip olmak veya maddi durumun bozulması)			-3	-2	-1	0	+1	+2	+3
24- Anne-baba ve çocukların oluşturduğu "çekirdek" aile üyelerinin yakın ilişkilerinde önemli değişmeler (yakınlığın azalması veya çoğalması)			-3	-2	-1	0	+1	+2	+3
25- Yakın akrabalarla (büyükanne, büyükbaba, amca, teyze, kuzenlerle ilişkilerde önemli değişmeler (yakınlığın azalması veya çoğalması)			-3	-2	-1	0	+1	+2	+3

	0-6 ay	7 ay - 1 sene	Çok olumsuz	Oldukça olumsuz	Az olumsuz	Etkisiz	Az olumlu	Oldukça olumlu	Çok olumlu
26- Aileye yeni bir üyenin katılması (doğum, evlat edinme, akrabalardan biri v.b.)			-3	-2	-1	0	+1	+2	+3
27- İkametgah değişikliği			-3	-2	-1	0	+1	+2	+3
28- Anlaşmazlık nedeniyle eşlerin birbirlerinden ayrı yaşamaları			-3	-2	-1	0	+1	+2	+3
29- Hacca gitme, zekat verme, Kuran okuma gibi dini faaliyetlerde önemli değişmeler (bu faaliyetlerin artması veya azalması)			-3	-2	-1	0	+1	+2	+3
30- Eşlerin tekrar birleşmesi			-3	-2	-1	0	+1	+2	+3
31- Karı/koca tartışmalarının sayısında önemli değişmeler (daha çok veya daha az tartışma)			-3	-2	-1	0	+1	+2	+3
32- Evli erkek için: Evin dışında karısının işindeki değişiklik (çalışmaya başlama, işini bırakması, işini değiştirmesi)			-3	-2	-1	0	+1	+2	+3
33- Evli kadın için: Kocasının işindeki değişiklik (işini kaybetmesi, yeni bir işe başlaması, emeklilik, v.b.)			-3	-2	-1	0	+1	+2	+3
34- 100.000 liradan fazla borç alma veya yatırım yapma (ev almak, iş kurmak, v.b. için)			-3	-2	-1	0	+1	+2	+3
35- 100.000 liradan daha az borç alma veya yatırım yapma (öğrenime devam etmek, TV almak, v.b. için)			-3	-2	-1	0	+1	+2	+3

	0-6 ay	7 ay - 1 sene	Çok olumsuz	Oldukça olumsuz	Az olumsuz	Etkisiz	Az olumlu	Oldukça olumlu	Çok olumlu
36- İşten çıkarılma			-3	-2	-1	0	+1	+2	+3
37- Kadın için: Çocuk aldırma			-3	-2	-1	0	+1	+2	+3
38- Erkek için: Karısının çocuk aldırması			-3	-2	-1	0	+1	+2	+3
39- Erkek için: Flörtü ya da nişanlısının çocuk aldırması			-3	-2	-1	0	+1	+2	+3
40- Sosyal ve eğlence faaliyetlerinin türünde ve miktarında önemli değişmeler (ziyaretler, sinema, tiyatro v.b.'de azalma veya artma)			-3	-2	-1	0	+1	+2	+3
41- Ailenin yaşama şartlarında önemli değişmeler (yeni ev yaptırma, evin onarımı, yeniden döşenmesi v.b.)			-3	-2	-1	0	+1	+2	+3
42- Boşanma			-3	-2	-1	0	+1	+2	+3
43- Kişinin geçirdiği önemli bir hastalık, yaralanma veya kaza			-3	-2	-1	0	+1	+2	+3
44- Yakın bir arkadaşın ağır bir hastalık geçirmesi, yaralanması, veya sakatlanması.			-3	-2	-1	0	+1	+2	+3
45- Eğitim için evden ayrılma			-3	-2	-1	0	+1	+2	+3
46- Geçici bir süre için eşten ayrı kalma (iş, gezi, v.b. neden ile)			-3	-2	-1	0	+1	+2	+3
47- Nişanlanma			-3	-2	-1	0	+1	+2	+3
48- Nişanlı veya flörtle anlaşmazlık			-3	-2	-1	0	+1	+2	+3
49- Nişanlı veya flörtle barışma, tekrar biraraya gelme			-3	-2	-1	0	+1	+2	+3

	0-6 ay	7 ay - 1 sene	Çok olumsuz	Oldukça olumsuz	Az olumsuz	Etkisiz	Az olumlu	Oldukça olumlu	Çok olumlu
50- Çalışma veya öğrenim nedeniyle çocuğa baktıracak birini veya bir kurum (kreş v.b.) bulamama			-3	-2	-1	0	+1	+2	+3
51- Aşık olma			-3	-2	-1	0	+1	+2	+3
52- Beklenmedik bir anda paraya sahip olma (miras, piyango, v.b. gibi)			-3	-2	-1	0	+1	+2	+3
53- Anarşik olaylara karışma			-3	-2	-1	0	+1	+2	+3
54- Yangın, hırsızlık			-3	-2	-1	0	+1	+2	+3
55- Aileden çok yakın birinin akıl hastanesine yatması			-3	-2	-1	0	+1	+2	+3
56- Yakın akrabalar ya da kardeşler arasında miras paylaşmalarından doğan dargınlıklar, tartışmalar			-3	-2	-1	0	+1	+2	+3
57- Çocuğunun ölümü			-3	-2	-1	0	+1	+2	+3
58- Daha yüksek bir akademik düzeyde yeni bir okula başlama (yüksek okul, üniversite v.b.)			-3	-2	-1	0	+1	+2	+3
59- Aynı akademik düzeyde okul değiştirme (transfer, nakil v.b.)			-3	-2	-1	0	+1	+2	+3
60- Sınıfta kalma veya dönem kaybetme			-3	-2	-1	0	+1	+2	+3
61- Öğrenci yurdundan uzaklaştırılma			-3	-2	-1	0	+1	+2	+3
62- Önemli bir sınavda başarısızlık			-3	-2	-1	0	+1	+2	+3
63- Branş veya bölüm değiştirme			-3	-2	-1	0	+1	+2	+3
64- Bir derste veya stajda başarısızlık			-3	-2	-1	0	+1	+2	+3

	0-6 ay	7 ay - 1 sene	Çok olumsuz	Oldukça olumsuz	Az olumsuz	Etkisiz	Az olumlu	Oldukça olumlu	Çok olumlu
65- Herhangi bir sosyal klüp veya derneğe üye olma (spor, folklor, fotoğrafçılık v.b.)			-3	-2	-1	0	+1	+2	+3
66- Öğrenimle ilgili parasal sorunlar (para sıkıntısı dolayısıyle okula devam edememe, v.b. durumlar)			-3	-2	-1	0	+1	+2	+3
67- Anne ve babanın boşanması veya ayrı yaşamaya başlamaları			-3	-2	-1	0	+1	+2	+3
Yaşamınızı etkileyen veya etkilemiş başka olaylar varsa lütfen belirleyin.									
68-			-3	-2	-1	0	+1	+2	+3
69-			-3	-2	-1	0	+1	+2	+3
70-			-3	-2	-1	0	+1	+2	+3

APPENDIX B

BECK DEPRESYON ENVANTERİ

Aşağıda gruplar halinde bazı cümleler yazılıdır. Her gruptaki cümleleri dikkatle okuyunuz. BUGÜN DAHİL, GEÇEN HAFTA içinde kendinizi nasıl hissettiğinizi en iyi anlatan cümleyi seçiniz. Seçmiş olduğunuz cümlenin yanındaki numarayı daire içine alınız. Eğer bir grupta durumunuzu tarif eden birden fazla cümle varsa herbirini daire içine alarak işaretleyiniz.

Seçiminizi yapmadan önce her gruptaki cümlelerin hepsini dikkatle okuyunuz.

Adı, Soyadı : ....

Tarih : ....

A. 0 Kendimi üzüntülü ve sıkıntılı hissetmiyorum.
   1 Kendimi üzüntülü ve sıkıntılı hissediyorum.
   2 Hep üzüntülü ve sıkıntılıyım. Bundan kurtulamıyorum.
   3 O kadar üzüntülü ve sıkıntılıyım ki artık dayanamıyorum.

B. 0 Gelecek hakkında umutsuz ve karamsar değilim.
   1 Gelecek hakkında karamsarım.
   2 Gelecekten beklediğim hiçbir şey yok.
   3 Geleceğim hakkında umutsuzum ve sanki hiçbir şey düzelmeyecekmiş gibi geliyor.

C. 0 Kendimi başarısız bir insan olarak görmüyorum.
   1 Çevremdeki birçok kişiden daha çok başarısızlıklarım olmuş gibi hissediyorum.
   2 Geçmişime baktığımda başarısızlıklarla dolu olduğunu görüyorum.
   3 Kendimi tümüyle başarısız bir kişi olarak görüyorum.

D. 0 Birçok şeyden eskisi kadar zevk alıyorum.
   1 Eskiden olduğu gibi herşeyden hoşlanmıyorum.
   2 Artık hiçbir şey bana tam anlamıyla zevk vermiyor.
   3 Herşeyden sıkılıyorum.

E. 0 Kendimi herhangi bir şekilde suçlu hissetmiyorum.
1 Kendimi zaman zaman suçlu hissediyorum.
2 Çoğu zaman kendimi suçlu hissediyorum.
3 Kendimi her zaman suçlu hissediyorum.

F. 0 Kendimden memnunum.
1 Kendi kendimden pek memnun değilim.
2 Kendime çok kızıyorum.
3 Kendimden nefret ediyorum.

G. 0 Başkalarından daha kötü olduğumu sanmıyorum.
1 Zayıf yanlarım veya hatalarım için kendi kendimi eleştiririm.
2 Hatalarımdan dolayı her zaman kendimi kabahatli bulurum.
3 Her aksilik karşısında kendimi kabahatli bulurum.

H. 0 Kendimi öldürmek gibi düşüncelerim yok.
1 Zaman zaman kendimi öldürmeyi düşündüğüm oluyor fakat yapmıyorum.
2 Kendimi öldürmek isterdim.
3 Fırsatını bulsam kendimi öldürürüm.

I. 0 Her zamankinden fazla içimden ağlamak gelmiyor.
1 Zaman zaman içimden ağlamak geliyor.
2 çoğu zaman ağlıyorum.
3 Eskiden ağlayabilirdim, şimdi istesem de ağlayamıyorum.

J. 0 Şimdi her zaman olduğumdan daha sinirli değilim.
1 Eskisine kıyasla daha kolay kızıyor ya da sinirleniyorum.
2 Şimdi hep sinirliyim.
3 Bir zamanlar beni sinirlendiren şeyler şimdi hiç sinirlendirmiyor.

K. 0 Başkaları ile görüşmek, konuşmak isteğimi kaybetmedim.
1 Başkaları ile eskisinden daha az konuşmak, görüşmek istiyorum.
2 Başkaları ile konuşma ve görüşme isteğimi kaybettim.
3 Hiç kimseyle görüşüp, konuşmak istemiyorum.

L. 0 Eskiden olduğu kadar kolay karar verebiliyorum.
1 Eskiden olduğu kadar kolay karar veremiyorum.
2 Karar verirken eskisine kıyasla çok güçlük çekiyorum.
3 Artık hiç karar veremiyorum.

M. 0 Aynada kendime baktığımda bir değişiklik görmüyorum.
1 Daha yaşlanmışım ve çirkinleşmişim gibi geliyor.
2 Görünüşümün çok değiştiğini ve daha çirkinleştiğimi hissediyorum.
3 Kendimi çok çirkin buluyorum.

N. 0 Eskisi kadar iyi çalışabiliyorum.
1 Birşeyler yapabilmek için gayret göstermek gerekiyor.
2 Herhangi bir şeyi yapabilmek için kendimi çok zorlamam gerekiyor.
3 Hiçbir şey yapamıyorum.

O. 0 Her zamanki gibi iyi uyuyabiliyorum.
1 Eskiden olduğu gibi iyi uyuyamıyorum.
2 Her zamankinden 1-2 saat daha erken uyanıyorum ve tekrar uyuyamıyorum.
3 Her zamankinden çok daha erken uyanıyorum ve tekrar uyuyamıyorum.

P. 0 Her zamankinden daha çabuk yorulmuyorum.
1 Her zamankinden daha çabuk yoruluyorum.
2 Yaptığım hemen herşey beni yoruyor.
3 Kendimi hiçbir şey yapamayacak kadar yorgun hissediyorum.

R. 0 İştahım her zamanki gibi.
1 İştahım eskisi kadar iyi değil.
2 İştahım çok azaldı.
3 Artık hiç iştahım yok.

S. 0 Son zamanlarda kilo vermedim.
1 İki kilodan fazla kilo verdim.
2 Dört kilodan fazla kilo verdim.
3 Altı kilodan fazla kilo verdim.

Daha az yiyerek kilo vermeye çalışıyorum.

Evet ( )
Hayır ( )

T. 0 Sağlığım beni fazla endişelendirmiyor.

1 Ağrı, sancı, mide bozukluğu veya kabızlık gibi rahatsızlıklar beni endişelendiriyor.

2 Sağlığım beni endişelendirdiği için başka şeyleri düşünmek zorlaşıyor.

3 Sağlığım hakkında o kadar endişeliyim ki başka hiçbir şey düşünemiyorum.

U. 0 Son zamanlarda cinsel konulara olan ilgimde bir değişme farketmedim.

1 Cinsel konularla eskisinden daha az ilgiliyim.

2 Cinsel konularla şimdi çok daha az ilgiliyim.

3 Cinsel konulara olan ilgimi tamamen kaybettim.

V. 0 Bana cezalandırılmışım gibi gelmiyor.

1 Cezalandırılabileceğimi seziyorum.

2 Cezalandırılmayı bekliyorum.

3 Cezalandırıldığımı hissediyorum.

APPENDIX C

KENDİNİ DEĞERLENDİRME ANKETİ
STAI FORM TX-2

İsim: Cinsiyet: Yaş: Tarih:

YÖNERGE: Aşağıda kişilerin kendilerine ait duygularını anlatmada kullandıkları birtakım ifadeler verilmiştir. Her ifadeyi okuyun, sonra da genel olarak nasıl hissettiğinizi, ifadelerin sağ tarafındaki parantezlerden uygun olanını karalamak suretiyle belirtin. Doğru ya da yanlış cevap yoktur. Herhangi bir ifadenin üzerinde fazla zaman sarfetmeksizin genel olarak nasıl hissettiğinizi gösteren cevabı işaretleyin.

	Hemen hiçbir zaman	Bazen	Çok zaman	Hemen her zaman
21- Genellikle keyfim yerindedir.	(1)	(2)	(3)	(4)
22- Genellikle çabuk yorulurum	(1)	(2)	(3)	(4)
23- Genellikle kolay ağlarım	(1)	(2)	(3)	(4)
24- Başkaları kadar mutlu olmak isterim	(1)	(2)	(3)	(4)
25- Çabuk karar veremediğim için fırsatları kaçırırım	(1)	(2)	(3)	(4)
26- Kendimi dinlenmiş hissederim	(1)	(2)	(3)	(4)
27- Genellikle sakin, kendime hakim ve soğukkanlıyım	(1)	(2)	(3)	(4)
28- Güçlüklerin, yenemiyeceğim kadar biriktiğini hissederim	(1)	(2)	(3)	(4)
29- Önemsiz şeyler hakkında endişelenirim	(1)	(2)	(3)	(4)
30- Genellikle mutluyum	(1)	(2)	(3)	(4)
31- Herşeyi ciddiye alır ve etkilenirim	(1)	(2)	(3)	(4)
32- Genellikle kendime güvenim yoktur	(1)	(2)	(3)	(4)

	Hemen hiçbir zaman	Bazen	Çok zaman	Hemen her zaman
33- Genellikle kendimi emniyette hissederim	(1)	(2)	(3)	(4)
34- Sıkıntılı ve güç durumlarla karşılaşmaktan kaçınırım	(1)	(2)	(3)	(4)
35- Genellikle kendimi hüzünlü hissederim	(1)	(2)	(3)	(4)
36- Genellikle hayatımdan memnunum	(1)	(2)	(3)	(4)
37- Olur olmaz düşünceler beni rahatsız eder	(1)	(2)	(3)	(4)
38- Hayal kırıklıklarını öylesine ciddiye alırım ki, hiç unutamam	(1)	(2)	(3)	(4)
39- Aklı başında ve kararlı bir insanım	(1)	(2)	(3)	(4)
40- Son zamanlarda kafama takılan konular beni tedirgin eder	(1)	(2)	(3)	(4)

APPENDIX D

Yaşam Olaylarına Verilen Tepkilerin
Sayısı ve Oranları
(n=306)

Madde No	M a d d e l e r	Toplam Tepki Sayısı	Tepki (%)
1	Evlilik	12	3.9
2	Aileden yakın birinin evliliği	35	11.4
3	Hapishanede tutuklu kalma	2	0.6
4	Aileden birinin hapiste tutuklu kalması	6	1.9
6	Uyku alışkanlığında değişmeler	105	34.3
7.a	Annenin ölümü	4	1.3
b	Babanın ölümü	3	0.9
d	Kız kardeşin ölümü	2	0.6
e	Büyük annenin ölümü	19	6.2
f	Büyük babanın ölümü	10	3.2
g	Diğer yakın akrabalar	14	4.5
8	Yemek alışkanlıklarında değişmeler	97	31.7
10	Yakın bir arkadaşın ölümü	16	5.2
11	Yüksek kişisel başarı	45	14.7
12	Küçük çapta yasa ihlalleri	11	3.6
13	Erkek için: Karısının hamile kalması	4	1.3
14	Erkek için: Flörtün hamile kalması	1	0.3
15	Kadın için: Kendinin hamile kalması	4	1.3
17	İş durumunda değişiklik	20	6.5
18	Yeni bir işe girme	14	4.5
19.a	Babanın ciddi bir hastalık geçirmesi	12	3.9
b	Annenin ciddi bir hastalık geçirmesi	16	5.2
c	Kız kardeşin ağır hastalık geçirmesi	6	1.9
d	Erkek kardeşin ağır hastalık geçirmesi	5	1.6
e	Büyük annenin ağır hastalık geçirmesi	12	3.9
f	Büyük babanın ağır hastalık geçirmesi	2	0.6
20	Cinsel sorunlar	4	1.3
21	İşverenle anlaşmazlık	4	1.3

Madde No	M a d d e l e r	Toplam Tepki Sayısı	Tepki (%)
22	Kayınvalide, kayınpeder, v.b. ile anlaşmazlık	1	0.3
23	Parasal durumda önemli değişmeler	78	25.5
24	Aile üyeleri ile ilişkilerde önemli değişmeler	64	20.9
25	Yakın akraba ilişkilerinde önemli değişmeler	57	18.6
26	Aileye yeni bir üyenin katılması	37	12.1
27	İkametgah değişikliği	73	23.8
29	Dini gerekleri yerine getirmede önemli değişmeler	23	7.5
31	Karı-koca tartışmalarında önemli değişmeler	2	0.6
34	100.000 TL'den çok borç alma veya yatırım yapma	16	5.2
35	100.000 TL'den daha az borç alma veya yatırım yapma	17	5.5
39	Erkek için: Karısının veya nişanlısının çocuk aldırması	4	1.3
40	Sosyal etkinliklere katılmada önemli değişmeler	142	46.4
41	Ailenin yaşam koşullarında önemli değişmeler	29	9.5
42	Boşanma	1	0.3
43	Kişinin hastalık geçirmesi veya yaralanması	14	4.5
44	Yakın bir arkadaşın önemli bir hastalık geçirmesi/yaralanması	20	6.5
45	Eğitim için evden ayrılma	34	11.1
46	Geçici bir süre için eşten ayrı kalma	4	1.3
47	Nişanlanma	15	4.9
48	Nişanlı veya flörtle anlaşmazlık	28	9.1
49	Nişanlı veya flörtle barışma	15	4.9
51	Aşık olma	74	24.1
52	Beklenmedik bir anda paraya sahip olma	1	0.3
53	Anarşik olaylara karışma	2	0.6
54	Yangın, hırsızlık	1	0.3
55	Aileden birinin akıl hastanesine yatması	1	0.3
56	Mirasla ilgili aile içi anlaşmazlıklar	11	3.6
58	Üniversiteye başlama	46	15.0
59	Okul değiştirme	11	3.6
60	Sınıfta kalma/dönem kaybetme	9	2.9

Madde No	M a d d e l e r	Toplam Tepki Sayısı	Tepki (%)
62	Önemli bir sınavda başarısızlık	41	13.4
63	Branş veya bölüm değiştirme	1	0.3
64	Bir derste veya stajda başarısızlık	38	12.4
65	Sosyal/spor kulübüne üye olma	52	16.9
66	Öğrenimle ilgili parasal sorunlar	17	55
67	Anne ve babanın boşanması	2	0.6