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# CHILDHOOD TRAUMAS AND CHRONIC PAIN: DISCUSSING THE LINKS WITH DEPRESSION

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#### **ABSTRACT**

The aim of this study was to investigate the relationship between childhood traumas and chronic pain. Many studies in literature show that chronic pain patients have a history of childhood trauma more than normal population. In addition to that, the distinction of childhood neglect between other traumas was expected. Demographic factors, including family history of pain or possible traumatic events after adolescence, and depressive scores are investigated as well. 50 chronic pain patients and 50 control group participants have contributed. The evaluations were made by Demographic Form, McGill Pain Questionnaire, Childhood Trauma Questionnaire Short-Form, Beck Depression Inventory and Clinician Administered PTSD-Scale in the case of traumatic event after age of 20. For statistical analysis, parametric tests and nonparametric tests were used due to data restrictions. Mann Whitney U Test, Spearman's Correlation, Independent Samples t-test and Chi-square are preferred. The results showed significant differences about childhood traumas between two groups. Chronic pain patients had more frequent and intense childhood traumas than the control group. As expected, neglect was the most discriminative trauma and demographic variables regarding neglect were found to be meaningful between two groups. In addition to that, depression scores were found to be significantly high in chronic pain patients.

## Key Words:

- 1. Chronic pain
- 2. Childhood trauma
- 3. Childhood neglect
- 4. Depression

#### ÖZET

Araştırmanın amacı çocukluk çağı travmaları ile kronik ağrı arasındaki ilişkiyi incelemektir. Literatürdeki birçok araştırma, kronik ağrı hastalarının normal popülasyona göre çocukluk çağı travma geçmişinin daha çok olduğunu göstermektedir. Ayrıca, araştırmada çocukluk çağı ihmalinin diğer travmalar arasında en ayırd edici olacağı beklenmektedir. Aile ağrı tarihi veya ergenlik sonrası travmatik olayları da içeren demografik etkenler ile depresif belirtiler de incelenmiştir. Araştırmaya, 50 kronik ağrı hastası ve 50 kontrol grubu katılımcısı dahil olmuştur. Değerlendirmeler için Demografik Form, McGill Ağrı Formu, Çocukluk Çağı Travma Ölçeği Kısa-Formu, Beck Depresyon Envanteri ve 20 yaşından sonra travmatik olay geçmişi olması durumunda Klinisyen Tarafından Değerlendirilen TSSB-Ölçeği kullanılmıştır. İstatistiki analizler için, parametrik ve verilerin yeterli kriterleri karşılamaması nedeniyle parametric olmayan testler kullanılmıştır. Mann Whitney U Testi, Spearman's Korelasyonu, Bağımsız Örneklem t-test ve Ki-Kare testleri tercih edilmiştir. Bulgular, çocukluk travmaları için iki grup arasında belirgin farklar göstermektedir. Kronik ağrı ağrıları, control grubuna göre daha sık ve şiddetli çocukluk çağı travma geçmişine sahip bulunmuştur. Beklendiği üzere, ihmal diğer travmalar arasında en belirleyici olarak çıkmıştır ve ihmali düşündüren demografik değişkenler de anlamlı bir ilişki göstermektedir. Bunlara ek olarak, depresyon puanları kronik ağrı grubunda belirgin derecede fazla bulunmuştur.

### Anahtar Kelimeler:

- 1. Kronik ağrı
- 2. Çocukluk çağı travması
- 3. Çocukluk çağı ihmali
- 4. Depresyon

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#### **INTRODUCTION**

#### 1. Chronic Pain

Chronic pain is defined by International Association for the Study of Pain (IASP) as a pain without any biological value that lasts beyond the expected tissue healing time, and lasts more than 6 months without any distinct organic epidemiology (Erbaydar & Çilingiroğlu, 2010). Chronic pain is found to be between the prevalence of 10.1% to 55.2% worldwide. In Europe countries, the prevalence is found to be 19%, whereas in the Unites States it is between 30.7% and 35% (Harstall & Ospina, 2003). In Turkey, there is no study which shows the chronic pain prevalence in the entire population however it is known that chronic pain is common. In a study, from a data of 400 primary care patients, 28.9% prevalence of chronic pain is found (Gureje, Von Korff, Simon & Gater, 1998).

#### 1.1 Chronic Pain vs. Acute Pain

Chronic pain is a prolonging pain which differs from acute pain. In this sense, its bodily and psychological experience is different. In the case of acute pain, the anxiety increases to the point a way of relief is found (Sternbach, 1974). However, in chronic pain a permanent relief is not found because the pain never leaves the body totally. The help-seeking motivation becomes more desperate and hopeless. The chronic pain patient knows the relief is temporary and the pain will arrive to the body again, at any time under any conditions. Rather than the anxiety in acute pain, a feeling of despair and hopelessness can be experienced in the case of chronic pain.

In chronic pain, giving a meaning to the pain is more difficult than in the acute pain. Its sign in the body is so blurry that it cannot be avoided and treated permanently, even by the doctors. A true cure cannot be found. In addition to that, in acute pain a self-blame of not visiting the doctor before the pain starts or a self-blame of carelessness can be made whereas in chronic pain because there is no obvious reasoning, the question of "Why me, why do I deserve this pain?" appears (Sternbach, 1974). An association between pain and the wrong-doing behavior cannot be made.

The experience of chronic pain controls over patient's life. For example, the pain might awaken the patient during sleep and leave him/her alone with it. The patient is surrendered by the pain, not able to seek help because of the night and forced to think about the pain till the morning. To continue the day, feeling of rest is not present and seek for relief starts again. The daily routine and sequence of life become shaped around the pain.

#### 1.2. Acute Pain and Anxiety

Anxiety is known to have a strong comorbidity with pain however it is more meaningful to consider this relationship in the case of acute but not chronic pain. Acute pain is known to create anxiety till the time a healer is found; when it is found, anxiety leaves its place to relief (Sternbach, 1974). Szasz (1959, cited in Sternbach, 1974) argues that pain is a threat to the body integrity. As any threat to the body integrity presents anxiety, pain presents as well. However perception, duration and treatment of pain may differ its echo in the psychic world. In the case of chronic pain, the patient is

in a desperate situation where no cure is available, suffering will continue, help-seeking will be hopeless and the function of the body part is lost. On the other hand, in the case of acute pain, not a permanent loss but a separation between the body part and its function is present. Like a threat of separation from an internalized object in the psychic world, an injury which leads to an acute pain threatens the body integration and thus, results in anxiety.

#### 1.3. Chronic Pain and Depression

The major depression is found to have a prevalence of 4% in Turkey for normal population. 5.4% of women and 2.3% of men are in this prevalence, indicating higher scores for women (Erol, Ulusoy, Keçeci,& Şimşek, 1997, cited in Erbaydar & Çilingiroğlu, 2010). For clinical setting, depression prevalence becomes between 30% to 54% (Erol, 1997, cited in Erbaydar & Çilingiroğlu, 2010). For chronic pain, there isn't any satisfying research to investigate the chronic pain prevalence; however researches indicate that chronic pain is common in Turkey.

Depression is found to be the most comorbid psychopathology with chronic pain. (Erbaydar & Çilingiroğlu, 2010). People with chronic back pain are found to have depressive symptoms 4 times more than the normal population (Munoz, McBride, Brnabic, Lopez, Hetem, & Secin, 2005). Munoz et.al (2005) found an association between increased painful somatic symptoms and increased depressive symptoms. In addition to that, conversely, Merskey and Separ (1967) found that 56% of the depressive patients had chronic pain (Sternbach, 1974).

Engel (1959, cited in Sternbach, 1974) argues that "pain-prone patients" are the patients who suffer continuously and can never find a temporary healing. Engel (1959) describes these patients who consciously or unconsciously have strong feelings of guilt; pain functions to relieve these guilt feelings. They are found to be the ones who put themselves in situations which they can get hurt again and in the case of improved life circumstances, they develop their pain again. Engel describes them as "intolerant of success" (cited in Sternbach, 1974, p.25). Even what Engel (1959) argues can be disputable, what is found in these pain-prone patients is similar to what might be found in depressive symptoms.

Feelings of guilt, intropunitive anger, feeling of punishment and grief are some of the components of depressive symptoms. According to Szasz (1959, cited in Sternbach, 1974) like an internalized object loss, loss of body parts' function are present in chronic pain. Here the loss of body parts' function is different than in acute pain because here the patient knows that loss is permanent; no true cure can be present. So, we can consider the grief in chronic pain. Like the grief of the internalized object loss, the grief of the body parts' function is present. In addition to that, an unknown response of "Why me, why I deserve this pain?" is another question most of the chronic pain patients ask. The pain is like a punishment by never leaving the patient and continues to produce suffering. In this sense, it is meaningful to observe a feeling of punishment and an introverted anger in chronic pain patients (Sternbach, 1974). When all these are considered together, it is not surprising to find the strongest association of chronic pain with depression.

Even anxiety is more associated with acute pain and depression is more with chronic pain; sometimes brief depressive symptoms may not be observed in chronic pain patients. This may not directly mean that they are not depressive. Pain is a symptom of the body and its symbolic meaning in the psychic pain should be considered. Pain can serve as a punishment to relieve guilt feelings and thus may result in lower depressive scores (Pilling, Brannick, & Swenson, 1967). In addition to that, pain can be a mask for depression (Engel, 1959, cited in Sternbach, 1974). The depression might only be experienced bodily, because it might be too painful for psyche to experience it in the psychic world. In this case, it can be less likely for chronic pain patients to report depressive symptoms than non-pain patients.

Chronic pain is a symptom of a suffering which is experienced both bodily and psychic. The body tells about the psychic world and psychic pain finds a language to express itself in the body. This language both brings previous experiences and both creates a new way of communication with the external world. In this sense, the underlying dynamics of chronic pain and its presence in the relational field should be understood.

#### 2. Psychosomatics

#### 2.1. Psychosomatic Symptoms

The term "psychosomatic" is first used by Heinroth who was a psychiatrist in the 19<sup>th</sup> century (as cited in Özmen, 2015). He referred this term to indicate soul's primacy over mind and body. He argued that mind and body interacts with each other in many ways and this interaction should be considered in the field of medicine and psychiatry. So, this term is used

to refer the relationship between mind and body, between psyche and soma. It shows that there is an interaction between mind and body, meaning a non-linear but a meaningful relationship. Later on his definitions, psychosomatic is defined by many other doctors and psychologists. Even the definitions might slightly differ; the main idea is the meaningful dual interaction showing that psychic pain may represent itself through bodily pain.

Psychosomatic is not the only term referring to this relationship; conversion and somatization are used as well (Özden, 2015). Conversion is used by Freud and will be mentioned below. Somatization is used for the presence of bodily complaints without any obvious physical health problem and these bodily attributions generally lead to medical help seeking (Ford, 1986 cited in Özen, 2010). Even they have similar meanings with psychosomatic; somatization is generally used in the medical field such as in psychiatry whereas psychosomatic is used mainly in the field of psychology (Özden, 2015). According to DSM-IV somatization is included in the Somatoform Disorders (APA, 2000). This cluster consists of Somatization Disorder, Undifferentiated Somatization Disorder, Pain Disorder, Conversion Disorder, Hypocondriasis and Body Dysmorphic Disorder. Somatization Disorder diagnosis requires at least four pain symptoms from different body parts, two gastro-intestinal, one sexual dysfunction and one pseudoneurological symptom with no predictable medical diagnosis. Fibromyalgia and Chronic Fatigue Syndrome are discussed whether to be diagnosed under this disorder or not. Pain Disorder diagnosis relies on the physician's evaluation about the symptoms which have a psychological onset and distinguished from other somatoform

disorders, by considering the pain as the main symptom. In DSM-V, the classifications of Somatoform Disorders have changed and the name of the cluster is called Somatic Syndrome Disorder. Undifferentiated somatic symptom disorder and Illness Anxiety Disorder are added to the cluster.

In addition to somatic diagnoses mentioned above, there are other affective and cognitive perspectives which argue predisposition to psychosomatic symptoms. Taylor, Bagby and Parker (1991, cited in Özden, 2015) conceptualized alexithymia as a personality factor which includes difficulties in identifying emotions, in discriminating bodily sensations and feelings, restriction of imaginative processes and an external cognitive orientation. People high on alexithymia have difficulties to both express and experience their emotions. The feelings are expressed as external, cognitive entities and personal experiences of these feelings lack (Özden, 2015). The emotions are concrete, not alive and cannot be described sophisticated. Their difficulties in emotion regulation regarding affective, experiential, cognitive and interpersonal field lead to a predisposition to psychosomatic symptoms (Özden, 2015). They are prone to focus on their physical symptoms due to their restrictions in identifying and experiencing internal emotional states. The difficulties in cognitive processing of emotions may result in difficulties in understanding emotional states. Because the unpleasant feelings are comprehended through physical symptoms, their way of soothing themselves are through physical actions (Özden, 2015). This situation creates a high predisposition to psychosomatic symptoms, by emphasizing physical states and ignoring internal states. There are many researches that investigated the relationship between alexithymia and somatic complaints such as fibromyalgia, migraine (Karşıkaya, Kavakçı, Kuğu, & Güler, 2010) or chest pain with no organic etiology (Güleç, Hocaoğlu, Gökçe, & Sayar, 2007, cited in Özden, 2015). The researches indicate a meaningful relationship between psychosomatic symptoms and alexithymia. Because alexithymia is considered as an issue regarding emotion regulation, it is meaningful to understand the affective etiology of psychosomatics.

#### 2.2. Psychoanalytic Perspectives on Psychosomatic Symptoms

"At the beginning there was the body. Life, starts between the body and bodily sensations, moreover we know that it starts before the birth when two bodies are together" (Limnili, 2015, p.1). A newborn's bodily sensations such as pain, anxiety or pleasure are regulated and contained by the mother. In this way, first the baby can perceive these sensations and then have representations of them in the psychic world (Limnili, 2015).

The mother holds, touches and fondles the baby and in the absence of the mother if the baby can internalize these feelings, then the body becomes autoerotic. So, the body can have a libidinal investment by being erotic and if it cannot, then it cannot fulfill a psychic development and stays as a psychosomatic body (Limnili, 2015). In such a psychosomatic body, the mother's libidinal investment to the baby's body is not internalized and thus libidinal investment finds a place only in the psyche. In the case of a psychosomatic body, because the representations are weak and; the body and psyche are not integrated, the body stays as a tool for the psychic pain (Marty, 1998).

#### 2.2.1. Freud's View on Soma

Freud (1923) says "The ego is first and foremost a body-ego." (cited in Fonagy & Target, 2007). Even psychoanalysis has evolved through Freud's drive theory, in which the body is the main organism for the child to feel pain and pleasure, the term "psychosomatic" is first used by Heinroth who is a psychiatrist in the 19<sup>th</sup> century (Özmen, 2015). Freud's theory has put emphasis on the body in the light of drive theory and bodily symptoms are evaluated in the light of repression and psychic conflicts.

Freud (1890) mentions 4 main bodily symptoms. They are conversion hysteria, actual neurosis, hypochondriac symptoms and organic illnesses (Freud, 1890 cited in Özmen, 2015)- Conversions are the symbolic outbursts of the libidinal energy which should have been repressed. The libidinal energy which couldn't have been satisfied or repressed due to moral rules, finds its expression in the body. This converted energy is called conversion (Taylor, 2003). So, according to Freud (1918) these somatic symptoms have a symbolic meaning. On the other hand, according to him actual neuroses such as anxiety neurosis and hypochondriasis cannot be treated in psychoanalysis because they don't have symbolic meanings and they represent only physical symptoms (Freud, 1918, cited in Özmen, 2015). In addition to that, Freud argued that in the case of organic illnesses the libido is directed to the ill organ so that the neurosis decreases (Özmen, 2015). According to him, a small tumor or an insignificant injury can protect the person from a traumatic, psychic neurosis. An organic illness can

relieve the psyche due to the change of libidinal investment and decrease the psychic pain by finding a place in the body.

#### 2.2.2. Ferenczi and Alexander

Ferenczi has worked psychoanalytically about the development of organic illnesses (Smadja, 2011). He argued that the show up of an organic illness has a relationship with being neurotic, psychotic or narcissistic. He pointed that the development of a disease may have a masochistic element. According to him, an organic illness can emerge like a masochistic symptom and it shouldn't be considered as only an external symptom but also an internal symptom in the psychoanalysis.

Ferenczi's follower Alexander, founder of Chicago School, proposed a dualistic perspective to somatic illnesses by combining physiopathological symptoms with psychoanalytic view (Smadja, 2011). According to him, an organic illness, neurosis, may develop due to actual neuoris' which are related to repressed emotions in the psyche for a long time. This repression and actual neurosis are transferred to autonomic nervous system which disrupt functions of organs and cause organic illnesses (Smadja, 2011). He argues that each emotion lead to different and specific physiological syndromes. In this way, some personality profiles are combined with some somatic illnesses.

#### 2.2.3. Paris School of Psychosomatics (IPSO)

Psychosomatic studies had the biological origin in the beginning, as mentioned above. According to them, organs and parts of the body have somatic meanings which are the symbols of the psychic conflicts and pain. People and illnesses have been clustered around these categories however this was not enough to understand the mechanisms underlying somatization. Freud has emphasized hysteria and actual neurosis to understand psychosomatic symptoms. On his understanding, the anxiety due to the inefficient suppression finds bodily symptoms to outburst. Paris School of Psychosomatics (IPSO) has taken this idea, distinguished from other psychosomatic psychoanalytic understandings, and developed it to a state of general anxiety rather than a traumatic neurosis (İkiz, 2012).

The main difference between IPSO's and Freud's theory of psychosomatic illnesses relies on the place of symbolism in their theories. Freud argues that hysteria, as a psychosomatic concept, emerges due to disruptions in repressions of the fantasy world. On the other hand, IPSO argues that psychosomatic symptoms emerge due to lacking a fantasy world. Because of deficient representations, weak affective responses and an impoverished symbolization capacity; the internal energy cannot find a place in psyche and impacts directly the soma and finds a place there (McDougall, 1974). IPSO has been established with this point of view and then later put additional theories on previous psychoanalytic understandings of the psychosomatics. IPSO's founders are Pierre Marty, Michel Fain, Michel de M'Uzan and Christian David (İkiz, 2012).

Marty and his collaborators have observed patients with a psychoanalytic approach and realized that there were some patients who were insensible, with no desire or excitement but with a frozen emotional world; differing from hysteria (Marty, 1998). Later these patients are understood with the new concepts of IPSO: Essential depression, operative

thought, mentalization, the progressive disorganization and preconscious (İkiz, 2012). Here, the three concepts will be described.

Essential depression is conceptualized as a different kind of depression. Here, there is no depression for an object but a depression for loss of the desire and libido. Sorrow is not present because emotional life and phantasy are lacking. The feeling of emptiness takes the place of feeling guilty (Marty, 1998). Operative thought is the thought process which is more concrete and doesn't allow any association or affect to emerge (İkiz, 2012). The thought is isolated from any possible affect evoking association, so that life becomes a mechanic world. As Marty (1998) mentions: "The unconscious can take but cannot transmit" (cited in Temiz, 2015, p.58)

#### 2.2.3.1. Mentalization and the Representational World

Mentalization is about the quality and the quantity of the mental representations such as phantasy, associations and daydreams (Marty, 1998, p.24). Mentalization capacity is important to satisfy the drive because this satisfaction happens through a discharge, which will be charged again, or through binding the drive to the representations (Marty, 1998). So, an increase in the mentalization capacity means a development while the loss of this capacity will result in regression (İkiz, 2012).

According to Marty (1998), inefficacy of the representations is related to the early stages of development. Mother's inefficacy of mirroring the baby, in a concordant but different way, or mother's emotional fathomlessness are possible factors leading to this weak representational world (Marty, 1998). The baby cannot make representations of her/his

emotions and arousals because there is no efficient and concordant other to make meaning through. The inner experiences stay unnamed, unshaped and raw in the psychic world. In this case, the mother can be unresponsive due to a bodily illness, depression or can be over-aroused. In addition to that, the mother may not be able to suffice all the children's unique needs in crowded families (Marty, 1998). This is an important aspect to understand how childhood neglect may result in psychosomatic symptoms. The mother is the mother of many children and this may not feed the unique baby's needs. The function and efficacy of the mother are shared and thus lessened for the unique baby. Baby loses the nutritious and one-and-only mother. A loss and grief might be present with lacking rich representations; the suffering can only be expressed in the body rather than in the psychic world.

According to McDougall (1989), in addition to loss of the mother in the pre-symbolic era, the unhealthy separation from her can be the basement of adult psychosomatic complaints, as well. In the pre-symbolic era, the image of the body is absent; the mother and the baby are inseparable and unique according to the baby. The mother is like an omnipotent figure, covering the entire earth around the baby (McDougall, 1989). Here while it's a desire to be the part of this omnipotence, there exists no individual being and this might be similar to a psychological death (Ciğeroğlu, 2015). So, while the baby needs to be nourished from this omnipotence, it also needs to be separated in order to protect its existence. Unless the mother can be healthy or efficient enough to help baby separate his/her body from her; the separation cannot be made. This inhibits the baby to distinguish between me and other, between what is mental and bodily. The mental and psychic

separation is not concordant with the bodily separation. According to McDougall (1989), this may be the foundation of psychosomatic symptoms.

As mentioned above, the attachment in the early years of development and how the relational and psychic world shaped around it are important to understand the main underlying dynamics of psychosomatics.

#### 3. Childhood Traumas

#### 3.1. Definitions

Childhood traumas are classified as five main groups in the literature: Sexual abuse, physical abuse, emotional abuse, physical neglect and emotional neglect. Sexual abuse is defined as a child or an adolescent's sexual organ's being fondled or being stimulated, showing a sexual organ or forcing the child to show his/her sexual organ, having vaginal or anal intercourse with the child or abusing through pornography (Walker, Bonner, & Kaufman, 1988, pp.7-8, cited in Bayram & Erol, 2014). Physical abuse consists of any physical harm or punishment to the child. Emotional abuse regards caregivers' insulting, teasing, verbally threatening or any humiliating critics which will harm the child's emotional and psychological wellbeing comments they make (Bayram & Erol, 2014). Physical neglect is not supplying child's more physical needs such as food, health or education (Bayram & Erol, 2014).

Different than emotional abuse, emotional neglect is not supplying child's needs such as love, care, support. It is known that chronic neglect causes both psychological and physical vulnerabilities in childhood (Klein, Gorter, & Rosenbaum, 2012). It affects brain development in childhood and

interacts with genetic vulnerabilities. "From an evolutionary perspective, there may be nothing more threatening for a young child than the lack or loss of a trusted primary caregiver." (Maheu et.al., 2010 cited in Klein et.al., 2012, p.765).

In countries with crowded families, such as Turkey, the importance of emotional neglect is ignored. Study of Zoroğlu, Tüzün, Şar, Öztürk, Kora and Alyanak (2001) shows that among 912 participants in Turkey, emotional neglect was the most frequent childhood trauma among others. Later emotional abuse, physical abuse and sexual abuse come. When the psychological vulnerabilities that neglect causes are considered, it is meaningful to investigate the outcomes in order not to neglect the neglected children again.

#### 3.2. Childhood Traumas and Somatization

The relationship between childhood traumatic experiences and somatization has firstly indicated by Freud (1962, cited in Stuart & Noyes, 1999). Since then many researches show that there is a meaningful relationship. However, a clear and certain relationship between childhood traumas and somatization cannot be argued because the researches are retrospective by nature. To understand the nature of this relationship two main interacting perspectives emerge. Firstly, childhood traumas can threaten psychic or physical integrity so strong and deeply that psychic pain can only be expressed through the body, resulting in somatization. In this case, dissociation can play an important role because it decomposes the relationship between psyche and soma and may result in somatic outcomes

(Yücel, Özyalcin, Sertel, Çamlica, Ketenci, & Talu, 2002). As an example, it is known that headache is a usual complaint of dissociative disorders (Yücel et.al., 2002). However the main focus of this thesis will not be dissociation but childhood traumas which may or may not predispose dissociative experiences but predispose somatic complaints such as chronic pain.

Second perspective is that childhood traumas can have a developmental impact on the relational field and somatization can be a manifestation of maladaptive attachments (Stuart & Noyes, 1999). When two perspectives are integrated, it is clear that childhood traumas affect not only psyche's being but also its expression. In this sense, a broad perspective regarding neurobiological, developmental and relational impacts of childhood traumas on somatization should be regarded.

## 3.2.1. Empirical Findings on Childhood Traumas, Somatization and Chronic Pain

Many researches show that being exposed to maltreatment in the childhood has a relation with adulthood health problems (O.Min,, Minnes, Kim& Singer, 2013, Bayram& Erol, 2014). Even causational studies cannot be made by nature, positive correlation between childhood maltreatment and adulthood health problems are found. O.Min et al. (2013)'s study has investigated the relationship between childhood maltreatment- through emotional abuse, physical abuse, sexual abuse, emotional and physical neglect- and adulthood physical health. They found that if there is stress,

related to the childhood maltreatment, then this maltreatment past increases the likelihood of adulthood health problems.

It is known that childhood traumas have a relationship with adulthood pain and illnesses with chronic pain (Bayram & Erol, 2014). Childhood traumatic events' traces on the body are investigated through headaches and migraine. 40% of the migraine patients who go to a headache clinic are found to have childhood abuse or neglect (Anda, Tietjen, Schulman, Felitti& Croft, 2010). This frequency is 4 times more than the normal population. Anda et.al. (2010) found that when the frequency of negative childhood events increases, frequency of headache increases.

Fibromyalgia is a syndrome which consists of chronic pain in the muscular system or skeleton, accompanied with many functional complaints (Bayram & Erol, 2014). There is no organic underlying factor in fibromyalgia that its social and psychological factors are investigated. Bayram and Erol (2014)'s study found that patients with fibromyalgia diagnoses have higher scores on childhood abuse past than the healthy population. In addition to that, fibromyalgia patients had higher depressive scores than the healthy population. Another important point of their study is that they found an association between clinical depressive scores and childhood sexual abuse (Bayram & Erol, 2014).

Another study showed a meaningful relationship between childhood traumas and Chronic Fatigue Syndrome (CFS) (Kempke et.al., 2013). More than half of the CFS patients had childhood traumas when compared with the normal population. In addition to that, the highest prevalence between trauma type and fatigue has found in emotional trauma which are emotional

neglect and emotional abuse (Kempke et.al., 2013). Kempke et.al (2013) found that multiple traumas result in stronger fatigue and pain symptoms.

McBeth, Tomenson, Chew-Graham, Macfarlane and Jackson (2015)'s study showed that chronic widespread pain and fatigue are associated with childhood physical abuse only in the presence of anxiety or depression. In their study, the similar relationship was found between PTSD symptoms, depression and anxiety. They found that in the case of life threatening events, chronic widespread pain and fatigue are present only in the presence of depression and anxiety. In this sense, it is meaningful to assess depression in the case of chronic pain epidemiology.

## 3.2.2. Neurobiological Perspective on Childhood Traumas and Somatization

Childhood trauma, resulting an over or under activation of the stress response systems, has an impact on HPA-axis dysregulation (Weissbecker, Floyd, Dedert, Salmon, & Sephton, 2005). HPA-axis, hypothalamic—pituitary—adrenal axis, consists of the interactions between hypothamalus, the pituitary gland and adrenal glands. The function of HPA-axis is multiple but importantly it regulates stress reactions, immune system, emotions and mood. So, it can be considered as one of the main psychobiologic regulatory systems. Researches show that childhood trauma and stress has a relationship with HPA-axis dysregulation and this result in adult neuroendocrine dysregulations. In addition to that, HPA-axis dysregulation creates a proneness to have stress-related bodily disorders, including

fibromyalgia and depression (Gupta & Silman, 2004, cited in Weissbecker et.al., 2005).

A study of Riva, Mork, Westgaard and Lundberg (2011), showed that patients with shoulder and neck pain had dysregulation of HPA-axis. When these patients are compared with a healthy group, they are found to have higher scores on perceived stress. In addition to that in the case of self-reported pain, shoulder and neck pain group had more health complaints than the healthy group. This study compares these pain patients with fibromyalgia patients. Similar pathogenies with HPA-axis dysregulations are found. However, they indicated that shoulder and neck pain patients had a tendency towards an increased HPA-axis activity whereas fibromyalgia patients had decreased.

Bick, Nguyen, Leng, Piecychna, Crowley, Bucala, Mayes and Grigorenko (2014) investigated the relationship between childhood neglect, HPA-axis and Macrophage Migration Inhibitory Factor (MIF) which is a counter-regulator of glucocorticoids like cortisol. Like many other studies showing childhood maltreatment's effects on HPA-axis (Carpenter, Carvalho, Tyrka, Wier, Mello, Mello, & Price, 2007), they found a meaningful relationship as well. From the subtypes of childhood maltreatment, neglect became prominent. Their investigation HPA-axis from two markers, MIF and cortisol level, showed that adolescents with a history of childhood neglect had higher levels of MIF when compared with adolescents without a neglect history. Neglected adolescents had overactivity or dysregulation of HPA-axis which predicts coping weak with stress and having serious emotion regulation problems.

Fibromyalgia is associated with sympathetic nervous system and HPA-axis abnormalities (Crofford, Young, Engleberg, Korszun, Brucksch, McClure, 2004 and Semiz, Kavakcı, Pekşen, Tunçay, Özer, Semiz, Kaptanoğlu, 2014). The impacts of childhood abuse and neglect on HPA-axis are investigated (Weissbecker et.al., 2005). Weissbecker et.al. (2005) found that HPA-axis of fibromyalgia patients with childhood maltreatment has a less regulatory structure than the participants with no childhood maltreatment past. They found that both childhood physical and sexual abuse were chronic stressors to dysregulate HPA-axis with later dysregulations in the adult endocrine system (Weissbecker et.al., 2005).

## 3.2.3. Developmental and Relational Perspectives on Childhood Traumas and Somatization

#### 3.2.3.1. Mother-Infant Relationship

Winnicott says "There is no such thing as an infant." meaning that an infant cannot be thought without a maternal care and without a maternal care there would be no infant (Winnicott, 1965, p.39). The infant's development cannot be thought without an interaction with the environment, especially interaction with the first other; the mother. He says "the infant and the maternal care together form a unit" (Winnicott, 1965, p.39). Here, Winnicott (1965) uses the word infant to refer a not-talking, very young child, who cannot verbally express him/herself and who cannot use words as symbols. The communication between the mother and the infant is through the maternal empathy.

Winnicott (1965) emphasizes the importance of holding in the parental care. A holding environment requires not only a physical but a three-dimensional relationship which includes psychological time/continuity dimensions, as well (Winnicott, 1965). Infant's physiological needs are met and the maternal empathy which prepares this environment is reliable. A good-enough mother creates a non-threatening environment for the baby's integration and disintegration processes (Martin, 2012). In the holding phase, the infant is dependent to the environment and care, and through this dependence and the feedbacks taken from the dependence, the first object relationships start. In the healthy development of this phase, the infant can endure to the unintegrated states through the continuity of the maternal care. With the internalization of this care, the infant becomes an individual and his/her psychosomatic existence begins to rely on this individuality. Winnicott names this process as "psyche indwelling in the soma" (Winnicott, 1965, p.45). The physical and psychic experiences become associated and a membrane, skin, between the infant and the other, the "me" and the "not-me" is formed. A limit between inside and outside is set, an inner psychic reality starts to be experienced by the infant.

Bion (1963, cited in Silverman, 2011), proposes the term container and contained to understand the relationship between two minds. This is a mental function to make psychic states more bearable for the two and give them ability to think or talk about this (Silverman, 2011). Here two objects are separate but interacting with each other; container influences the contained and contained can have an impact on container's features. One of

the main functions of the container is to create tolerability for unbearable states to the contained. At this point, Bion took Klein's ideas further and argued that, this can happen through projective identification which is a way of communication. "A crying baby is a dying baby." offers Bion (1963, cited in Silverman, 2011, p.479), pointing that the sense of the baby is much stronger than a cry. Here, if the mother can metabolize and contain the baby's message, the baby can introject this feeling of death in a more bearable way. Here, the mother has an alpha-function to convert beta elements which are raw, experiential and unintegrated, to alpha elements which are verbally organized and promoting symbolization. So, the unnamed and unbearable state is turned into a symbolized, bearable and thinkable state with the help of mother's alpha-function. If the baby can internalize the mother's alpha function, then when she/he is separated from the mother, she/he will be able to turn betas to alphas on himself/herself. Thus, the mother converts not only primitives to mature elements but also gives meaning to them. The psychic pain can be verbalized, symbolized and detoxified in the psyche. Thus the soma doesn't necessarily have to carry all the pain on its own.

Symbolization enables the conflict of the desire to be expressed and provides a replacement of conflictual object to a symbol (Segal, 1978). As Klein (1930) puts in words, symbolism arises from the conflict that the infant experiences toward the mother's body. The aggressive and libidinal interest on the mother's body will result in anxiety and guilt which will direct the child's interest to the world around him/her, and give opportunity to find a symbolic meaning for these conflictual and unbearable feelings

(Klein, 1930). Agreeing with Klein, Bion (1963) and Segal (1978) propose that symbolism develops with projective identification, starting from the breast to the mother's whole body. If the mother's response is not destructive or extremely omnipotent, then the child can introject a mother and a breast which has a symbolic quality. Similar to Bion's terms, the baby can internalize the alpha function of the mother and have the capacity to convert beta elements to alphas on his/her own. On the other hand, the projection process can result in mutual damage or an enmeshed one in both symbols are extremely concrete and meanings are empty (Segal, 1978).

Joyce McDougall (1974) proposes that psychosomatic symptoms lack a symbolic meaning (Martin, 2012). She argues, lacking the symbolic meaning results in a gap in the psychic structure by splitting the affective experience into its structures. The psychic element of the experience is ignored and split from the somatic aspect, thus the experience is stuck in the soma. McDougall proposes that psychosomatic patients' emotions are not regulated through their attachment figures. As Stern (1985, cited in Martin, 2012) points out, affective attunement in the early childhood is fundamental to emotion regulation and other regulatory systems. The capacity for self-regulation is born between the interactions of the mother-infant relationship. Stern continues that children with lower self-regulation capacity are more predisposed to psychosomatic diseases. McDougall argues that these psychosomatic patients have ambivalent feelings towards their mother in which they are either merged with or disconnected from them. They lack an external regulating object which can be internalized during their

development. They lack the internal, holding and containing object that they search for it externally (Martin, 2012).

#### 3.2.3.2. The Position of Pain in Family Dynamics

Pain cannot be regarded as an individual phenomenon. An infant or an adult with pain is present in the family context with the pain he/she has. The relational field is affected by this pain and pain may become as a way of communication. In this sense, it is meaningful to understand the pain in the family context as well.

The affects start to snowball when the mother cannot relieve the baby in a short time. This snowball is so fast that it corrupts the mind and body of the baby and leaves her/him with an extreme excitement; which is a starting point of infantile psychic trauma state (Krystal, 1997). As Winnicott (1965) emphasizes the infant cannot be thought without a maternal care thus the maternal response is important in the case of pain as well.

The parental response to child's pain is an important aspect of developing somatic symptoms. Pain can be a way of help-seeking from the parent when the child faces with psychic pain. Stuart and Noyes (1999) argue that children's reactions to pain are governed by their parent's affective responses to this pain, rather than only trauma itself. For the child, the only condition to have care can be through bodily expressions. The parent can pay attention to these bodily expressions but ignore emotional needs. The care seeking child from his/her mother can be similar to care seeking pain patient from the doctors. The need is not satisfied by mother or by doctor and search for help is continuous. Parents' over-attention, anxiety

or inattention to child's pain will be an important predisposition of somatization.

Family context and interrelations between family members are important factors for the development of somatization. It is known that childhood sexual abuse can predict somatization however the context which this trauma is experienced has an important role. Morrison indicated that chaotic family context is an important contributor when patients with somatization disorder and primary affective disorders are compared. It is found that in the case of chaotic family environment, childhood sexual abuse was leading to somatization more frequently. In addition to that, the majority of patients with somatization disorder did not report childhood sexual abuse when compared with the other patient group. This shows that, by itself a traumatic experience might not always be a determinant of somatization because the context which this trauma is experienced has a significant role, as well.

Patients with somatization disorder are found to have a parental illness history more than the normal population (Bass, & Murphy, 1995). Jamison and Walker (1992)'s research with children who have somatic symptoms showed a correlation between these symptoms and parental pain or disability. Children of parents with chronic pain reported more pain medication and children of parents with chest pain had more frequent chest pain. This important relationship can be explained from different perspectives. One perspective can be the modeling of the illness behavior. Children can observe their parent's gained rewards or punishments through their pain and model these behaviors in order to have acceptability in family

context (Stuart & Noyes, 1999). In addition to that, in this situation, internalized mother can be a mother with pain. Then, pain can be a symbol of internal mother. Another perspective is that inadequate parenting due to their illness, can lead to a predisposition to somatization. Similar to the case of neglect, both physically and psychologically unavailable parents, lost parents, may foster somatization in children.

## 3.2.4. The Relationship between Childhood Neglect and Chronic Pain

The infant seeks protection from both internal and external threats which are experienced as fear or anxiety. Maternal care is organized to fulfill this need of the infant. Sullivan (1953, cited in Cortina, 2001) argues that if the mother or caring object is there and respond with sensitivity, the infant feels the security and the "attachment behavior" is relieved. Later, the infant can focus on exploring other activities or the environment (Sullivan, 1953, cited in Cortina, 2001). The primary need is the feeling of security. The infant can discover if this condition is provided, if his/her bodily alert through internal and external threats are soothed. However, if this need is not met then the focus is shaped around the body and the discovery which will enrich the psychic structure is left aside. The body takes the attention.

In other words, in the case of neglect, there is no holding environment in which infant's needs are met. It is such that, there is no mother or maternal empathy when the child cries of hunger. There is no holding mother that can integrate the unintegrated states; psyche cannot be

indwelled in the soma. The infant is hard to soothe like an adult's pain is hard to soothe.

Winnicott argues that mothers with several children, knows very well about mothering because of their experiences with many children (Winnicott, 1965). However this mothering is so technique, memorized and lacking the maternal empathy that the needs might be met before the infant needs them. In this sense, when the infant starts to be separated from the mother, he/she has no chance to cry or protest because the needs are already met. The infant is left with two choices, being merged with the mother or rejecting the mother (Winnicott, 1965). In both choices, there is no place to express the anger or any negative feeling to the mother. The protest can only be carried with the soma but not the psyche.

Bion proposes that if the mother cannot contain, cannot have an alpha function, then the baby can be left with a "nameless dread" (Silverman, 2011). The negative and raw experiences cannot be tolerated because there is no object to project and re-introject them or because that object doesn't have a capacity to do so. Lacking the internalization of the alpha function is lacking the transformation from sensory to an emotional experience (Brown, 2012). What is experienced sensory remains sensory. Bodily pain remains in the body.

Mallouh, Abbey and Gillies (1995)'s research on patients with somatic disorder show that, when compared with other psychiatric patients, they are generally characterized by having a history of loss in their childhood. This loss can be a loss of a parent or a caregiving person. They found that patients with somatic disorders have received less maternal care

than other psychiatric patients. It can be argued that, the only way to escape from the maternal neglect is to create illnesses, such as somatic symptoms, and trying to make himself/herself visible.

Neglect is found to be the most frequent childhood trauma seen in Turkey (Sar, Tutkun, Alyanak, Bakim, & Baral, 2000 and Tutkun, Sar, Yargıc, Özpulat, Yanik, & Kiziltan, 1998). In the research of Yücel et.al. (2002), 41.4% of the headache patients and 28.1% of the low back pain groups are found to have a childhood neglect history. In addition to that, neglect rate is found to be the highest among other childhood traumas in both pain groups. This is an important finding to consider the meaning of the pain. Pain is not only a consequence of a dissociative experience which can be more expected in the case of abuse. It has a more complex meaning. Engel (1959, cited in Yücel et.al., 2002) argues that the pain's discomfort can only be relieved by a caring and soothing one. In this sense, pain can be a manifestation for a need to a soothing object. The loss of a caring object or an unsatisfactory attachment to this object may predispose deterioration from care (Schofferman, Anderson, Hines, Smith, & White, 1993) and being valued. And this may contribute to an endless search for care and help as in the case of chronic pain.

## 4. Demographic Variables and Chronic Pain

Chronic pain is found more in the low socioeconomic status (SES) than the high socioeconomic status (Day& Thorn, 2010). People with low SES have harder conditions to meet their needs. The less accessibility to services such as health or education may create vulnerability. According to

Day and Thorn (2010), not only less accessibility but also a feeling of desperateness predisposes less effort to reach these services. In addition to low SES, low literacy is found more in chronic pain population than the normal population (Day& Thorn, 2010). Day and Thorn (2010) argue that low-literacy level can be related to low SES in childhood and thus less accessibility to education resources. Additionally, in Turkey the early quit of school for girls is common. Şar et.al (2010) argue that being a woman in Turkey and the gender discrimination may create proneness to depressive and pain symptoms. Thus, early quit of school and having a low-literacy level may have a role on creating chronic pain symptoms.

Chronic pain is found more common in older people than young people (Day & Thorn, 2010; Tsang et.al., 2008). Age is found to be a factor that has a positive correlation with chronic pain (Tsang et.al., 2008). Even there is not much direct causation to explain this relationship; it can be thought that with the increase of the years a person live, the increase of the life experiences can be expected (Tsang et.al., 2008). The charge the body and psyche increases thus the bodily pain can be expected to be more in older people.

Gender is another factor that can have an effect on developing chronic pain. It is found that chronic pain is more prevalent in women than in men (Şar et.al., 2010; Tsang et.al., 2008; Day & Thorn, 2010). Many researches show there is a significant gap between women and men about chronic pain. Researches propose to investigate this relationship by considering depression (Tsang et.al., 2008). It is known that depression is the most comorbid psychopathology with chronic pain and women are

found to have more depressive symptoms than men. This link doesn't show a direct link however being a woman and being discriminated in the social life from men may create vulnerability. In conservative societies boys are more valued than girls. The situation is similar in Turkey's conservative parts. Girls quit school and work in the field whereas their brothers go to school or stay at home. The little space and smaller value to the girls may predispose women's feelings less verbalization. The less the space they have in the house, the less they are visible and their emotions are less recognized. The psychic pain and charge of the psyche can be less verbalized and may have a place on the girl's own body.

#### 5. Current Study

The purpose of this study is to investigate the relationship between childhood traumas and chronic pain in adulthood. In addition to that, other elements that can foster this relationship are considered through questions regarding family members. Family history of chronic pain, mother's occupation, early parental loss or number of siblings was some of those elements. In this sense, not only trauma, but also the environment in which traumatic experience took place is considered. In order to investigate relationship between chronic pain and other elements; a chronic pain sample and a normal sample are administered.

This study considers the presence of depressive symptoms, as well.

The direction of the relationship between pain and depression cannot be indicated, because either pain may predispose to depressive symptoms or depressive symptoms may predispose pain. However, when childhood

trauma is considered, a vulnerability to depressive symptoms is expected. In this sense, pain and depression relationship is considered.

Another investigation of this study is the prominence of neglect when compared to other childhood traumas, in the case of chronic pain. Neglect is expected to be a strong determiner of chronic pain; it is an insidious trauma which is neither seen nor behaved like a trauma. The echoes of abuse can be more visible because it is a presence of a devastating event, whereas neglect is the absence. In this sense, neglect is a trauma which doesn't leave traces to be seen. In addition to that, neglect is a common pattern, a cultural norm, which is confirmed as normal in the family context. One of the aims of this study is to create awareness about this subject.

In the literature, there isn't a study in Turkey which investigates this relationship. For algology clinics and in the clinical practice the association between pain and childhood traumas might be meaningful. It can give a different perspective to the bodily complaints in clinical samples. In addition to that, this study aims to contribute to the literature by its emphasis on neglect. Neglect is a very common phenomenon in Turkey however because it is accepted as a cultural norm and normalized in child rearing, its impact is not investigated. This study aims to investigate neglect's importance in a Turkish sample as well.

#### 5.1. Variables

The Independent Variable:

1) To have chronic pain or not. This variable is investigated through two independent groups; participants with a diagnosis of chronic pain and participants without a diagnosis of chronic pain. The pain properties of the chronic pain group are assessed by McGill Pain Questionnaire (MPQ).

The Dependent Variables:

- 1) Childhood traumas type and intensity which are assessed by Childhood Trauma Questionnaire-Short Form (CTQ-SF).
- 2) Demographic variables which are investigated by Demographic Form.
- 3) Depressive symptoms which are assessed through Beck Depression Inventory.

## 5.2. Hypotheses

1) In chronic pain patients, the intensity and the frequency of childhood traumas are expected to be more than in the normal population.

Fibromyalgia patients are found to have higher scores on childhood abuse past than the healthy population in Bayram and Erol (2014)'s study. In addition to that, it is known that when childhood negative experiences increase, the headache complaints increase (Anda et al., 2010). In addition to that, a meaningful relationship between childhood traumas and Chronic Fatigue Syndrome (CFS) are found as well (Kempke et.al., 2013). More than half of the CFS patients had childhood traumas when compared with the normal population.

2) Childhood neglect, when compared with other childhood traumas, is expected to be more frequent and intense in chronic pain patients than in the normal population.

In Yücel et.al. (2002)'s study, neglect is found to be the most frequent childhood trauma in pain samples. 41.4% of the headache patients and 28.1% of the low back pain groups are found to have a childhood neglect history. In addition to that, neglect is found to be the most frequent childhood trauma seen in Turkey (Sar, Tutkun, Alyanak, Bakim, & Baral, 2000).

#### **METHOD**

### 1. Sample

For the pain group, the questionnaires were administered to 50 chronic pain patients in İstanbul University İstanbul Medical Faculty (IU, IMF) Department of Algology. Chronic pain diagnosis is given to the patients who have a pain without any biological value that lasts beyond the expected tissue healing time, and lasts more than 6 months without any distinct organic epidemiology. The diagnosis is given by the doctors and the administrations are made through these diagnosis. 40 female (80%) and 10 male (20%) participants were recruited. Their ages were ranging from 24 to 64 with a mean of 47.9 (SD=10.27). The researcher collected the data from the outpatient service users in Department of Algology. When a patient entered the room, the physicians in charge of the outpatient facility directed him/her to the researcher if the patient has chronic pain and between the ages of 18-65. Then, the researcher took the patient to a separate room and made a face-to-face interview.

The Inclusion Criteria for the Sample Group:

- 1- Being between the ages of 18-65.
- 2- Being literate.
- 3- Not having, alcohol/substance addiction or any heavy physical or mental health problem that may prevent the interview
- 4- After informing about the interview, accepting to contribute
- 5- Having chronic pain diagnosis.

The Exclusion Criteria for the Sample Group:

- 1- Having mental retardation, schizophrenia or a similar psychotic disorder
- 2- Having alcohol/substance addiction
- 3- Having pain symptoms due to a physical operation

A control group, whose members have similar sociodemographic features with the members of the first group administered from Arnavutköy Public Hospital. The control group is selected from both inpatient and outpatient relatives, from different departments of the hospital. 40 female (80%) and 10 male (20%) participants were recruited. They had an age range between 26 to 64, with a mean of 44.8 (SD=10.85). The researcher asked patient relatives to contribute to the research. When they accepted to contribute, the researcher took the participant to the nurse's room which was silent and left empty for the research. A face-to-face interview is made and if the participant had chronic pain complaints or diagnosis, then their contribution is not added to the data.

The Inclusion Criteria for the Control Group:

- 1- Being between the ages of 18-65.
- 2- Being literate.
- 3- Not having, alcohol/substance addiction or any heavy physical or mental health problem that may prevent the interview
- 4- After informing about the interview, accepting to contribute

The Exclusion Criteria for the Control Group:

- 1- Having mental retardation, schizophrenia or a similar psychotic disorder
- 2- Having alcohol/substance addiction
- 3- Having chronic pain diagnosis or complaints

#### 2. Instruments

Demographic form. The questions in this form are prepared by the researcher and the thesis advisor. The questionnaire serves to reveal the background features that the participants of the sample have in common and the links between these features and their pain and/or childhood history.

The features such as: Age, gender, education level, marital status, the age of marriage, occupation, and household income were included in the form. In addition to that, questions regarding their parent's previous occupations, sibling number they have and age difference with siblings, with how many people they live in their house and their relatedness, and with how many people they have lived during their childhood.

The questions regarding their physical health and pain history can be clustered as the second part of the demographic form. These questions include whether they have a diagnosed physical/general health problem and chronic pain. Their chronic pain is investigated through asking the diagnosis, its location and duration in the body, any additional bodily reaction to this pain, whether this pain started after a physical operation such as surgery or accident and if the subject thinks of an event which might have triggered the pain's presence. The family pain history is asked, as well, to understand whether this pain is transgenerational or has another relational

meaning in the family context. In addition to these experiential pain questions, the expression of pain is investigated. The subjects were asked whether they express their feeling of pain or they expect it to be understood through their attitudes, how they express this pain (crying, being aggressive, groaning exc.) and whether they have rituals when the pain comes. Additionally, their expression of sadness and distress is asked in order to understand its concordance with the pain expression.

At the last part of the demographic form, participants' past history is investigated by means of traumatic events, psychiatric background and two questions regarding before their age of 16. Participants are asked whether they have a traumatic event, examples such as exposure to violence, accident, loss of an important one, war, natural disasters, rape and more, after the age of 20 or not. The age of 20 is considered because earlier traumas are assessed with another form, Childhood Trauma Questionnaire. This question is asked in order not to skip any traumatic event that might have triggered the pain history. If participants say that they have a traumatic event history, then Clinician-Administered Post-traumatic Stress Disorder Scale (CAPS) is administered to these participants in order to consider Post-traumatic Stress Disorder (PTSD) symptoms or diagnosis in the presence of pain history, after the age of 20 will be explained below.

After the traumatic event question, participants are asked whether they have psychiatric diagnoses or have ever had psychiatric complaints, have a psychiatric diagnostic report, for medication. If the subject has ever been to a psychologist their complaints are asked.

McGill-Melzack Pain Questionnaire(MPQ). MPQ is developed by Melzack and Torgerson (1975) to provide a multidimensional pain assessment for both chronic and acute pain (Kuğuoğlu, Aslan& Olgun, 2003). It gives both qualitative and quantitative data for the pain. The first part of the questionnaire gives information about the spatial feature of the pain. The second part consists of 78 words in 20 subclasses and informs about the description of pain by 4 main groups: sensory (spatial, temporal, thermal and pressure qualities of pain), affective (fear, tension and autonomic qualities of pain), evaluative (subjective intensity of pain) and miscellaneous (other properties of pain). The third part describes the temporal feature of pain and the particular conditions that increase or decrease the pain. Lastly, the fourth part gives information about the overall pain intensity in which participant rates his/her pain intensity from 1 (mild) to 5 (excruciating) for different body parts. So, this part gives an idea about the participant's personal tendency to rate his/her pain (Melzack, 1975). In this way, MPQ assesses location of pain, sensation of pain, temporal feature of pain and pain's intensity.

MPQ has an internal reliability between 0.89 to 0.90, showing a strong internal consistency within the questionnaire (Melzack, 1975). Factor loadings correlates between 0.31 to 0.43 (Boyle, 2015). MPQ has external validity correlations from 0.89 to 0.97 and a test-retest reliability between 0.59 to 0.81 (Hawker, Mian, Kendzerska& French, 2011).

Kuğuoğlu, Aslan and Olgun (2003) has developed the Turkish version of MPQ. They conducted a research in two state hospitals with patients of surgery clinics. The results of their study show an internal

reliability between 0.50 to 0.72 (Kuğuoğlu et.al., 2003). The internal reliabilities are between 0.52 to 0.72 for the second part, 0.50-0.70 for the third part and 0.50-0.58 for the fourth part are found. The total Cronbach alpha is found to be 0.93. Factor intercorrelations range from 0.51 to 0.99

Childhood Trauma Questionnaire (CTQ). CTQ is developed by Bernstein, Ahluvalia and Handelsman (1997) in order to assess abuse and neglect history before the age of 20. It's a retrospective and quantitative questionnaire which consists of 53 items in its original form and 28 items (CTQ-SF) in its shortened form by the developer, Bernstein et. al. (2003). Participants respond to each item by a 5-point Likert scale regarding the frequency of the statement, ranging from 1 (never) to 5 (very often).

CTQ-SF consists of 5 subclasses which are sexual abuse, physical abuse, emotional abuse, emotional neglect and physical neglect. Every subclass has 5 items distributed mixed with other subclasses. A subclass can take a score between 5 to 25. In total, a participant can have a score ranging from 25 to 125. In addition to that, 3 items are present to consider the minimization of trauma and a participant may have a score between 0-3 about minimizing the trauma history however, this score is not added to the total score and regarded separately.

CTQ-SF has a Cronbach alpha of 0.94 for Sexual Abuse, 0.88 for Physical Abuse, 0.87 for Emotional Abuse, 0.91 for Emotional Neglect and 0.60 for Physical Neglect (Spinhoven, Penninx, Hickendorff, Hemert, Bernstein, &Elzinga, 2014). This shows that every subscale has a strong reliability. Factor intercorrelations have a range from 0.39 to 0.92. In addition to that, subclasses' validity ranges from 0.57 to 0.61.

For Turkish version of CTQ-SF, Şar, Öztürk and İkikardeş (2012) conducted a research with a clinical sample consisting of a dissociative disorder group, this group's primary relatives and a nonclinical group. The findings indicated a Cronbach alpha of 0.93 and Gutman test-retest coefficient of 0.97 (Şar et.al, 2012). In addition to that, a Pearson correlation is made between a score of each item and a total CTQ score which that item is extracted. The correlation coefficients differ from 0.30 to 0.50, excluding item 4 (r=0.17). These results indicate a strong reliability for Turkish version of CTQ-SF. (Şar et. al, 2012)

A total score of CTQ-SF is calculated both in clinical and nonclinical sample through a retest following 2 weeks (Şar et al., 2012). A total test-retest correlation coefficient is found to be 0.90 and for subclasses r=0.73 for Sexual Abuse, r=0.90 for Physical Abuse, r=0.90 for Emotional Abuse, r=0.85 for Emotional Neglect, r=.077 for Physical Neglect and r=0.71 for Minimization are found in the Turkish version.

Turkish version of CTQ-SF is found to have a strong validity with correlations of 0.78 and 0.60 (Şar et al., 2012). In addition to that, every group in Şar et. al (2012)'s research is found to be meaningfully differed from each other, showing Turkish CTQ-SF has a construct validity as well.

Şar et.al. (2012) found that for Turkish sample, having more than 5 points for sexual and physical abuse sections were regarded as positive feedbacks, meaning even one 'yes' answer at minimum level indicates an abusive pattern in these subscales. For, physical neglect and emotional abuse this threshold is found to be 7. 12 points is accepted as above the threshold for emotional neglect. In this sense, it can be thought that

emotional neglect is a more common childhood trauma in Turkish population because in both clinical and nonclinical samples, the threshold is the highest of all subscales. For total CTQ-SF, the score is found to be 35 (Şar et.al., 2012).

Beck Depression Inventory. Beck Depression Inventory is developed by Beck, Ward, Mendelson, Mock, and Erbaugh in 1961. It is a self-report inventory which assesses depression through 21, multiple-choice items. Participant reads the items regarding how she/he felt in the last week. For every item, the participant choses one of the states written between 0 to 3; so takes a score between 0-3 for each item. A participant can have a total score ranging from 0 to 63. Scores are clustered as 0-9, 10-18, 19-29, 30-63 respectively indicating minimal depression, mild depression, moderate depression and severe depression. The scale includes cognitive-emotional, somatic and motivational symptoms related to depression.

Beck Depression Inventory is found have a test-retest reliability ranging from 0.79 to 0.90 and a coefficient alpha ranging between 0.73 to 0.91 (Gallagher, Nies, & Thompson, 1982). Cognitive-emotional subscale has a Cronbach alpha 0.73 and somatic subscale has a 0.73 (Knaster, Estlander, Karlsson, Kaprio, & Kalso, 2016).

Turkish version of Beck Depression Inventory is developed by Hisli (1988) and its reliability is tested with a clinical sample (Hisli, 1988). The test-retest reliability of Turkish version is found between 0.65 to 0.73. The reliability is found between 0.65 to 0.73. It has a strong validity ranging from 0.72 to 0.75 (Hisli, 1988).

Clinician-Administered PTSD Scale (CAPS). CAPS is developed by Blake, Weathers, Nagy, Kaloupek, Klauminzer, Charney and Keane in 1990. It is a 30-item scale which is administered by the clinician in order to assess PTSD symptoms of the participants. Every item assesses PTSD symptoms both within the last month and lifelong. The symptoms are investigated through frequency, ranging (0-4) from 'never' to 'almost every day', and intensity, ranging (0-4) from 'never' to 'excessive, frustrating distress'. 17 items assess PTSD symptoms according to DSM-III, through three clusters: re-experiencing, avoidance and numbing, hyperarousal. 5 items assess global severity, global impairment, response validity, social and occupational outcomes; and 8 items assess associated features to PTSD such as guilt, memory, suicidal risk etc. (Weathers, Keane& Jonathan, 2001).

Internal consistency of CAPS is found to range from 0.80 to 0.90 alphas for the three subclasses of PTSD (Weathers, et al., 2001). Interrater reliability is found to be above 0.90. CAPS is found to be valid within the coefficients of 0.80 to 0.90 when compared with other specific scales (Weathers, et al., 2001). Factor analysis of CAPS is made and it is validated that CAPS can be used as a measure of PTSD because it corresponds to DSM criteria (Weathers, et al., 2001).

Turkish version of CAPS is developed by Aker, Özeren, Başoğlu, Kaptanoğlu, Erol and Buran (1999). They made their studies with survivors of torture in Turkey. A Cronbach alpha of 0.91 is found for the total scale. For re-experiencing symptoms 0.78, for avoidance and numbing symptoms 0.78, for hyperarousal symptoms 0.82 alpha levels are found. Interrater

reliability ranges from 0.82 and 0.99 for intensity ratings of PTSD (Aker et.al., 1999). The validity correlation is found to be between 0.63 to 0.77 when compared with other scales. These results showed that Turkish version of CAPS is valid and reliable.

#### 3. Procedure

There were two target populations in the study. For the first population, an academic contact was formed with a collaborator from İstanbul University, Istanbul Faculty of Medicine (Çapa), Outpatient Department of Algology Department. The first group is the chronic pain patient population who came to Çapa Algology Department to see doctors. Doctors have directed these patients to the researcher, if they have a chronic pain with no organic etiology.

Then the researcher told about the aim of the study and gave information about the procedure face to face to the participant in a silent room. Participation was voluntary. If the participant agrees to participate, then Consent Form is distributed for them to read and sign. Their names are written only on the Consent Form, for the other forms which are distributed separately for confidentiality they put their initials.

After Consent Form, Demographic Form is filled by the researcher by verbally asking the questions to the participant. The main reason to apply verbally is having a possibility to write and ask additional information if necessary. Then McGill-Melzack Pain Questionnaire, Childhood Trauma Questionnaire and Beck Depression Inventory are given to participant respectively one by one and filled by him/her. If the participant responds

"yes" to the trauma question in the Demographic Form or have a high score in the CTQ's sexual abuse or physical abuse subscales; then Clinician Administered PTSD Scale (CAPS) is applied by the researcher to the participant.

The second group is a group with no chronic pain and matched according to the socio-demographic variables of the first group. Their procedure was similar in total with the first group but differed in two points. The questions related to pain, except the pain question which asks whether they have a chronic pain, are not asked to them in the Demographic Form. The second difference is that McGill-Melzack Pain Questionnaire is not given to this group because it is confirmed that participants do not have a chronic pain and if they had, they were excluded.

The total procedure lasted about 30-40 minutes. At the end, for both groups, psychological counselling or psychiatric consulting was recommended to participants if necessary. In the need for psychological counselling, participants were directed to Istanbul Bilgi University Psychological Counselling Center whereas for psychiatric counselling Çapa Psychiatry Department was recommended.

#### **RESULTS**

Participants consist of a pain group and a control group. Both of the groups consist of 50 participants, 40 women and 10 men with an age range from 18 to 65. The dependent variables are CTQ-SF scores, MPQ scores, Beck Depression scores and sociodemographic variables. The independent variable is having chronic pain and investigated through pain and control groups.

Before applying statistical analysis, in order to assess normality, Kolmogorov-Smirnov test is applied to dependent variables for both groups. According to this test, the scores of the dependent variables didn't meet normality criteria. After this, various transformations are applied and only one variable (Beck depression scores) is found to meet normality criteria. Nonparametric tests are applied because of lacking normality criteria in general (Tabachnick & Fidell, 2013). Mann-Whitney U is preferred for group comparisons of these variables.

Pearson's chi-squared (X<sup>2</sup>) is preferred for categorical variables to investigate frequencies. Independent samples t-test is applied for the variables (Beck depression score) which meet normality criteria. Lastly, Spearman's correlation is applied to understand the relationship between two continuous scores which do not meet normality criteria after transformations (Tabachnick & Fidell, 2013). Statistical significance level is regarded as 0.05 for all the analysis. The scores above this p-value are found to be statistically meaningless whereas scores below or equal are found statistically significant.

In this section, descriptive properties and statistical analysis of the sample will be transferred. Firstly descriptives of the sample, both groups, their CTQ-SF scores, MPQ scores and Beck Depression scores will be investigated. Secondly, statistical analyses are mentioned to infer differences between two groups in terms of their dependent variable scores.

## 1. Descriptive Analysis

## 1.1 Descriptive Analysis for Demographic Variables

Descriptives of the sociodemographic variables for the total sample are listed in Table 1a and Table 1b. In Table 2a, 2b and 2c descriptives of the demographic variables are investigated by means of two groups.

Table 1a.

Descriptives of demographic variables for the sample - 1

	n	%
Gender		
Woman	80	80
Man	20	20
Marital status		
Married	85	85
Divorced	12	12
Other	3	3
Education		
Literate	10	10
5-year primary school	46	46
Other	44	44
Occupation		
Housewife	76	76
Other	24	24

Income

< 2500 TL	49	49
2500-4000 TL	32	32
>4000 TL	19	19

Eighty percent of the participants are women and 20% are men. Married participants are 85% of the sample. 46% of the participants are graduated from 5-year primary school, 10% are literate and 44% varied between 8-year primary school to college. Seventy-six percent of the participants are housewives and 24% re working in different jobs. 49% of the participants have an income lower than 2500 TL, 32% have between 2500TL to 4000 TL and 19% have more than 4000 TL.

Table 1b. Descriptives of demographic variables for the sample - 2

	n	Mean (SD)	Min	Max
Age	100	45(9,9)	24	64

Participants of the sample have an age average of 45 (SD=9,9).

2.a. Investigation of groups by means of demographic variables -1

	Pain Group		Control Group		$X^2$
	n	%	n	%	
Gender					
Woman	40	80	40	80	0
Man	10	20	10	20	
Marital status					
Married	42	84	43	86	3,45
Divorced	6	12	6	12	

Other	2	4	1	2	
Education					
Literate	4	8	6	12	2,77
5-year primary	24	48	22	44	
Other	22	44	22	44	
Occupation					
Housewife	39	78	37	74	0,25
Other	11	22	13	26	
Income					
< 2500 TL	15	30	34	68	17,41*
2500-4000 TL	20	40	12	24	
>4000 TL	15	30	4	8	
Birth order					
Oldest	8	16	16	32	6,03*
Middle	35	70	23	46	
Youngest	7	14	11	22	
Mother's occupation					
Housewife	37	74	44	88	7,72
Farmer	9	18	2	4	
Other	4	4	4	8	
Father's occupation					
Labor	20	40	18	28	4,65
Self-employment	17	34	19	38	
Farmer	10	20	16	32	
Other	3	6	1	2	
Household affinity					
Husband/children	43	86	39	78	6,86
Parents	3	6	6	12	
Other	4	8	5	10	
Diagnoses of a disease					
Yes	28	56	21	42	3,84

No	22	44	29	58	
Expression of sadness and					
distress					
Yes	19	38	33	66	7,85*
No	31	62	17	34	
Family history of					
chronic pain					
Mother	15	30	0	0	40,84*
Sibling	14	28	0	0	
No	21	42	50	100	
Traumatic event after age 20					
Yes	11	22	8	16	0,58
No	39	78	42	84	
Psychiatric diagnosis					
Yes	11	22	6	12	1,32
No	39	78	44	88	
Psychiatric medicine					
Yes	17	34	7	14	5,48*
No	33	66	43	86	
Psychological counseling					
Yes	7	14	1	2	4,89*
No	43	86	49	98	
Parent loss before age 16					
Yes	3	6	5	10	0,54
No	47	94	45	90	
Residence before age 16					
Parents	48	96	49	98	1,01
Other	2	4	1	2	

Note. N=50 for pain group, N=50 for control group

Chi-square test of independence was preferred to investigate the relationships between two groups by means of demographic variables. Pain and control groups are found to have similar sociodemographic properties, except income,  $X^2(4, N=100)=17.41$ , p<.001. Pain group is found to have higher income than the control group.

A significant difference was found for birth order,  $X^2(2, N=100) = 6.03$ , p<.05. There are more middle child participants in the pain group whereas in control group a more balanced distribution of birth order is present. A significant relationship is found in expression of sadness and distress,  $X^2(1, N=100) = 7.85$ , p<.001. Pain group is found to express sadness and distress less than the control group. Another significant relationship is found by means of family history with chronic pain,  $X^2(1, N=100) = 40.84$ , p<.001. Control group has no family history of pain, whereas in pain group 15 participants (30%) had mothers and 14 participants (28%) had siblings with chronic pain.

Having a psychiatric medicine report,  $X^2(1,100) = 5.48$ , p<.01 and having psychological counseling,  $X^2(1,100) = 4.89$ , p<.05 are found to indicate significant differences between two groups. Pain group had psychiatric medicine report and psychological counseling more than the control group.

Table 2b. *Investigation of groups by means of demographic variables* – 2

		Mdn	95% CI	U	Z	p
Number	of					
siblings						
Pain		5	4,89 - 6,34	900,5	-2,43	.015

Control	4	3,99 - 5,29			
Age difference,					
previous sibling					
Pain	2	2,19 - 3,35	1060	1 22	.181
Control	2	1,44 - 3,35	1060	-1,33	.101
Age difference,					
next sibling					
Pain	2	1,97-3,21	994	1.70	.072
Control	2	1,40-3,23	994	-1,79	.072
Number, people					
living with					
Pain	4	3,40- 4,35	1091	1 12	.262
Control	4	3,56- 4,44	1091	-1,12	.202
Number, people					
lived with in					
childhood					
Pain	7	7,25-10,02	973	2.62	000
Control	6	5,98-7,38	872	-2,63	.009
The age of					
marriage					
Pain	20	16,1-20,08	950	1 75	.080
Control	20,5	19,8-22,57	852	-1,75	.000

Note. N=50 for pain group, N=50 for control group

Pain and control groups differed in number of siblings, U=900, z=-2.43, p=.01. In addition to that, number of people lived with in childhood differed in two groups, U=872, z=2.63, p<.01. Pain group (Mdn=5) is found to have more siblings and more people lived together in childhood (Mdn=7) than the control group (Mdn=4, Mdn=6).

A significant difference of age is not found between two groups, t=0.24 (M=45.2, SD=9.11, M=44.8, SD=10.85).

## 1.2. Descriptive Analysis of CTQ-SF, MPQ and Beck Depression Scores.

Descriptive analysis of intensity and frequency scores of CTQ-SF for the sample and two groups are listed in Table 3a and Table 3b, respectively. Descriptive analysis of Beck Depression Scores for the sample and both groups are listed in Table 3c. Lastly in Table 4a, 4b and 4c, MPQ scores of the pain group are listed.

Table 3a. Descriptives of CTQ-SF intensity

	n	Mean(SD) Min		Max
Total score				
Pain	50	39,2(12,39)	26	93
Control	50	31,42(7,05)	25	54
Total	100	35,31(10,76)	25	93
Minimization				
Pain	50	0,38(0,69)	0	2
Control	50	0,82(1,02)	0	3
Total	100	0,6(0,89)	0	3
Sex. Abuse				
Pain	50	5,76(2,19)	5	15
Control	50	5,08(0,44)	5	8
Total	100	5,42(1,61)	5	15
Emo. Abuse				
Pain	50	6,98(2,96)	5	20
Control	50	6,02(2,03)	5	14
Total	100	6,5(2,57)	5	20

Phy. Abuse				
Pain	50	6,18(2,96)	5	20
Control	50	5,44(1,16)	5	10
Total	100	5,81(2,26)	5	20
Emo. Neglect				
Pain	50	11,46(4,06)	5	25
Control	50	8,44(3,92)	5	20
Total	100	9,95(4,25)	5	25
Phy. Neglect				
Pain	50	8,82(3,7)	5	23
Control	50	6,44(2,17)	5	14
Total	100	7,63(3,25)	5	23

Table 3b. Descriptives of CTQ-SF frequencies

	Pain group		Control	Control group		Total	
	n	%	n	%	n	%	
Total score							
Above	26	52	9	18	35	35	
Below	24	48	41	82	65	65	
Sex. Abuse							
Above	10	20	2	4	12	12	
Below	40	80	48	96	88	88	
Emo. Abuse							
Above	15	30	7	14	22	22	
Below	35	70	43	86	78	78	
Phy. Abuse							
Above	13	26	10	20	33	33	
Below	37	74	40	80	77	77	
Emo. Neglect							
Above	17	34	4	8	21	21	
Below	33	66	46	92	79	79	

Phy. Neglect						
Above	24	48	9	18	33	33
Below	26	52	41	82	67	67

<sup>\*</sup>above: above the threshold of trauma,below: below the threshold of trauma

Table 3c. Descriptives of Beck Depression scores.

	n	Mean(SD)	Min	Max
Pain group	50	15,54(10,22)	1	46
Control group	50	8,5(8,44)	0	40
Total	100	12,02(9,97)	0	46

Table 4a. MPQ scores of Pain group - 1

	Mean(SD)	Min	Max
Quality of pain	24,96(12,1)	2	48
Frequency of pain	9,84(4,59)	1	20
Personal tendency to rate pain	20,16(3,51)	14	29

Table 4b. *MPQ scores of Pain group* − 2

	n	%
Location of pain		
Head, neck	14	28
Back, loins, hip	26	52
Arm, leg, foot, knee, shoulder, joints	10	20
Diagnosis of pain		
Fibromyalgia	9	18
Migraine	5	10
No	36	72
Pain relieving		
Warming	7	14

No	16	32
Other	23	46
Distress	11	22
Pain increasing		
No	19	38
Other	24	48

The locations of pain are clustered according to their medical and body image relatedness. Most of the participants (52%) had beck, loins or hip pain. 28% of them had head or neck pain. Arm, leg, foot, knee, joints or shoulder pain was present in 20% of the participants. In general, participants didn't have a diagnosis of pain disorder, except chronic pain. 18% had fibromyalgia whereas 10% had migraine diagnoses. 38% of the pain patients proposed that there is nothing that can relieve their pain. On the other hand, 14% of the participants proposed warming and 48% proposed other ways such as resting or medication to relieve their pain. The most prominent pain increasing factor is found distress (22%). 46% of the participants proposed different factors such as fatigue or making hard physical activities. 32% proposed no certain factor to increase their pain.

4c. The relationship between participants' and their family members' pain locations.

	Pain group		Family members		
	n	%	n	%	$X^2$
Location of pain					
Head, neck	14	28	7	14	6.67
Back, loins, hip	26	52	15	30	
Arm, foot,knee, joints	10	20	7	14	

A significant relationship for location of pain between pain group participants and their family members with chronic pain isn't found,  $X^2(6, N=50)=6.67$ , p>.05.

# 2. The Investigation of CTQ-SF Scores between Pain and Control Groups

## 2.1. The Comparison of CTQ-SF Intensity Scores

In pain group, when compared with control group, higher scores on intensity of CTQ-SF scores were hypothesized. To test this hypothesis, pain and control groups are compared by means of their intensity scores in CTQ-SF. Kolmogorov-Smirnov test is used to assess normality of the scores in both groups. The variables didn't meet normality criteria, even after transformations. For this reason, Mann-Whitney U which is a nonparametric test is used. The results are presented in Table 5.

Table 5. Median and Confidence Interval of CTQ-SF intensity scores.

	Mdn	95% CI	U	Z	P
Min.					
Pain	0	0,18 - 0,58	942	-2,45	.014
Control	0,5	0,53 - 1,11	942	-2,43	.014
Sex. Abuse					
Pain	5	5,13 - 6,39	1040	2.46	014
Control	5	4,95 - 5,21	1048	-2,46	.014
Emo. Abuse					
Pain	6	6,14 - 7,82	025	2.44	014
Control	5	5,44 - 6,60	925	-2,44	.014

Phy. Abuse					
Pain	5	5,34 - 7,02	1150.5	0.02	252
Control	5	5,11 - 5,77	1150,5	-0,93	.352
Emo. Neglect					
Pain	10	10,31 - 12,61	637	-4,24	.000
Control	7	7,32 - 9,56	037	-4,24	.000
Phy. Neglect					
Pain	7	7,77 - 9,87	600 <b>5</b>	4.5	000
Control	6	5,82 - 7,06	609,5	-4,5	.000
Total score					
Pain	36	35,68 - 42,72	643,5	-4,18	.000
Control	29	29,42 - 33,42			

*Note.* N=50 for pain group, N=50 for control group

As expected, total CTQ scores were higher in pain group (Mdn=36) than the control group (Mdn=29) showing a statistical difference between two groups, U=643.5, z=-4.18, p=.00. Minimization scores differed significantly, U=942, z=-2.45, p=.014, however pain group (Mdn=0) had lower scores than the control group (Mdn=0.50).

Subclasses of sexual abuse, U=10.48, z=-2.46, p=.014, and emotional abuse, U=925, z=-2.44, p=.014, were significantly different between two groups. Pain group had higher scores on both sexual abuse (Mdn=5) and emotional abuse (Mdn=6) than the control group (Mdn=5, Mdn=5). However, physical abuse didn't statistically differ, U=1150.5, z=-.93, p>.05 between pain group (Mdn=5) and control group (Mdn=5). Emotional neglect, U=637, z=-4.24, p=.000, and physical neglect, U=639.5,

z=-4,5, p=.000, were significantly different between two groups. As expected, pain group had higher scores on both emotional neglect (Mdn=10) and physical neglect (Mdn=7) when compared to control group (Mdn=7, Mdn=6).

# 2.2. Exploratory Analysis: The Relationship between CTQ-SF Intensity and Pain Intensity in Pain Group

In order to understand the relationship between CTQ-SF intensity scores and pain intensity in pain group, a non-parametric test, Spearman's Correlation is applied as shown in Table 6.

Table 6. The relationship between CTQ-SF intensity scores and pain intensity in pain group.

	1	2	3	4	5	6	7	8	9	10
1.Min.	_	29	37	23	6	35	54	05	.01	1
2. Sex. Abuse	_	_	.24	.39	.29	.11	.42	03	0	.3
3. Emo. Abuse	-	_	_	.5	.58	.31	.68	.03	.13	.07
4. Phy. Abuse	_	_	_	_	.41	.3	.57	.2	.17	.08
5. Emo. Neglect	-	_	_	_	-	.7	.91	.11	.13	.07
6. Phy. Neglect	-	-	_	_	_	-	.79	03	01	.1
7. Total score	_	_	_	_	_	_	_	.05	.07	.13
8. Quality of pain	_	_	_	_	_	_	_	_	.88	.45
9. Quantity of pain	_	_	_	_	_	_	_	_	_	.41
10. Personal										
tendency	_	-	_	_	-	_	_	-	_	_

The results show that, there isn't a significant relationship between CTQ-SF scores and pain intensity of the pain group.

## 2.3. The Comparison of Frequencies in Exceeding CTQ-SF Thresholds

The frequencies of thresholds that are exceeded in CTQ-SF, according to Turkish norms (Şar et.al., 2012), are investigated between two groups. Number of pain group participants is expected to be more than control group participants, in terms of exceeding the threshold of CTQ-SF subscales. In order to test this hypothesis, Pearson's Chi-Square tests are applied to each subscale score of CTQ-SF. Participants that have exceeded the threshold and can be counted as exposed to childhood traumatic events through subscales of CTQ-SF are named as "above" and others that stayed under the threshold are named as "below". The results are shown in Table 7.

Table 7. Comparison of CTQ-SF thresholds in two groups.

	Pair	n group	Control group		$X^2$
	n	%	n	%	
Sex. abuse					
Above	10	20	2	4	6,08*
Below	40	80	48	96	
Emo.					
Abuse					
Above	15	30	7	14	3,73*
Below	35	70	43	86	
Phy. Abuse					
Above	13	26	10	20	0,5
Below	37	74	40	80	
E					

Emo.

Neglect

Above	17	34	4	8	10,18*
Below	33	66	46	92	
Phy.					
Neglect					
Above	24	48	9	18	10,17*
Below	26	52	41	82	
Total score					
Above	26	52	9	18	12,7*
Below	24	48	41	82	

As expected, a significant relationship is found for CTQ-SF total score,  $X^2(1, N=100) = 12.7$ , p=.000, in which pain group has more participants that exceeded threshold than the control group.

Sexual abuse,  $X^2(1, N=100) = 6.08$ , p=.01, and emotional abuse  $X^2(1, N=100) = 3.73$ , p=.05, are found to indicate significant differences between two groups. Again, pain group has more participants than the control group. A significant relationship by means of physical abuse is not found,  $X^2(1, N=100) = 0.5$ , p>.05, even pain group has more participants that exceeded the threshold. As expected, a significant relationship in emotional neglect,  $X^2(1, N=100) = 10.8$ , p<.01 and physical neglect  $X^2(1, N=100) = 10.17$ , p<.01 are found. There were more pain group participants that exceeded the thresholds.

# $\hbox{\bf 3. The Investigation of Beck Depression Scores between Two } \\ Groups$

The difference of Beck depression scores between pain and control groups are investigated. Firstly, Kolmogorov-Smirnov test is applied to

assess normality. The scores are transformed and provided the normality criteria. Independent samples t-test is applied.

A significant difference of Beck Depression scores between pain and control groups are found, t(98)=4.33, p=.00. As expected, pain group (M=15.54, SD=10.22) has higher scores than control group (M=8.50, SD=8.44).

## **DISCUSSION**

The aim of this study was to investigate the relationship between childhood traumas and chronic pain. Childhood traumas are investigated with two groups, consisting of 50 participants per group through five subclasses: sexual abuse, emotional abuse, physical abuse, emotional neglect and physical neglect. First group includes participants with chronic pain diagnosis and the other group consists of participants without a chronic pain diagnosis. In addition to childhood traumas, demographic information and depressive symptoms are investigated. Demographic information consists of questions regarding participants' socioeconomic background, the presence of other siblings and parents' occupations, their history of pain and any traumatic event they experienced after their adolescence.

#### 1. Childhood Traumas and Chronic Pain

It is known that childhood traumas have an impact on both bodily and psychic integrity. They can be a strong threat for the psyche that, psyche cannot mentalize the trauma and reflect the pain through the body, as bodily pain and somatization. In addition to that, the impact of trauma may be expressed in the relational field only by somatic symptoms. Bodily pain and somatization can be a manifestation of the trauma and maladaptive attachments settled around this trauma (Stuart & Noyes, 1999). The psychic pain can find a place only with bodily expressions in the family. It can be a way of help-seeking (Stuart & Noyes, 1999). In addition to these developmental perspectives, neurobiological findings argue that HPA-axis regulation, which has an important role on stress reactions and emotions, is

shattered in the case of childhood trauma (Weisbecker et.al., 2005; Riva et.al, 2011). The people with a history of childhood trauma are found to have more dysregulations on HPA-axis (Bick et. al., 2014) and more physical pain complaints (Riva et. al. 2011). When all are brought together, in this study, chronic pain patients are expected to have more frequency and intensity of childhood traumas than the normal population.

Goldberg and Goldstein (2000) proposed that chronic pain patients have higher scores on childhood abuse than the normal population. In addition to that, Anda et.al. (2010)'s research in a headache clinic showed that, patients with more frequent adverse childhood experiences have more intense levels of headache. In Turkey, similar results are found. Taycan, Sar, Celik and Erdoğan-Taycan (2014) found that in a somatic disorder sample, childhood traumas are more frequent than in the non-clinical population. Their research is administered in Muş where women have low socioeconomic and education levels, similar to this study. In another research made in Turkey (Bayram & Erol, 2014), fibromyalgia patients are found to have higher scores on childhood abuse than the normal population. In the present study, chronic pain patients are found to have more frequent and intense childhood trauma histories than the normal population. As expected, there was an important difference between pain and normal groups indicating the relationship between chronic pain and childhood traumas.

#### **Minimization**

In this study, chronic pain patients are found to have less minimization of trauma than the control group. Similar to the present study, MacDonald et.al. (2016)'s study show that having low scores on CTQ and high scores on minimization were more likely in non-chronic pain group in comparison to the pain group.. They found that control group has higher scores on minimization than the patient group. A possible factor can be that, control group do not consist of participants who seek either physical or psychological help. In this sense, because control group didn't participate due to a psychological or physical need, they may not necessarily have childhood traumas and symptoms around it. On the other hand, pain group participants seek help for their bodily complaints and found to have more psychological counseling, indicating a psychological help seeking.

MacDonald et.al. (2016) proposes that, minimization in the control group can be due to the denial of trauma. In this study, another factor can be that control group may deny these traumas more than the pain group. They may not show bodily symptoms which are found to have a relationship with childhood traumas and they do not seek help for these traumas. On the other hand, pain group can be in less denial because, in a way, the symptoms are present bodily and a help for these symptoms are searched.

## Physical Abuse

In this study, among childhood traumas only physical abuse didn't create a difference between both groups. Contradicting with the present study, in other researches, physical abuse is found to increase predisposition to migraine (Goodwin, Hoven, Murison, & Hotopf, 2003) and chronic daily headache (Juang, Wang, Fuh, Lu, & Chen, 2004). However, a similar result with the present study is found in Brown, Schrag, and Trimble (2005)'s

study. They didn't find any significant difference between the somatization disorder group and control group by means of physical abuse. In addition to that, in a Turkey based population, Yücel et.al. (2002) found that physical abuse was less than childhood neglect and didn't make difference between headache patients and normal population.

In this research, a possible factor can be that, during the research participants are observed to have a tendency of regarding physical abuse as a way of normal parental issue. It is accepted as a way of discipline during childrearing and participants do not tend to rate physical abuse as a traumatic experience, especially when it is not very intense. As a cultural norm, different than international researches, physical abuse can be regarded as a more normalized traumatic experience in the present population.

Another possible factor can be the guilt feelings of chronic pain patients towards their families. Even chronic pain group had higher scores in physical abuse; they didn't mention it as a serious issue in the parental care. When the higher depressive points of chronic pain group are considered, they can be thought to have more feelings of guilt. Their anger towards their family is strong that they need to compensate these feelings to reduce their guilt. As an observation, they mention the physical abuse they are exposed to as if they were naughty children and they deserved it; additionally it is accepted as a cultural norm.

## Emotional Abuse and Sexual Abuse

Emotional abuse and sexual abuse are found to be higher in chronic pain group than in the normal population. Chronic pain group reported to be exposed to emotional and sexual abuse more frequently and intensely. Similar results are found in the literature. Brown et.al (2005) found that participants with somatization disorder had longer durations, higher frequencies and intensities of emotional abuse than the control group. They argued that half of the variance of unexplained symptoms is belonging to emotional abuse they were exposed to.

Brown et.al. (2005) proposed that participants with somatization disorder have grown up in families with emotional distance and poor psychological and physical support when compared to control group. The somatization group proposed a harsher, colder family environment in which they were exposed to insults and rejections. In addition to that, Engel (1959 cited in Sternbach, 1974) argues that families of pain patients are insulting, devaluing and aggressive like in the case of emotional abuse. He proposes that pain serves as a punishment; punishes the child as the child is punished. Thus, as an internalized punishment mechanism, emotional abuse can be expected in pain patients.

Similar results with this study are found about sexual abuse in the literature (Green, Flowe-Valencia, Rosenblum, & Tait, 1999; Bayram & Erol, 2014). Chronic pelvic pain patients are found to have more sexual abuse history than the participants with no pain (Walling, Reiter, O'Hara, Milburn, Lilly, & Vincent, 1994). In general, from a psychodynamic perspective, pelvic pain is associated with sexual abuse; however sexual abuse is not present only in the pelvic pain. In Finestone, Stenn, Davies, Stalker, Fry, and Koumanis, (2000)'s study, women with chronic pain had a sexual abuse history more than in the pain-free group. These chronic pain women are found to have pain in different areas of their bodies, rather than

only pelvic pain. This is similar to our findings, showing that no particular type of trauma results in particular areas of the body. In addition to that, in Finestone et.al (2000)'s study, between the women with chronic pain and sexual abuse, the most frequent diagnosis was fibromyalgia; which is the most frequent diagnosis in this study as well.

The most destructive impact of sexual abuse is its disruptions on the integrity of the psyche (Slavin & Pollock, 1997). Slavin and Pollock (1997) argue that sexually abused patients have a great doubt of what happened to him/her in the childhood: Was it real or my phantasy, was I seduced by the perpetrator or did I seduce the perpetrator? The disruption of self reliability is a great threat to the psychic integrity; as pain is a great threat to the body integrity. Slavin and Pollock (1997) names abused children as trapped because they are both trapped in the moments of abuse and trapped in the reality of the abuse. In this sense, they are similar to the chronic pain patients in adulthood; trapped in their bodily pain for years with no provided cure to escape. Similar to the loss of agency during abuse, agency over body is lost in chronic pain.

## 1.1. Childhood Neglect

Neglect is found to be the most prominent childhood trauma for patients with chronic fatigue syndrome (Kempke et.al., 2013; Heim, Nater, Maloney, Boneva, Jones, & Reeves, 2009) and fibromyalgia (Van Houdenhove et.al., 2001). In addition to that, Bick et.al (2014)'s study, investigating childhood maltreatment on HPA-axis and cortisol levels, showed that the biggest over-activation or under-activation of cortisol levels

were in participants with a history of childhood neglect. In the present study, childhood neglect is expected to be more intense and frequent in the pain group than the normal population.

In Turkey, the most frequent childhood trauma is found to be neglect (Zoroğlu et.al., 2001). According to Zoroğlu et.al (2001), half of the adolescents with a childhood trauma history are exposed to neglect. In Yücel et.al. (2002)'s study in Turkey with chronic pain patients, neglect is found to be the most frequent trauma among others. 41.4% of the headache and 28.1% of the low back pain patients had a history of childhood neglect.

In the present study, childhood neglect is found to create the biggest difference between pain and control groups. As it was expected, neglect was more discriminant than the other types of abuse. One of the possibilities is that, neglect is an absence and may last longer and continuously when compared to a sudden exposure of a terrifying event. For sure the devastation of the two cannot be compared however when neglect's insidiousness is regarded during this continuity, the search for help can be more silent. The help-seeking cannot be expressed or heard; and can only be carried bodily, through the unrelieved chronic pain.

Chronic pain patients are the patients whom doctors feel inefficient because they cannot heal or relieve the patient. They increase the level of analgesics when pain increases and continues steadily; however then they are faced with the problem of addiction to those analgesics (Sternbach, 1974). Patients are insatiable; they are never satisfied and when the exceeded amount is given to satisfy them, then they become addictive and thus desperate again. With doctors, they have a similar relationship to an

infant-mother relationship. The breast, like the doctor, is not nutritious enough to satisfy the hunger of the infant. It can be absent or interested in other actions, such as caring other siblings or other members of the crowded family, than the baby's unique needs. In both cases, the needs are neglected and mother leaves the infant with a great pain which is not turned into alpha elements. The baby is left with beta elements and psychic pain can only be carried through the body; as in the case of chronic pain.

Chronic pain patients come to algology polyclinic for years whereas other pain patients find a cure, doctors can help others to be healed. Doctors may feel inefficient and get bored of the chronic pain patients when compared with others (Sternbach, 1974). After a while, less time with chronic pain patients are spent; only medication is reorganized and their current needs might be ignored. From an infant-mother perspective, there is no holding environment for them because a holding environment requires not only a physical but a three-dimensional relationship which includes psychological and continuity dimensions (Winnicott, 1965). It is as if these patients are searching for such environment, coming continuously to find a continuous care. It is similar to an infant-mother relationship where the baby searches for a holding environment in which maternal empathy should be reliable. As Winnicott says "There is no such thing as an infant." (Winnicott, 1965, p.39). Chronic pain patients are similar to neglected children in which a holding environment and maternal empathy is absent.

## 2. Depression and Chronic Pain

As expected, depression is found to be higher in chronic pain groups than in normal population. It is known that depression is the most comorbid ith psychopathology with chronic pain (Erbaydar & Çilingiroğlu, 2010). Many studies show that chronic pain patients have higher scores on depressive symptoms and more major depressive disorder than the normal population (Geisser, Roth, & Robinson, 1997). While range of depression is found between 5-8% of the normal population, for chronic patients this range differed between 8-50% (Patten, 2001). In addition to that, a meaningful relationship is found between the duration of pain and depression. When pain lasts longer, depression is found to be more severe (Wenzel, Haug, Mykletun, & Dahl, 2002). On the other hand, pain contributes depressive episodes to last longer, as well. (Kerns, Rosenberg, & Jacob, 1994 cited in Tütüncü & Günay, 2010).

In Bayram and Erol (2014)'s study, 64% of the fibromyalgia patients had above-threshold depressive scores whereas for rheumatoid arthritis patients it was 36%. Fibromyalgia has no organic explanation however rheumatoid arthritis is known to have an organic basis Thus, their study shows that even pain, by itself, predisposes depressive symptom as seen in the rheumatoid arthritis group; the psychogenic pain as seen in fibromyalgia has higher depressive symptoms. Especially when it is considered that in fibromyalgia patients, childhood traumas are seen more than in the normal population (Weissbecker et.al, 2006; Kempke et.al., 2013).

According to Engel (1959 cited in Sternbach, 1974), for pain patients, pain is like a punishment and serves as a relief for guilt. He argues

that these patients choose relationships in which they are unvalued and hurt. When their life standards get better, their pain remains and even increases because they cannot tolerate success and improvement in their well-being. McDougall (1989) proposes that some physical illnesses are present to indicate the liveliness of the body (cited in Ciğeroğlu, 2015). An aching body is a living body and the psyche may need to witness this aliveness. In this way, psyche can try to compensate the feeling of internal death with a bodily aliveness.

## 2.1. Being a Woman in Turkey

It is known that depression and chronic pain may go together in general; however the role of gender should be considered in this relationship. Women are known to have higher scores on depression in Turkey; while the depression prevalence is 5.3% for women, it is 2.3% for men (Erol et.al., 1997). In international studies this difference is found to be smaller or nonsignificant. According to World Health Organization (2001) depression prevalence is 5.9% for women and 5.8% for men, worldwide (cited in Erbaydar & Çilingiroğlu, 2010). In addition to depression, women have higher scores on somatization disorder and are more frequent in pain samples in Turkey (Sar, Akyuz, Ozturk, & Alioglu, 2013; Soysal, Kara, & Arda, 2013)

Sar et.al. (2013) reported that in addition to sexual abuse which women are more exposed to than men, early school cessation predicts dissociative depression in adulthood. In the present study, women participants in the chronic pain group are observed to declare their anger

towards their families because of by being obliged to leave their school. They remember the day they stopped going to school and the way they had to work in the field while their brothers go to school. They were angry of being discriminated from their brothers and the obligations they had to do because they were girls.

The cessation of school education for girls is a consequence of a gender-related childrearing. This gender-based discrimination is an indicator of oppression on women. This oppression leads not only deprivation of education but also forcing early-age marriages and lead to another oppression from the husband's family as well (Sar et.al., 2013). In Sar et.al. (2013)'s study, women who had earlier marriages and arranged marriages are found to have more somatic disorder and depressive symptoms. A woman participant in chronic pain group says "I was a daughter of an ignorant mother and father. They make you marry; you don't have a right to say something. They thought 'let's give her anyway' and gave me like a slave." The women in the chronic pain group are observed to feel like a burden against their families. Thus, another possible factor why more women than men are present in the pain group of this study can have a relationship with the gender differences in Turkey.

The reason why women in chronic group have more depressive symptoms than the control group cannot be explained by gender because control group has the same number of women as well. However, in the pain group women have more childhood traumas and more negative feelings against their families. This situation can foster their expression of anger by means of gender; and thus seem as only them but not the other group is

discriminated. However, gender difference may be the only field they could express their anger towards their families.

## 3. Demographic Factors

Many studies show that low sociodemographic conditions predispose vulnerability on both physical and psychological health (Jomes, Ames, Jeffries, Scarinci, & Brantley, 2001). Inefficiency of resources is found to create vulnerability for pain, as well (Verhaak, Kerssens, Dekker, Sorbi, & Bensing, 1998). In this study, similar results were expected however chronic pain patients are found to have higher income than the control group. It is known that, low socioeconomic status of the family is regarded as a part of childhood neglect. Lacking necessary economic resources may handicap child's access to education or health services. Even this factor is very important Nikulina, Widom and Czaja (2011) proposes an important argument in their research. They argue that the consequences of poverty and childhood neglect should be considered separately. Poverty should not necessarily be accepted as a factor under childhood neglect but rather investigated different than that. They found that family poverty and childhood neglect have different consequences in the long-term. On the other hand, an average income might be necessary to regard pain as a health problem and seek help, For this reason, in this study it can be argued that the participants of the pain group are the ones who had enough resources to seek help; for the ones who couldn't have these resources, lower income average can be expected.

Chronic pain patients had more psychiatric medicine reports and had more psychological counseling than normal population. Many studies are concordant with this result. In McWilliams, Cox and Enns (2003)' study, when compared with normal population, chronic pain patients are found to have more mood and anxiety disorders such as panic disorder, post-traumatic stress disorder and the strongest comorbidity with depression (Tütüncü & Günay, 2011; Banks & Kerns, 1996). In addition to that, pain is a way of help seeking for the child and chronic pain patients seek help for years. In this sense, they can be expected to seek psychological help more than the normal population as well.

Even chronic pain patients seek help; the way they seek this help is in a more physical and concrete level than a verbal and relational way. As they carry their pain on their bodies, they search cure through their bodies. When inefficient symbolism and mentalization in somatic patients are considered, chronic pain group is expected to express their sadness and distress less than the control group. The results were as expected, indicating pain patients' difficulties in mentioning their emotional world to others. A possible factor can be that because they have pain and psychological difficulties around pain very often, they and their complaints can be neglected; resulting in being silent about their sadness and distress.

## 3.1. Family Context

In this study, neglect was expected and found to be the most discriminant trauma among others to predict chronic pain. Thus, the demographic information about family crowdedness and number of siblings was asked to participants. Chronic pain participants were expected to have more crowded families and more number of siblings because mothers of these crowded families have to take care of many children at the same time. In addition to that, especially when gender roles are considered, the other members of the big family who are lived together should be taken care of by the mothers. In these families, the unique needs of an infant or a child can be neglected.

As expected, an important difference about number of siblings and number of people lived with in childhood are found between pain and control groups. Chronic pain patients had more crowded houses in childhood and more number of siblings. In these crowded families, İkiz (2012) proposes that mother should take care of her newborn and youngest children at the same time, thus misses the differences between these two children. The developmental levels and needs are different but the caregiver gives them as if they are similar. Mother's functions and efficacy has to be shared with other siblings (Marty, 1998). Thus, the child loses the one-andonly mother. The representational world is filled with mismatched need-care dualities, inefficiency in the symbolic world is present and the capacity to make meaning and verbalize is weak. In addition to that, the child of these crowded families may be obliged to take care of other siblings' needs. Her/his needs are neglected and there is no holding environment to meet his/her unique needs. Rather than being a child, she becomes like a mother to the siblings, as one of the chronic patients says: "My mother was giving birth and then was going to work in the fields. I was taking care of my siblings which she gave birth. Is it suitable for a child to know cooking at the age of 7?"

In this study, chronic pain patients are found to have family members with chronic pain; however in control group there was neither mother nor sibling with chronic pain. Similar results are found by other researches (Bass, & Murphy, 1995). In the study of Jamison and Walker (1992), a correlation between children's somatic symptoms and parents' pain complaints is found. Children who have parents with pain are found to use more pain medication and parental chest pain was correlated with child chest pain. Even, in this study a correlation between body locations of pain patients and their family members' pain locations is not found, these results indicate pain to be a way of communication and a way of gaining acceptability in the family (Stuart & Noyes, 1999).

A mother with a chronic pain can pay over attention to the physical outbursts of the psychic pain in her body. Thus, a bodily preoccupied or bodily-mother may pay attention to her child through the child's body. Not the emotions, but the bodily sensations of the child are realized and taken care of. The baby can exist only with the help of bodily symptoms and pain. Otherwise, her/his psychic pain cannot be realized or regarded as a problem. As Özmen (2015) argues, pain can be expressed and healed only through body; no space is given for symbolism and mentalization. The internalized mother and self are with pain.

## 4. Summary, Strengths, Limitations and Future Directions

The aim of this study was to investigate childhood traumas between chronic pain patients and normal population. Depressive symptoms and demographic questions regarding participants' sociodemographic backgrounds, their history of pain and family members' pain histories are investigated. A strength of this study is to indicate these relationships through a clinical sample. In addition to that, the results support the hypothesis by showing more intense and frequent childhood traumas in chronic pain sample than the normal sample. As it was expected, childhood neglect has created the biggest difference between two groups. The importance of this study is, its emphasis on neglect which is an insidious trauma and ignored by many researches. Another aim of this study is to create awareness to childhood neglect, especially in a country as Turkey where families are crowded, number of children in a family is high, mothers are busy enough to disregard a unique infant's needs and neglect is treated as a cultural, usual norm in childrearing.

Even results express statistical differences; one of the limitations of this study is the necessity to use nonparametric tests. These tests are known to be weaker than parametric tests however because the data didn't meet enough criteria for parametric tests, nonparametrics are preferred. Another limitation of this study is the small sample size. Because it takes time to make face-to-face interviews and due to time limitations; the data is limited to 50 participants per group. These participants were low in socioeconomic levels however participants with high socio economic levels couldn't be investigated. In this sense, it is difficult to generalize the results to the entire

population. For further researches, having participants from different socioeconomic status would be meaningful. Future studies can investigate the pain in different body parts and these parts' meanings in the light of childhood traumas.

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#### APPENDIX A: Consent Form

Değerli Katılımcı,

İstanbul Bilgi Üniversitesi Klinik Psikoloji bölümü yüksek lisans öğrencisi İrem Serhatlı'nın; bireylerin ağrı şikayetleri, çocukluk yaşantıları ve ruhsal (depresif vb) belirtileri arasındaki ilişkiyi inceleyen tez çalışmasına bazı sorulara cevap vererek katılımınızı rica ediyorum.

Bu çalışmaya 18-65 yaş arasındaki bireyler katılabilir. Eğer bu yaş aralığında iseniz, katılımcı olarak yaklaşık 30 dakika sürecek olan anket formlarını doldurmanız beklenmektedir. Hem basılı formlar, hem de kalem araştırmacı tarafından verilecektir. Bütün soruların tek seferde, boşluk bırakmadan, eksiksiz bir şekilde doldurulması araştırmanın güvenilirliği ve geçerliği açısından önemlidir. Bu hassasiyeti, sizin de dikkate almanızı rica ederim. Eğer çalışmayı, yarıda bırakmak isterseniz; istediğiniz zaman bırakabilirsiniz. Bu durumda, katılımınız geçersiz sayılacaktır.

Araştırma boyunca kimliğiniz gizli kalacaktır ve bu onam formu dışında hiçbir yere isim ve soy isminizi yazmanıza gerek yoktur. Diğer formlar, bu onam formundan ayrı olarak dağıtılacak ve toplanacak; böylece isim ve soy isminiz araştırmanın hiçbir yerinde kullanılmamış olacaktır.

Çalışma, gönüllülük esasına dayanmaktadır. Soruların doğru veya yanlış bir cevabı yoktur. Gönüllü olarak katılmayı kabul ederseniz, doğru veya yanlış cevapları olmayan bu soruları olabildiğince samimi ve kendi yaşantılarınıza göre cevap vermeniz rica edilir.

Bu araştırmaya, bu klinikte size uygulanan tıbbi tahlil, test ve tedavilere dair herhangi bir veri veya bilgi dahil değildir. Sizin olağan tedaviniz ayrıca doktorunuz tarafından yürütülecektir.

Çalışmayla ilgili sorularınız için Psk. İrem Serhatlı'ya, mesai saatleri içinde (09.00-18.00) <u>iremserhatli@gmail.com</u> e-posta adresinden veya 0534 493 22 11 numaralı telefondan ulaşabilirsiniz.

A mostumo amun vivilrandalri santlamini alrudum va Iratilmavvi Irahul adiyamum
Araştırmanın yukardaki şartlarını okudum ve katılmayı kabul ediyorum.
Araştırmanın yukardaki şartlarını okudum ve katılmayı kabul etmiyorum.

Araştırmaya olan katkınız ve ayırdığınız zaman için şimdiden teşekkür ederim.

İsim-Soy isim
İmza:
Tarih:

## Demografik Bilgi Formu

Adınız ve soyadınızın baş harflerini yazınız:
<b>1-</b> Yaş:
<b>2-</b> Cinsiyet: 1)Kadın 2)Erkek
<b>3-</b> Medeni hal: 1) Bekar 2)Evli 3)Boşanmış 4)Birlikte yaşıyor 5) Dul (eşi ölmüş)
4- Kaç Kardeşsiniz? : Kendinden önceki kardeş ile arasındaki yaş farkı: Kendinden sonraki kardeş ile arasındaki yaş farkı:
5- Siz kaçıncı çocuksunuz; ( en büyükten sonra) aranızda kaç yaş olduğunu dayazınız.
6- Annenizin varsa çalıştığı/emekli olduğu iş: (Katılımcı bebekken çalışma durumu, saatleri, o saatlerde katılımcıya nasıl bakıldığı)
7- Babanızın varsa çalıştığı/emekli olduğu iş:
8- Öğrenim durumu: 1)Okur yazar 2) 5 yıllık ilkokul 3) 8 yıllık ilköğretim 4) Lise 5) Üniversite
9- Aynı evde kaç kişi yaşıyorsunuz? Akrabalık dereceniz: Çocukluğunuzda aynı evde kaç kişi yaşardınız?
<b>10-</b> Çalışma durumu: 1) çalışmıyor 2) düzenli sigortalı işte çalışıyor 3) düzensiz sigortasız işte çalışıyor 4) aile işinde ücretli 5) aile işinde ücretsiz
11- Mesleğiniz:

<b>12-</b> Haneye giren gelir miktarı? (Gizlilik hatırlatılacak) 1) bilmiyor 2) 1000 TL'den az 3) 1000-2500 TL 4) 2500-4000 TL 5) 4000-6000 TL 6) 6000
TL'nin üstü
13- Herhangi bir tanı almış sağlık probleminiz /hastalığınız var mı? Varsa açıklayınız. (Tanı varsa da yoksa da şikayetler detaylı sorulacak: nasıl, ne zaman, ne şiddette)
Evet(açıklayınız)
Hayır
<ul> <li>14- Bedeninizin herhangi bir bölgesinde uzun zamandır hissettiğiniz, yerleşik bir ağrı var mı?</li> <li>1) Var</li> <li>2) Yok</li> </ul>
15- Uzun süreli ağrınız varsa: - Tanısı: Var (açıklayınız) Yok Bilmiyor
<ul><li>Hangi bölgede:</li><li>Ne zamandan beri:</li></ul>
- O dönemde bunu tetiklemiş olabileceğini düşündüğünüz herhangi bir olay veya hayatınızda değişiklik oldu mu?
- Herhangi bir fiziksel operasyon sonucu mu oluştu (kaza, ameliyat,vb.)?  Evet (açıklayınız)  Hayır
- Bu ağrıya eşlik eden varsa diğer bedensel tepkiler:
<ul><li>16- Ağrınız olduğu zaman,</li><li>1) "Söylerim."</li><li>2) "Tavırlarımdan anlaşılmasını beklerim."</li></ul>
17- Ağrınız olduğu zaman, bunu nasıl ifade edersiniz? ( ağlama, sinirli olma, inleme,ritüeller)

18- Üzüntü ve sıkıntılarınızı ifade eder misiniz?			
1) Evet (nasıl)			
2) Hayır			
<ul> <li>19- Anne, baba ve varsa kardeşlerinizin bildiğiniz, uzun zamandır hissettiği, yerleşik bir ağrı şikayeti var mı?</li> <li>1) Var 2) Yok.</li> </ul>			
20- Varsa, ağrı kim / kimlerde var:			
Hangi bölgede, ne zamandan beri ve ne şiddette:			
21-20 yaşınızdan sonra, herhangi bir travmatik (Tanık olunan ve maruz kalınan doğal			
afetler, kazalar, aile içi/dışı şiddete tanık olma ya da maruz kalma, taciz/tecavüz, işkence, savaş, terör, sevilen/yakın olunan birinin kaybı, ait hissedilen bir yerin kaybı) yaşantınız oldu mu?			
1)Evet(nasıl)			
2) Hayır			
22- Evetse, travmatik bu anı günlük hayatınızı eskiden etkiler miydi?			
1)Evet (nasıl)			
2) Hayır			
23- Evetse, travmatik bu anı şu anda günlük hayatınızı etkiliyor mu?			
1) Evet (nasıl)			
2)Hayır			
24- Aldığınız herhangi psikiyatrik bir tanı oldu mu? (Tanı olmasa da varsa belirtileri not al; moralsiz, isteksiz, kaygılı,)  1) Var 2) Yok			
<b>25-</b> Varsa psikiyatrik /ruhsal rahatsızlığınızın tanısı nedir ve ne zaman bu tanıyı aldınız?			
<b>26-</b> Hayatınızın herhangi bir döneminde sizin için psikiyatrik ilaç raporu çıkarıldı mı?			
1) Evet (Hangi ilaç, ne kadar kullanıldı, neden bırakıldı) 2) Hayır			
<ul><li>27- Şimdiye kadar bir psikologdan destek aldınız mı? (Psikoloğu tanımla)</li><li>1) Evet 2) Hayır</li></ul>			

<b>29-</b> 16 yaşında	ın önce anne veya babanızdan birini kaybettiniz mi?
1) Hayır	2) Evet (hangisi, katılımcı kaç yaşında iken)

## APPENDIX C: McGill Pain Questionnaire

# MCGILL-MELZACK AĞRI SORU FORMU

Hastanın Adı:	
Yaşı:	
Dosya No:	Tarih:
Klinik Sorun:	
Tanı :	
Analjezik (Şayı	et verilmişse)
1.Tipi:	
2 Dozu:	

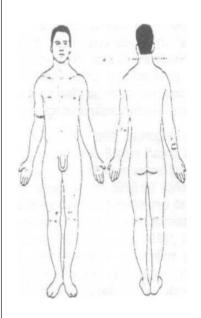
Hastanın algılama ölçütü: En iyi tahmini belirtilen sayıyı daire içersine alın.

1 (düşük) 2 3 4 5 (yüksek)
Bu ölçek; ağrınıza ilişkin bize daha fazla bilgi
vermek üzere hazırlanmış olup dört bölümden
oluşmuştur. (1) Ağrınızın yeri (2) Özelliği (3)
Zamanla ilişkisi (4) şiddeti

Şu anda bizce ağrınızı nasıl hissettiğiniz çok önemlidir. Lütfen her bölümün başında bulunan açıklamaları izleyiniz.

#### I. BÖLÜM AĞRINIZ NEREDE?

Lütfen aşağıdaki şekil üzerinde ağrınızı nerede / nerelerde hissettiğinizi işaretleyiniz. Eğer ağrınız derinde ise **D** harfi, yüzeyde ise **Y** harfini işaretlediğiniz yerin yan tarafına yazınız. Şayet hem derinde hem de yüzeyde ise **DY** harflerini yazınız.



#### II. BÖLÜM: AĞRINIZIN ÖZELLİĞİ

Aşağıdaki kelimelerin bazıları şu andaki ağrınızı tanımlamaktadır, Sadece ağrınızı en iyi tanımlayan kelimeleri daire içine alınız Uygun gelmeyenleri boş bırakınız. Her grupta uygun olan sadece bir kelime işaretleyiniz

1	6	11	17
Pır pır eden	Çekiştirici	Yorucu	Yayılan
Titreyen	Sürükleyici	Tüketici	Dağılan
Çarpan	Burkutucu	12	İçe işleyen
Zonklayan	7	Tiksindirici	Delen
Vuran	Sıcaklık veren	Boğucu	18
Döven	Yakıyor gibi	13	Sıkıntı verici
2	Haşlanıyor gibi	Korku veren	Uyuşuklaştıran
Sıçrayan	Dağlayıcı	Korkunç	Hissizleştiren
Yansıyan	8	Dehşetli	Sürükleyici
Fırlayan	Sızlıyor gibi	14	Sıkıştırıcı
3	Kaşıntılı	Cezalandırıcı	Yırtıcı
Diken diken	Acıtıcı	Bitap düşürücü	19
Oyuluyor gibi	İğne batar gibi	Dayanılmaz	Ürperten
Deliyorlar gibi	9	Şiddetli	Üşüten
Şiş saplanır gibi	Künt	Öldürücü	Donduran
Şimşek çakar gibi	Çıldırtan	15	20
4	Yaralayıcı	Biçare eden	Sürekli
Çok keskin	Sızlayan	Kör eden	Rahatsız eden
Kesiliyor gibi	Yoğun	16	Bulantı veren
Yırtılır gibi	10	Usandıran	Istırap veren
5	Hassas	Sıkıntılı	Berbat
Kemirici sancı	Gergin	Perişan eden	İşkence eder
Kasılır tarzda	Törpüleyen	Yoğun	tarzda
Eziliyor gibi	Keskin	Dayanılmaz	

#### III. BÖLÜM: ZAMANLA AĞRINIZIN İLİŞKİSİ

1. Ağrınızı tanımlamak için hangi kelimeyi/kelimeleri kullanırsınız?

1	2	3	
Devamlı	Ritmik	Genel	
Kararlı	Periyodik	Anlık	
Sabit	Aralıklı	Geçici	

2. Neler ağrınızı rahatlatıyor?

3. Neler ağrınızı arttırıyor?

#### IV. BÖLÜM: AĞRINIZIN ŞİDDETİ

 V. İnsanlar artan yoğunluğa göre ağrılarını belirten beş kelimede birleşirler. Bunlar

1 2 3 4 5 Hafif Rahatsız edici Şiddetli Çok şiddetli Dayanılmaz

Aşağıdaki her soruyu yanıtlamak için sorunun yanındaki boşluğa, size en uygun rakamı yazınız.

	, , , , , , , , , , , , , , , , , , , ,	
1.	Şu andaki ağrınızı hangi kelime tanımlar?	
2.	Ağrınızın en kötü halini hangi kelime tanımlar?	
3.	Ağrınız en az olduğunda hangi kelime tanımlar?	

4. Şu ana kadar geçirdiğiniz en kötü diş ağrısını hangi kelime tanımlar?

5. Şu ana kadar geçirdiğiniz en kötü baş ağrısını hangi kelime tanımlar?

6. Şu ana kadar geçirdiğiniz en kötü karın ağrısını hangi kelime tanımlar?

.....

## APPENDIX D: Childhood Trauma Questionnaire Short-Form

#### İsminin Baş Harfleri:

Çocukluk Çağı Travmaları Ölçeği (CTQ-28)

Bu sorular çocukluğunuzda ve ilk gençliğinizde (20 yaşından önce) başınıza gelmiş olabilecek bazı olaylar hakkındadır. Her bir soru için sizin durumunuza uyan rakamı daire içerisine alarak işaretleyiniz. Sorulardan bazıları özel yaşamınızla ilgilidir; lütfen elinizden geldiğince gerçeğe uygun yanıt veriniz. Yanıtlarınızı gizli tutulacaktır.

Çocukluğumda ya da ilk gençliğimde...

Evde yeterli yemek olmadığından aç kalırdım.
 A.Hiç Bir Zaman
 Z.Nadiren
 3.Kimi Zaman

1.Hiç Bir Zaman 2.Nadiren 3.Kimi Zaman 4.Sık Olarak 5.Çok Sık

2. Benim bakımımı ve güvenliğimi üstlenen birinin olduğunu biliyordum.

1.Hiç Bir Zaman 2.Nadiren 3.Kimi Zaman 4.Sık Olarak 5.Çok Sık

3. Ailemdekiler bana "salak", "beceriksiz" ya da "tipsiz" gibi sıfatlarla seslenirdi.

1.Hiç Bir Zaman 2.Nadiren 3.Kimi Zaman 4.Sık Olarak 5.Çok Sık

4. Anne ve babam ailelerine bakamayacak kadar sıklıkla sarhoş olur ya da uyuşturucu alırlardı.

1.Hiç Bir Zaman 2.Nadiren 3.Kimi Zaman 4.Sık Olarak

5.Çok Sık

 Ailemde önemli ve özel biri olduğum duygusunu hissetmeme yardımcı olan biri vardı.

1.Hiç Bir Zaman 2.Nadiren 3.Kimi Zaman 4.Sık Olarak

5.Çok Sık

6. Yırtık sökük ya da kirli giysiler içersinde dolaşmak zorunda kaldım.

1.Hiç Bir Zaman 2.Nadiren 3.Kimi Zaman 4.Sık Olarak 5.Çok Sık

7. Sevildiğimi hissediyorum.

1.Hiç Bir Zaman 2.Nadiren 3.Kimi Zaman 4.Sık Olarak

5.Çok Sık

Anne ve babamım benim doğmuş olmamı istemediklerini düşünüyordum.

1.Hiç Bir Zaman 2.Nadiren 3.Kimi Zaman 4.Sık Olarak

5.Çok Sık

9. Ailemden birisi bana öyle kötü vurmuştu ki doktora ya da hastaneye gitmem gerekmişti.

1.Hiç Bir Zaman 2.Nadiren 3.Kimi Zaman 4.Sık Olarak

5.Çok Sık

10. Ailemde başka türlü olmasını istediğim bir şey yoktu.

1.Hiç Bir Zaman 2.Nadiren 3.Kimi Zaman 4.Sık Olarak 5.Çok Sık

11. Ailemdekiler bana o kadar şiddetle vuruyorlardı ki vücudumda morartı ya da sıyrıklar oluyordu.

1.Hiç Bir Zaman 2.Nadiren 3.Kimi Zaman 4.Sık Olarak 5.Çok Sık

12. Kayış, sopa, kordon ya da başka sert cisimle vurarak cezalandırılıyordum. 1.Hiç Bir Zaman 2.Nadiren 3.Kimi Zaman 4.Sık Olarak

2.Nadiren 1.Hiç Bir Zaman 3.Kimi Zaman 4.Sık Olarak 5.Çok Sık 14. Ailemdekiler bana kırıcı ya da saldırganca sözler söylerlerdi. 3.Kimi Zaman 4.Sık Olarak 1.Hiç Bir Zaman 2.Nadiren 5.Çok Sık 15. Vücutça kötüye kullanılmış olduğuma (dövülme, itilip kakılma vb.) inanıyorum. 1.Hiç Bir Zaman 2.Nadiren 3.Kimi Zaman 4.Sık Olarak 5.Çok Sık 16. Çocukluğum mükemmeldi. 1.Hiç Bir Zaman 2.Nadiren 3.Kimi Zaman 4.Sık Olarak 5.Çok Sık 17. Bana o kadar kötü vuruyorlar ya da dövülüyordum ki öğretmen, komşu ya da bir doktorun bunu fark ettiği oluyordu. 1.Hiç Bir Zaman 2.Nadiren 3.Kimi Zaman 4.Sık Olarak 5.Çok Sık 18. Ailemde birisi benden nefret ederdi. 1.Hiç Bir Zaman 2.Nadiren 3.Kimi Zaman 4.Sık Olarak 5.Çok Sık 19. Ailemdekiler kendilerini birbirine yakın hissederlerdi. 1.Hiç Bir Zaman 2.Nadiren 3.Kimi Zaman 4.Sık Olarak 5.Çok Sık 20. Birisi bana cinsel amaçla dokundu ya da kendisine dokunmamı istedi. 1.Hiç Bir Zaman 2.Nadiren 3.Kimi Zaman 4.Sık Olarak 5.Çok Sık 21. Kendisi ile cinsel temas kurmadığım taktirde beni yaralamakla ya da benim hakkımda yalanlar söylemekle tehdit eden birisi vardı. 3.Kimi Zaman 1.Hiç Bir Zaman 2.Nadiren 4.Sık Olarak 5.Çok Sık 22. Benim ailem dünyanın en iyisiydi. 4.Sık Olarak 1.Hiç Bir Zaman 2.Nadiren 3.Kimi Zaman 5.Çok Sık 23. Birisi beni cinsel şeyler yapmaya ya da cinsel şeylere bakmaya zorladı. 2.Nadiren 3.Kimi Zaman 4.Sık Olarak 1.Hiç Bir Zaman 5.Çok Sık 24. Birisi bana cinsel tacizde bulundu. 3.Kimi Zaman 4.Sık Olarak 1.Hiç Bir Zaman 2.Nadiren 5.Cok Sık 25. Duygusal bakımdan kötüye kullanılmış olduğuma (hakaret, aşağılama vb.) inanıyorum. 1.Hiç Bir Zaman 4.Sık Olarak 2.Nadiren 3.Kimi Zaman 5.Çok Sık 26. İhtiyacım olduğunda beni doktora götürecek birisi vardı. 1.Hiç Bir Zaman 2.Nadiren 3.Kimi Zaman 4.Sık Olarak 5.Çok Sık 27. Cinsel bakımdan kötüye kullanılmış olduğuma inanıyorum. 3.Kimi Zaman 1.Hiç Bir Zaman 2.Nadiren 4.Sık Olarak 5.Cok Sık 28. Ailem benim için bir güç ve destek kaynağı idi. 1.Hiç Bir Zaman 2.Nadiren 3.Kimi Zaman 4.Sık Olarak 5.Çok Sık

13. Ailemdekiler birbirlerine ilgi gösterirlerdi.

## BECK DEPRESYON ÖLÇEĞİ

AÇIKLAMA: Sayın cevaplayıcı aşağıda gruplar halinde cümleler verilmektedir. Öncelikle her gruptaki cümleleri dikkatle okuyarak, BUGÜN DAHİL GEÇEN HAFTA içinde kendinizi nasıl hissettiğinizi en iyi anlatan cümleyi seçin ve yuvarlak içine alın. Seçiminizi yapmadan önce gruptaki cümlelerin hepsini dikkatle okuyunuz ve yalnızca bir maddeyi işaretleyiniz. Sorulara vereceğiniz samimi ve dürüst cevaplar araştırmanın bilimsel niteliği açısından son derece önemlidir. Bilimsel katkı ve yardımlarınız için teşekkürler.

## İsminizin baş harfleri : .....

- 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.
- Geleceğim hakkında umutsuzum ve sanki hiçbir şey düzelmeyecekmiş gibi geliyor.
- C- 0. Kendimi başarısız bir insan olarak görmüyorum.
- 1. Çevremdeki birçok kişiden daha başarısız olduğumu hissediyorum.
- 2. Geçmişe baktığımda başarısızlıklarla dolu olduğunu görüyorum.
- 3. Kendimi tümüyle başarısız biri olarak görüyorum.
- D- 0. Birçok şeyden eskisi kadar zevk alıyorum.
- 1. Eskiden olduğu gibi her şeyden hoşlanmıyorum.
- 2. Artık hiçbir şey bana tam anlamıyla zevk vermiyor.
- 3. Her şeyden 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. Bana cezalandırılmışım gibi gelmiyor.
- 1. Cezalandırılabileceğimi hissediyorum.
- 2. Cezalandırılmayı bekliyorum.
- 3. Cezalandırıldığımı hissediyorum.
- G- 0. Kendimden memnunum.
- 1. Kendimden pek memnun değilim.
- 2. Kendime çok kızıyorum.
- 3. Kendimden nefret ediyorum.
- H- 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 hatalı bulurum.
- İ- 0. Kendimi öldürmek gibi düşüncelerim yok.
- Zaman zaman kendimi öldürmeyi düşündüğüm olur. Fakat yapmıyorum.
- 2. Kendimi öldürmek isterdim.
- 3. Fırsatını bulsam kendimi öldürürdüm.
- J- 0. Her zamankinden fazla içimden ağlamak gelmiyor.
- 1. Zaman zaman içindem ağlamak geliyor.
- 2. Çoğu zaman ağlıyorum.
- 3. Eskiden ağlayabilirdim şimdi istesem de ağlayamıyorum.
- K- 0. Şimdi her zaman olduğumdan daha sinirli değilim.
- 1. Eskisine kıyasla daha kolay kızıyor ya da sinirleniyorum.
- 2. Şimdi hep sinirliyim.
- 3. Bir zamanlar sinirlendiğim şeylere artık sinirlenemiyorum bile.
- L. 0. Başkaları ile görüşme, konuşma isteğimi kaybetmedim.
- 1. Başkaları ile eskisinden daha az konuşmak, görüşmek istiyorum.
- 2. Başkaları ile konuşma ve görüşme isteği artık hiç içimden gelmiyor.
- 3. Hiç kimseyle konuşmak görüşmek istemiyorum.

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

## N- 0. Aynada kendime baktığımda değişiklik görmüyorum.

- 1. Daha yaşlanmış ve çirkinleşmişim gibi geliyor.
- 2. Görünüşümün çok değiştiğini ve çirkinleştiğimi hissediyorum.
- 3. Kendimi çok çirkin buluyorum.

## O- 0. Eskisi kadar iyi iş güç yapabiliyorum.

- 1. Her zaman yaptığım işler gözümde büyüyor.
- 2. Ufacık bir işi bile kendimi çok zorlayarak yapabiliyorum.
- 3. Hiçbir şey yapamıyorum.

## P- 0. Uykum her zamanki gibi.

- 1. Eskisi gibi uyuyamıyorum.
- 2. Her zamankinden 1-2 saat daha erken uyanıyorum ve tekrar uyuyamıyorum.
- 3. Her zamankinden çok daha erken uyanıyor ve tekrar uyuyamıyorum.

## R- 0. Her zamankinden daha çabuk yorulmuyorum.

- 1. Her zamankinden daha çabuk yoruluyorum.
- 2. Yaptığım her şey beni yoruyor.
- 3. Kendimi hemen hiçbir şey yapamayacak kadar yorgun hissediyorum.

## S- 0. İştahım her zamanki gibi.

- 1. İştahım her zamanki kadar iyi değil.
- 2. İştahım çok azaldı.
- 3. Artık hiç iştahım yok.

#### T- 0. Son zamanlarda kilo vermedim.

- 1. Zayıflamaya çalışmadığım halde iki kilodan fazla kilo verdim.
- 2. Zayıflamaya çalışmadığım halde dört kilodan fazla kilo verdim.
- 3. Zayıflamaya çalışmadığım halde altı kilodan fazla kilo verdim.

- U- 0. Sağlığım beni fazla endişelendirmiyor.
- 1. Ağrı, sancı, mide bozukluğu veya kabızlık gibi rahatsızlıklar beni endişelendiriyor.
- 2. Sağlığım beni çok endişelendirdiği için başka şeyleri düşünmek zorlaşıyor.
  - 3. Sağlığım hakkında o kadar endişeliyim ki başka hiçbir şey düşünemiyorum.
  - V- 0. Son zamanlarda cinsel konulara olan ilgimde bir değişme fark etmedim.
  - 1. Cinsel konularla eskisinden daha az ilgiliyim.
  - 2. Cinsel konularla şimdi çok daha az ilgiliyim.
  - 3. Cinsel konulara olan ilgimi tamamen kaybettim.