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DEPRESSIVE SYMPTOMS AND NEGATIVE EMOTIONS IN TURKISH CHILDREN: RELATIONSHIP WITH THE EXPERIENCE OF RESIDENTIAL MOBILITY

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Depressive Symptoms and Negative Emotions in Turkish Children: Relationship with the Experience of Residential Mobility

Türk Çocuklarında Depresyon Belirtileri ve Olumsuz Duygular: Taşınma Deneyimi ile İlişkiler

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ABSTRACT

Residential mobility, as one of the major life changing events, has been reported to be negatively linked with childhood depression. Depression significantly impairs emotional, cognitive and behavioral functioning of children and adolescents. Considering its adverse effect in childhood, depression and its etiology have attracted considerable empirical and theoretical interest in the mental health literature. The purpose of this study was to examine the effect of residential mobility on Turkish children. In this research, the association between depressive symptoms and emotion valence in children and adolescents, and the role of residential mobility in this relationship were investigated. The data came from a larger research project on children's life events, and 233 students, aged between 8 and 14, who were living in a low SES district of Istanbul, were examined. The Children's Depression Inventory – 2 was used in order to assess depressive symptoms in children. A newly developing semi-projective measure called 'The Children's Life Changes Scale' was employed to examine emotion valence scores. The results of the statistical analyses indicated that depressive symptoms and negative emotions are significantly correlated. However, no effect of residential mobility was found. Exploratory analyses showed that number of family members living in the home is also significantly related to children's depressive symptoms. These results provided preliminary findings for the Children's Life Changes Scale and the findings were discussed in the light of existing depression and mobility literature.

Keywords: depression in children, emotion valence, negative emotions, residential mobility, semi-projective testing

ÖZET

Araştırmalar taşınmanın yaşam değiştiren bir olay olarak çocuklardaki depresyonla olan anlamlı ilişkisini ortaya çıkarmıştır. Depresyon, çocuk ve ergenlerin duygusal, bilişsel ve davranışsal işleyişini önemli ölçüde kısıtlar. Çocukluktaki olumsuz etkileri göz önüne alınarak, depresyon ve etiyolojisi zihinsel sağlık literatüründeki ampirik ve teorik dikkatleri üzerine oldukça çekmiştir. Bu çalışma taşınmanın Türk çocukları üzerindeki etkisini görmeyi amaçlamaktadır. Mevcut çalışma çocuklardaki depresyon belirtileri ve duygu değerliği arasındaki ilişkiyi ve bu ilişkideki taşınmanın rolünü incelemektedir. İstanbul'un düşük sosyo-ekonomik durumu ile tanımlanabilecek bir bölgesinde öğrenci olan 8 ve 14 yaş arasındaki toplam 233 çocuk bu çalışmaya katılmıştır ve bu çalışmanın verileri çocukların yaşam olayları üzerine yapılan bir araştırma projesinden sağlanmıştır. Katılımcıların depresyon belirtilerini ölçmek için Çocuklar İçin Depresyon Ölçeği – 2 kullanılmıştır. Katılımcıların duygu değerlik skorlarının ölçümü için ise yeni geliştirilen bir yarı-projektif ölçek olan Çocukların Yaşam Değişimleri Ölçeği kullanılmıştır. İstatistiksel analizlerin sonuçları depresyon belirtilerinin ve olumsuz duyguların anlamlı olarak ilişkili olduğunu göstermiştir. Ancak taşınmanın her hangi bir etkisi görülmemiştir. İleri analiz sonuçları evde yaşayan aile bireyi sayısının çocuklardaki depresyon belirtileri ile anlamlı bir ilişki içerisinde olduğunu ortaya çıkarmıştır. Bu çalışmanın sonuçları, Çocukların Yaşam Değişimleri Ölçeği için ön bulgular sunmaktadır ve bu sonuçlar var olan depresyon ve taşınma literatüründeki diğer bulguların ışığında tartışılmıştır.

Anahtar Kelimeler: çocuklarda depresyon, duygu valansı, olumsuz duygular, taşınma, yarı-projektif ölçek

CHAPTER 1

1.INTRODUCTION

Psychological disorders have got a significant impact on emotional, cognitive and behavioral functioning of children and adolescents, causing an immense stressor since they impair daily life. Depression forms a huge part of this mental health issue because research suggest that it has a life time prevalence of approximately 17-18 percent (SBU, 2004). Depressive vulnerability in early years is a predictive determinant for depression in later life. According to many epidemiological studies, depression occurs in about 2% of school children (Son & Kirchner, 2000). The prevalence of current depressive symptoms among adolescents in European countries have been found to range between 7.1% and 19.4% (Balazs et al., 2012). Near the half percent of adolescents with major depressive symptoms are expected to relapse in young adulthood (Lewinsohn, Rohde, Klein, & Seeley, 1999). Despite its reported adverse impact on children's development, considerable numbers of depression cases in children and adolescents remains unrecognized, undiagnosed and untreated.

Experiences of unpleasant emotions are among the most salient characteristics of depression disorders in children and adolescents. They struggle with the obvious subjective distress following the feelings of sadness, guilt, hopelessness and anger, while having difficulties to experience appropriate positive emotions in contexts which normally stimulates feelings of joy and pleasure.

Many different factors can be suggested to play significant role in the development of depressive symptoms in children and adolescents. Etiology for depression follows several interacting pathways consisting of genetic, psychological, environmental and social inputs. Life changes are reported to be negatively linked with depressive disorders in children and adolescents. Considering residential mobility as a life changing event, children who moved from one place to another are vulnerable to the adverse effects of this experience on their psychological well-being. Not only the experience of mobility itself but also the

post-mobility/migration factors (neighborhood changes, school changes, discrimination, possible linguistic issues due to language change) and pre-mobility/migration life changes (high poverty, parents' divorce, remarriage, death, major life events such as disaster, terror, war) are discussed to be significant factors for poor mental health results in mobile adults and children (Morris, Manley, & Sabel, 2016).

In the current study, the effect of residential mobility experiences on Turkish children will be examined. In the literature, the residential mobility experiences of Turkish children was not extensively studied. Therefore, the aim of this research is to shed light on the depressive symptoms and emotions of children who moved houses and experienced life events.

1.1.LITERATURE

1.1.1.Depression

Depression is a common mental health condition marked by emotional, cognitive and physical symptoms. The Diagnostic and Statistical Manual of Mental Disorders – Fifth Edition (DSM-V; American Psychiatric Association, 2013) describes the symptomatology of depression as follows: a general depressed and/or irritable mood during the day; decreased pleasure and diminished interest in everyday activities which were enjoyable before (anhedonia); experiencing difficulty with concentrating on a task; change in sleep routines (hypersomnia or insomnia); change in eating habits or significant and involuntary weight loss or increase (more than %5); psychomotor agitation or retardation in daily activities and impaired functioning in occupational, educational and social areas; thinking about self's and/or others' death recurrently, attempting self-mutilation and planning on suicide; negative feelings of guilt and worthlessness and seeing self and the world only from negative lenses.

Depression severely disrupts psychological functioning of individual while reducing the life-quality. According to 2015 reports of the World Health

Organization (WHO) Major Depressive Disorder (MDD) is to be ranked as the first leading cause of worldwide mental and physical disability, and considering the rise of its prevalence over the years it is projected that depression will rank as the first cause by 2030 and become one of the priority diseases that is covered by the WHO's Mental Health Gap Action Program (WHO, 2015). In a comprehensive study, Bromet and colleagues (2011) screened 89037 people from 18 different countries and summarized that the prevalence of major depression disorder is 14,6% and 11,1%, respectively for high-income and low-to-middle income countries. Depression may be chronic and life long, therefore it was linked with considerable economic burden to society as well as with increased mortality and medical morbidity (Vos et al., 2016). In order to prevent and treat this disorder, developed countries have widened their mental healthcare services for depression since 1970's (Jorm, Patten, Brugha, & Mojtabai, 2017; Patten et al. 2016). However, the rise in the psychological treatments has not been accompanied by a decrease in the number of people diagnosed with depression.

Psychologists have long studied depression for its etiology, prevalence, and risk factors. In the theoretical literature, psychoanalytic theories and cognitive-behavioral theories of depression come into prominence among all different depression theories on its etiology. Freud (1917), as the father of psychoanalytic theory, sees depression as aggression, created by super-ego's severe demands, directed to the self. Depression is a reaction to the loss of an imaginary or real object. He claims that not the solely loss itself but the codification of loss in unconscious phantasies determines the experience of loss. Depression occurs as a result of this experience if the subject longs for that object while unattainability of the loss object is present in the mind. His theory has also supported with scientific studies. For instance, the research of Agid and colleagues (1999) indicated that the early parental loss (before age nine) significantly predicts adult depression later in life. The same work showed that depression was significantly more related with divorce of parents compared to the death of a parent and, secondly, loss of mother had a more substantial impact on depression occurrence in later life than loss of father. Similar to Freud, Klein (1940) emphasized the profound role of aggression

as an essential causal agent in depression. She indicated that the origins of depression lies in the mother and baby relationship, and pointed the role of guilt in the interaction between depression and aggression (Klein, 1935). Later, Bowlby, founder of the attachment theory, proposed that early mother/caregiver-child interactions has an important impact on later mental health disturbances. He linked insecure attachment to inconsistent, unavailable caregivers' responses for their babies' needs (Bowlby, 1988). Insecure attachment patterns have been indicated to be a form of internal fear for the loss of the love object. In insecure attachment, vulnerability to depression is created due to this hypothetical loss and later mourning, thus a reaction to loss of the love objects.

Aaron Beck (1967), on the other hand, contributed to the theoretical approaches on depression with his cognitive-behavioral model. He focused on the maladaptive cognitive patterns following life events as triggering factors. He emphasized the role of distorted mental events such as thoughts, beliefs feelings and judgements in the occurrence of depression. According to him, depressed people misinterpret themselves, others, situations and the future in a negative way following unpleasant experiences. They catastrophize the outcomes, tend to show white-and-black thinking, overgeneralize unpleasant experiences or personalize every single detail coming from external sources.

Psychoanalytic theories and cognitive theories have areas of agreement in their explanations about the etiology of depression. Both theories share a considerable overlap in their emphasis on the role of adverse life events, whether early in life or at a present time, as a cause of depression. Besides these two theories, in many theories of depression, similarly, stressful life events appear as a leading contributor to the depressive symptoms of the individuals.

1.1.2.Depression in Children and Adolescents

For decades, controversy whether children could be diagnosed with depression has persisted. The opponents against a diagnosis for childhood depression asserted that children are not able to experience depressive feelings

(Malhotra & Das, 2007). The mental health professionals, however, have finally decided to officially include the diagnosis for depression in children in Diagnostic and Statistical Manual – III (DSM-III) which was published in 1980. Nonetheless, the childhood depressive symptoms identified in DSM-III were very similar to the depression criteria for adults (Malhotra & Das, 2007). Although researchers have begun to study comprehensively the childhood depression, DSM-IV-TR also has not separated the diagnostic category for childhood depression from adult depression. Lastly, the new version of the Diagnostic and Statistical Manual (5th ed.; DSM 5) published in 2011 does not provide a clear distinction between the symptoms of childhood and adult depression. Instead of including a distinct symptomatology list for childhood depression, the DSM-5 provides the practitioners with an additional list of adult depressive symptomatology: children in depression show irritable mood and get easily angry. They may have eating problems and lose weight.

In general, childhood psychological disorders are divided into two categories: internalizing disorders and externalizing disorders (Achenbach & Edelbrock, 1978). Depression, social withdrawal, fearfulness, and anxiety characterize the former whereas aggression, destructive behavior, defiance, and hyperactivity characterize the latter (Fanti & Henrich, 2010). Feelings of guilt, sadness and shame are the emotions that a child with depression mostly deals with (Mash & Wolfe, 2012). In addition to such depressive moods, however, children with depression may report difficulties in concentration, restlessness and irritability (Fraser, Cooper, Agha, Collishaw, Rice, Thapar, & Eyre, 2018). Agitation is another salient feature of childhood depression occurring in approximately 35 percent of children living with depression (Ang, Chong, Chye, & Huan, 2012). It might be difficult to detect depressive symptoms in children. Those effects and behaviors in a child's life such as anger, hyperactivity, irritability or restlessness may "mask" the traditional depressive symptoms such as sadness and apathy (Minev, 2018). Before the pre-adolescent stage, school children may be less willing and/or able to talk about their feelings. When depressed, they might express some somatic symptoms such as stomachache and headache (Kozlowska, 2013). In

contrast to expectations, mental health specialists are not the first identifiers of depression in children (Tolan & Dodge, 2005). Educational personnel such as classroom teachers and school counselors are frequently the first recognizers of the depressive symptoms in children, especially agitation and irritability.

Depressive symptomatology in adolescents, on the other hand, may be observed as follows: they may feel more anxious and irritable (Price et al., 2016), may prefer to become socially isolated, may recurrently think about death, show self-mutilating behavior and even attempt to suicide (Twenge, Joiner, Rogers, & Martin, 2018). Their self-care routines may be deteriorated and hygiene practices may be poor while their responsibilities and duties are being delayed or completely disrupted (Ranasinghe, Ramesh, & Jacobsen, 2016). Alcohol misuse and drug abuse are also more common in depressed adolescents than their non-depressed peers (Pedrelli, Shapero, Arcibald, & Dale, 2016). They may have difficulties tolerating issues occurring in relationships and daily life events and may give overreactions and/or manifest aggressive behaviors (Brent & Weersing, 2015).

Childhood depression, as a common mental and public health issue, brings about lifelong costs not only for the individual but also for society given its prevalence rates. Thus, epidemiological studies were conducted in order to develop prevention strategies along with screening methods and treatment techniques for depression in children. A meta-analysis of 26 studies from different countries was analyzed by Costello, Erkanli and Angold (2006) and the results indicated a 2.8% overall prevalence rate of depressive symptoms in children equal to or under 12 years old. After the recovery of the first diagnosed depression, about 60 percent of children are supposed to experience a recurrent episode within 5 years (Varley, 2003). Another comprehensive research by Avenevoli and colleagues (2015) used a large sample of 10,123 teenagers aged between 13 to 18 years old and found that the prevalence rate of major depressive disorder (MDD) is 7.5%. Although many epidemiological studies of childhood depression have been investigated worldwide, studies on the depression of children living in Turkey were very limited. Demir and colleagues (2011) conducted an epidemiological study including 1482 children and

adolescents aged between 9 to 16 years old. The participants were students from 3 different schools in Fatih, Istanbul which is a district where generally people with low to middle income live. A prevalence rate of 4.2% was found for some type of depressive symptomatology, ordered from highest to the lowest rates, 1.75% for dysthymic disorder 1.55% for major depressive disorder (MDD), 0.60% for depressive disorder-not otherwise specified, 0.26% for double depression. Low maternal education and low SES were found to be associated with depression.

The underlying reasons for the symptomatology of depression in children are complex. The present diagnostic criteria listed in the DSM-V do not show any interest in its etiology. The developmental course for the symptomatology of depression consists of multiple and variable tracks which are the total product of interaction among ongoing physiological, psychological and social inputs for the individual (Cicchetti & Toth, 1998). Studies proposed several risk factors contributing to the developmental pathways for depression: genetic tendency, imbalance in neurochemical system, psychological disorders in parents and close relatives, lack of emotional connection and availability by parents, absence of the father in the early years of childhood, death of parents, child abuse, rejecting and neglecting parents, maternal depression, strict and controlling parenting styles, family stress, incapability to regulate emotions, self-esteem issues, drop in academic achievement or failure in school, rejection and victimization by peers, poverty, housing in poor neighborhood and racism (Kessler, Avenevoli, & Merikangas, 2001; Walker & Shaffer, 2007; Burt, 2009; Feiring, Cleland & Simon, 2010; Goodman et al., 2011; Culpin, Heron, Araya, Melotti, & Joinson, 2013; Wang et al., 2015; Cole, Sinclair-McBride, Zelkowitz, Bilsk, Roeder, & Spinelli, 2016; Scourfield, Culpin, Gunnell, Dale, Joinson, Heron, & Coillin, 2016). Exposure to stressful life events is associated with the risk of developing depression in children and adolescents (Lu, Daleiden, Pratt, Shay, Stone, & Asaku-Yeboah, 2013).

Recent research concerning for the etiology of the depressive symptoms in children focuses on the heterogeneity in children's responses to negative life events based on the gene-environment interaction mostly through a process called epigenetic modification (Klengel et al., 2013; Scheuer, Ising, Uhr, Otto, von

Klitzing, & Klein, 2016). The role of the risk factors, however, should be highlighted for a more accurate analysis of the etiology of childhood depression.

Protective factors, on the other hand, play a direct role in the developmental pathways of psychological disorders, as cited by Greenberg, Domitrovich, and Bumbarger (2001). In an individual's history, they defend her /him against the risk factors either by decreasing their adverse effects or by completely keep them from happening. In case of experiencing any stressful life events, protective factors such as living in a stable and united family, autonomy granting parenting style, healthy parental coping abilities, children's emotional connectedness with parents or caregivers and social and family support, high maternal and child's reflective functioning, peer attachment and child's self-esteem are significant to mitigate the experience and its adverse impacts (Ensink, Bégin, Normandin, & Fonagy, 2016; Chai, Kwok, & Gu, 2018; Ju & Lee, 2018).

Various literature has investigated the link between depression in children and several variables like gender, socioeconomic status, and family variables. First of all, depressive symptoms have been found to increase from childhood to adolescence. For instance, in a recent research conducted with a national sample of adolescents aged 12 to 17 years depressive symptoms have been reported to heighten in older adults (Lu, 2019). In aforementioned epidemiological studies, the prevalence of depression in children younger than 12 years old was documented as 2.8% in the population according to the meta-analysis conducted by Erkanli and colleagues (2006), whereas 7.7% of adolescents older than 12 years old have been found to be diagnosed with MDD in a national sample (Avenvoli et al., 2015). Gender is another variable that was indicated to be related to depressive symptoms. Numerous research reported higher rates of depression in adolescent girls compared to boys (Fleitlich-Bilyk & Goodman, 2004; Rohde et al., 2009). However, the effect of gender on depression was not proved to be very significant for children (Kashani et al., 1983; Demir et al., 2011). Many researchers investigated and reported different findings for the effects of socioeconomic status on childhood depression. Various researchers suggested that the number of depressive children increases within low SES (Angold et al., 2002; Kistner, David, & White, 2003) whereas other

findings claimed no significant relationship between two variables (Kashani et al., 1983). Notably, the sole prevalence study of depression administered with Turkish children suggested that SES level was predictive of depressive symptoms, with lower SES is indicative of more depressed children (Demir et al., 2011). Moreover, various research has been conducted to investigate the link between depression and family variables. In a sample of children 8 to 11 years old, Evans and colleagues (2001) documented that poor living conditions with the high number of the household were related to depressive symptoms. Another study found that individuals who, as a child, lived in overcrowded houses were at elevated risk of suffering from depression disorders at the age of 23 (Ghodsian & Fogelman, 1988).

Depression in children and youth has been associated with significant adverse effects such as high rates of school dropouts, academic failures, family stress due to conflict with parents, decreased self-esteem, increased problems in physical health, social withdrawal, elevated risk for teen pregnancy, substance abuse, and suicidality (Auger, 2005; Compton, Burns, Egger, & Robertson, 2002; Sagrestano, Paikoff, Holmbeck, & Fenrich, 2003; Michael & Crowley, 2002). Children with depression may suffer from serious functional impairments (Mash & Wolfe, 2012). Furthermore, childhood depression predicts severe depression cases throughout adulthood (Park & Goodyer, 2000; Wilcox & Anthony, 2004). Considerable evidence beheld the idea that experiencing negative emotions are a salient characteristic of depression in children and adolescence (Cicchetti, Ganiban & Barnett, 1991; Zeman, Shipman, & Suveg, 2002). In addition to concurrent cognitive and behavioral symptoms exhibited as difficulties in sleeping, eating, concentration and frequent thoughts of death children and youth in depression may feel elevated levels of sadness, disappointment, guilt, worthlessness, anhedonia, irritability or anger (Cole, Luby, & Sullivan, 2008). Depressive symptoms cannot be separated from the emotional functioning of children and adolescents. It reveals that children in depression attend and recall negative emotions eliciting content different than positive emotions content. They process emotional events and information less correct and more ineffective which reduces their performance (Reijntjes, Stegge, Terwog, & Hurkens, 2007). A critical number of psychologists

believe that the core difficulty that children in depression live with is their incapability for the proper discharge of negative emotions (Cole, Luby, & Sullivan, 2008; Forbes, Fox, Cohn, Galles & Kovacs, 2006). This view has some empirical support. Symptomatology of childhood depression is associated with decreased use of effective cognitive strategies such as positive reappraisal and problem-solving (Reijntjes, Stegge, Terwog, & Hurkens, 2007). Moreover, neuroimaging studies propose that individuals in depression put greater mental effort to recall positive emotions in the presence of negative emotions (Forbes, Fox, Cohn, Galles & Kovacs, 2006).

Depression has got a major effect on people's interpretations of self, others, and the world around them. As explained by Beck's cognitive models (1988), they exhibit a rise in self-focus and negative thinking. These underlying factors, in turn, become apparent through their language usage reflecting elevated numbers of words with negative emotion and self-focused words (Baddeley, Daniel, & Pennebaker, 2011). Settanni and Marengo (2015) investigated the correlation between the emotional wellbeing of 201 participants using Facebook and their textual contents shared on the media channel. Depressed participants have been found to use more negative emotion words than the control group. Moreover, in another study conducted by Quevedo and colleagues (2018), 81 adolescents, depressed and psychologically healthy ones, were evaluated while they were completing a face recognition task which consisted of emotional (happy, neutral, sad) pictures of their own or a stranger young person's face. When compared with the control group, depressed teenagers showed overall increased activity in their brain regions which are linked to the emotion-related or self-related information. The outcomes of neuroimaging research were found to be consistent with depression theories and previous studies displaying diminished positive emotions and decreased anticipation of rewards as core foundations of depression (Davey, Yucel, & Allen, 2008). Neutral self-faces have been interpreted by depressed adolescents as more negatively remarkable versus sad faces. It could be hypothesized that the restrained appearance of their neutral faces could have been interpreted by the depressed group as closer to their own congruent experience of

sadness compared to their overt unhappy faces. Another suggestion might be that neutral self faces could have been interpreted as more threatening due to their ambiguous nature (Filkowski & Haas, 2016).

Depression and emotions are not independent of each other. Children and adolescents diagnosed with depression manifest prolonged feelings of sadness, guilt, and worthlessness. Considerable research relates increased negative feelings, whether evaluated as reactions to challenging life events or more as an individual's temperamental characteristic, to the diagnosis of or risk for mental health problems in children, especially for depression (Cole, Zahn-Waxler, Fox, Usher, & Welsh, 1996; Eisenberg et al., 1993; Luby et al., 2006; Zeman, Shipman, & Suveg, 2002). Moreover, children diagnosed with or at risk for depression are unlikely to show positive emotions of happiness and enjoyment to normally pleasant life events (Forbes & Dahl, 2005).

1.1.3.Depression and Emotions

Many scientists defined emotions as physiological and behavioral reactions which are originally the product of neural circuits of the brain in response to a particular situation and/or object. Some scientists thought emotions as evolution's way of work for the successful adaptation and survival of the individuals by providing them with problem-solving skills when faced with unfavorable social events (Damasio, 2000; Darwin, 1872; Ekman, 1992; Ekman, 1999; James, 1884). Emotional reactions to any situation cannot be separated from past experiences (Damasio, 1994). These reactions, therefore, can differ in their adaptive or maladaptive responses to the concurrent situations because they strictly depend on which experiences did the individual live in the past and how they were processed. Emotions can become maladaptive because they are an attempt at reaction/adaptation to difficult life events/stressors and persistent even though later life conditions changed.

The underlying factors that are studied in depression research are similar to the variables influencing the emotional world of children. First of all, it was found that parents respond differently to the emotional needs of their daughters and sons. During the socialization of children by the family members, particularly fathers rewarded their daughters for expressing unpleasant feelings of unhappiness and fear, whereas disapproved and punished their sons for such disclosures (Brody & Hall, 1993. Thus, negative emotions of sadness and fear are easier to express for girls than boys. On the other hand, Birnbaum and Croll (1984) reported that parents were more welcoming of feelings of anger expressed by boys than by girls. Brody and Hall (1993) stated that boys, when compared to girls, tend to express more feelings of anger. Not only adults but children associate emotional expressiveness with females (Birnbaum & Chemelski, 1984). Furthermore, emotion recognition, identification, and verbal expression increase as age increases. In their study, Harter and Budin (1987) found that 8 years old children could not attribute emotions of opposite valence to an effect eliciting situation, whereas 11-years-old pre-puberty children could describe a situation with two opposite valence of emotions. Moreover, several parameters defining the living conditions of families have been indicated to relate to emotions in children. For example, poverty has been stated to be linked with the recognition of emotion expressions in children. According to the research of Erhart and colleagues (2019), children aged 7-11 years old who were exposed to chronic poverty needed more intense expressions to recognize feelings of sadness, fear and anger. In addition to poverty, household chaos was also shown to be correlated with emotion processing and modulating skills of children. In these studies, household chaos was described by various variables such as the frequency of mobility, household density, and interparental conflict etc. (Raver, Blair, & Garrett-Peters, 2015).

1.1.3.1.Theories of Emotions

Theories of emotions in children varied widely among researchers from different viewpoints. Campos and colleagues (1989) highlighted the social function

of emotions by defining them as a process regulating the interaction between the individual and the environment. The supporters of the functionalist theory viewed emotions as physiological systems motivating the individual to give an adaptive reaction to significant events (Frijda, 1986). Differential emotions theory by Izard (1977) claimed that emotion is related to an individual specific response pattern that shapes an individual's primary reaction to difficult situations (Gray, 1990).

Ciompi (1991) proposed a psychosocial/biological viewpoint underlining the central role of emotions in the organization and integration of human cognitive processes and as an element of psyche their contribution to process and storage of cognitions. Dodge (1991), similarly, supported Ciompi's conceptualization of emotions as an element of a complicated hierarchical structure called psyche. He defined emotions as the energy responsible for the motivation and action for all cognitive processes. On the other hand, Saarni, Mumme, and Campos (1998) see emotions from a psychosocial perspective according to their emphasis on the interaction between the person and social event. They conceptualized emotions as the individual's intention and action to build, continue, or alter their relationship with the social environment with respect to the significance of the event to that person.

In elaborating his interpersonal perspective of emotion, Stern (1985) pointed out the process of identifying and relating emotions within social interactions beginning from the primal relationship between the caregiver and child. Infants experience vital affects which are very basic feelings of pleasure and/or displeasure as a reaction to the inner stimuli and/or states from their bodies such as the need for sleep. These primary affective states will lead to discrete expressions of affective states such as fear and joy (Siegel& Solomon, 2003). In addition to somatic stimuli that awake vital feelings in infants, Stern (2010) discussed that the interaction between primary caregiver and infant is one of the first experiences from which the vitality affects originate. Schore (2008), on the other hand, discussed how an infant's emotional communications with his caregiver mold the psychic structure by helping the development of the neural systems related to affect processes such emotion expression, emotion identification, or emotion regulation.

According to Cole, Martin and Dennis (2004) emotions are dynamic processes involving an individual's appraisals to the social events and readiness for any action to those events based on the interaction between person and environment. In children, emotions have got regulatory functions but they can also be regulated via alterations in time course, arousal level, and valence. The former function may bring about an apparent behavioral change in the interaction between the infant and caregiver. For example, a child's fear and sadness may push the caregiver to use more favorable discipline methods. An example of the latter function, on the other hand, could be an infant's thumb sucking behavior in order to reduce its stress. In sum, theories have varied in conceptualizations of emotion. However, they are in agreement with the central role of emotions in the maturation of a child's psychic structure, because they are essential to both information-processing mechanisms in the brain systems and integration processes of psychic energy.

1.1.3.2. Concepts of Emotion

Previous research on the assessment of human emotions has long studied some emotion concepts, such as emotion differentiation, emotion recognition, emotion detection, and emotion labeling. Emotion differentiation is called as the precision with which individuals could understand and distinguish the affective states (Lennarz et al., 2018). Emotion recognition is benefited from the facial tasks to a greater extent and refers to the process of identifying emotions whereas emotion detection refers to the task of recognizing any subtle signs of emotional states on the human face.

In the present work, participants were asked to name the emotion which they attribute to the protagonist in the pictures. This notion is called emotion labeling. Emotion labeling is the main operation for the affective components of mentalization skills in children (Cutting & Dunn, 1999; Hughes & Dunn, 1998; Youngblade & Dunn, 1995). Mentalization, on the other hand, refers to perceive, understand and identify mental states of the self and others, as well as the ability to interpret behaviors in terms of underlying mental states such as cognitions and

emotions (Allen, Fonagy & Bateman, 2008). It is strongly related to the Theory of Mind, which constructs the cognitive and affective aspects of mentalization (ToM, Premack & Woodruff, 1978). ToM could be described as being able to understand that others have different minds with different emotions, ideas and beliefs that motivate their behavior (Baron-Cohen, Leslie & Frith, 1985). Accurate emotion labeling is an important step for mentalization and one of the valid indicators for ToM. Emotion labeling tasks require the children to identify different affective states such as happiness, sadness, fear and anger of the characters in the drawings, images or cartoons (Steele, Steele, Croft & Fonagy, 1999; Taumoepeau & Ruffman, 2008). A vast number of studies indicate that affective mentalization skills are related to prosocial behaviors (Denham, 1986). Children with mentalization skills are able to understand and label affective states of self and others. They are better in understanding and tolerating negative emotions such as sadness, anxiety, shame and anger (Allen et al., 2008) since labeling those emotions help children to contain those affects. Furthermore, depressed people who deal with difficulties to regulate their affects have been found to exhibit biases in favor of negative emotion labeling for ambiguous information (Stopa and Clark 2000). Labeling emotions is also strongly related to language skills, emotion knowledge and vocabulary aptitude. In a study done by Fine and colleagues (2003), it was found that first graders' emotion knowledge accounts for significant variance in their internalizing symptoms after 5 years, when controlled for their expressive language skills.

Gender and age differences in the labeling of emotions have been well documented. Girls as young as two years old have been found to talk more about emotions than did boys (Dunn et al., 1987). As an explanation, researchers have indicated that parents talked more about emotional states to their preschool-aged daughters than to their sons (Reese & Fivush, 1993). Besides, with ages children acquire greater verbal aptitude which results in richer use of emotional labeling. Children's verbal skills contributed to a great extent to their capacity to correctly label emotions (Harden et al., 2014). Above and beyond verbal aptitude, family environment such as family stress also affected this ability. On the other hand, children with a higher number of siblings have been shown to perform better in

labeling affective mental states (McAllister & Peterson, 2007), since they grow with more conversational and social experiences in crowded family environments. Not only gender, age and conditions of the family environment, but also socioeconomic status has been found to be associated with affective labeling in children. Even by age four, there are some differences in emotion labeling skills as a function of children's social environment. Children living in high socioeconomic status have been found to perform better in emotion labeling tasks than children living in low socioeconomic status (Edwards, Manstead, & Macdonald, 1984).

In sum, emotion labeling is greatly related to children's mentalization skills. In depressive children, emotion labeling is biased towards negativity. Labeling the affective mental states of others develops through childhood and it has been documented to differentiate according to some individual and demographic variables.

1.1.3.3. Emotional Development and Depression

Emotional development in childhood is rapid. From the first weeks of the infancy to ages five children's emotional capacities develop dramatically. Before one year old, a basic set of emotions such as sadness, happiness, anger, fear, surprise, and interest are salient in babies' facial expressions and behaviors (Izard, 1991; Sroufe, 1997). Not only experiences for core emotions, but also some simple strategies for emotion regulation are observable by the end of the first year. After one year, the basis for the emotions of shame, guilt and pride are discernable, and 2 years old toddlers have been found to perceive standard expressions of sadness, happiness, anger, and so on (Lewis & Sullivan, 2005; Lewis, Sullivan, Weiss, & Stanger, 1989). They seem to relate those emotions to the situational contexts figuring out how they shape behavior. Before ages 5, they become more capable in emotion regulation skills (Kopp, 1989) such that they can follow the teacher's rules in the classroom and find friends while maintaining relationships (Calkins & Hill, 2007). They also experience happiness, sadness, anger, fear, guilt, pride and shame while identifying and differentiating emotions based on facial expressions (Rafaila,

2015). After 6 years old, affective vocabulary of children changes in terms of the variety of the concepts defining emotions and the number of emotion words dramatically increase. Children grow into being able to talk with others about how they feel. They become also able to comprehend distinct emotions while perceiving the complexity of emotional expressions. By the start of the first grade, children begin to handle elevated amounts of challenges both in the academic environment and also in peer relations (Campbell & Stauffenberg, 2007). They progressively increase their emotional vocabulary since emotions begin to accompany every area in a school child's life.

Children's understanding of the words and narratives influences their performance in psychological evaluations (Lewis, Freeman, Hagestadt, & Douglas, 1994). Cutting and Dunn (1999) suggested that children's both receptive and expressive language skills were linked with their understanding and expression of emotions. In research examining the emotional lexicon development in children between 4 and 16 years old, Baron-Cohen and his colleagues (2010) showed that the size of the affective vocabulary doubled every 2 years between 4 and 11 years of age. In that study, they also found that approximately 90 emotion words are understood by more than 75% of children who are 7 to 8 years old, whereas children between 9 to 10 years old understand 180 emotion words. Participants became able to understand 299 emotion words by 11 years old, and between 13 and 14 years old they could understand 320 words. The 8 emotion words, which are also used in this study, have been indicated to be understood by children between 7 to 8 years old with the following ratios: all children understood "happy" and "excited", 97% of children understood "unhappy", 95% of children understood "afraid", 95% of children understood "angry", 82% of children understood "safe", 61% of children understood "guilty" (which, then, increased to 96% in the age band of 9 to 10 years old), and 38% of children understood "relief" (which, then, increased to 81% in the age band of 9 to 10 years old). The dramatic change found in the transition to adolescence is the elevation in the intensity and frequency of negative feelings, which has been indicated to play a role in internalizing symptoms (Larson & Richards, 1991; Klein et al., 2002).

Emotional awareness, sensitivity, and responsiveness lead children to be more vulnerable to negative life events because they lack the adults' emotion regulation skills for stressors and strong negative emotions (Cole, Luby, & Sullivan, 2008). Problems in children's psychology would increase without sensitive parenting that is expected to support children's emotion regulation. Children with a healthy emotional world, in turn, differ from those children with depression. For instance, children's temper tantrums consist of two affects which are anger and distress. The temper tantrums of depressed young children, however, are more violent, aggressive and strong since the emotional functioning of depressed and non-depressed young children differs. Furthermore, childhood depression has got an adverse impact on cognitive development and its processes in the presence of emotional content. Research on depressed children found that depressive symptoms in children and adolescents are related with focusing on and remembering contents filled with both positive and negative emotions (Bishop, Dalgleish, & Yule, 2004; Gotlib, Traill, Montoya, Joormann, & Chang, 2005; Joormann, Talbot, & Gotlib, 2007). Depressed children achieve lower performance when another stimulus is also given with an emotional nature (Jazbec, McClure, Hardin, Pine, & Ernst, 2005; LaDouceur, Dahl, Williamson, Birmaher, Ryan, & Casey, 2005), and they process emotional content less accurate and more inefficient than non-depressed children (LaDouceur, Dahl, Williamson, Birmaher, Axelson, Ryan, & Casey, 2006; Pérez-Edgar, Fox, Cohn, & Kovacs, 2006; Pine et al., 2004; Reijntjes, Stegge, Terwogt, & Hurkens, 2007).

1.1.3.4.Negative Emotions and Depression

Researchers have long talked about how to name different dimensions of emotions: action tendencies (Frijda, 1986), valence (the question of emotion whether it is positive or negative), activation (whether the emotion is high or low) (Larsen & Diener, 1992; Russell & Carroll, 1999; Watson & Tellegen, 1985), and sociality (whether emotions handle a problem of somatic/biological responses vs. inherently social behaviors) (Britton, Phan, Taylor, Welsh, Berridge, & Liberzon,

2006). Some researchers opposed to that classification stating the impossibility to measure emotions due to its subjective nature.

Two theoretical frameworks are important in portraying the models of emotion. Russell's (1980) circumplex model of emotion depicts the descriptive words of emotions such as happy, excited, relaxed, and angry in a circular diagram, consisting of bipolar extremities. In this circular model, there exist two primary axes called Valence and Activation (Larsen & Diener, 1992; Russell & Carroll, 1999). Valence represents bipolar axes of pleasantness and unpleasantness, whereas Activation represents a unipolar dimension of a sense of energy and mobilization. Russell's conceptualization of positive and negative affect emphasizes bipolarity. Watson and Tellegen (1985), on the other hand, proposed another model of emotion that shared some similar features but also important dissimilarities when compared with Russell's model (1980). Watson and Tellegen (1985) conceptualized affective structure based on two bipolar dimensions of Valence which are called positive affect (PA) and negative affect (NA). These two affective dimensions, PA and NA, were yielded by following a factor analysis of an all-inclusive sample of emotion terms arising from the prior study by Zevon and Tellegen (1982). PA refers to the degree in which a person feels active, alert, pleasant and enthusiastic. It is a total of positive emotions. High PA means being in a state of full zest with full concentration, whereas low PA can be described as being in a state of lethargy and sadness with no interest in anything. On the other side, NA refers to negative emotions. High NA is characterized by tension, anxiety and nervousness, whereas low NA subsumes feelings of tranquility, relaxation and calmness. At first, in these circular models, PA and NA were as if they are simply opposites lying on the same axis. However, in fact, PA and NA are independent and distinct measures. In other words, according to this model, a significant and strong correlation between similarly valenced affective states is expected, i.e. distressed and anxious, whereas mood states of distinct valence indicated low correlation between emotions like anxious and enthusiastic. Moreover, Watson and Tellegen (1985) proposed that emotions are linked with internalizing symptoms. Positive affect was negatively

correlated with depressive symptoms, whereas negative affect was positively correlated with them (Watson, Clark, & Tellegen, 1988).

Negative emotions are natural. Independent of their intensity, negative feelings are context-appropriate reactions to some circumstances (Saarni, 1999). They shape how we perceive, interpret and respond to the world, others and ourselves. Negative emotions of sadness, guilt, worthlessness, and anger are characteristics of depression that mold the way children and adolescents see the world. Dysregulated coping pattern of negative emotions, especially anger, was found to be associated with depressive symptoms in youth between 11 to 15-year-old (Goodwin, 2006). Another study, conducted with adults diagnosed with major depressive disorder, reported increased levels of sadness in depressed participants while watching films that are expected to arouse positive feelings such as happiness and joy (Rottenberg, Gross, & Gotlib, 2005). Heightened levels of negative emotions bring about selectively attending to negative sides, while the possible experience of positive emotions diminishes. Context inappropriate negative emotions are particularly significant in depression research (Forbes & Dahl, 2005).

Accurate interpretation of stimuli elicited by emotional events is essential for human beings' survival (Lang, Nelson, & Collins, 1990; Phaf, Mohr, Rottevehl & Wicherts, 2014). The affect system should properly function to evaluate emotionally significant events, with elevated attention to unpleasant compared to pleasant events for survival (Baumeister, Brastlavsky, Finkenauer, & Vohs, 2001). In general, studies showed that individuals tend to attribute a little pleasant emotion to neutral pictures which are called the positivity offset, when they tend to attribute more negative emotions for unpleasant events, compared to the assigned positive affect to equally intense pleasant images, then it is called the negativity bias (Diener & Diener, 1996; Cacioppo, Gardner, & Bernston, 1999). A recent study showed that depressed individuals assigned more negative emotions to unpleasant images when compared to healthy control group, they responded with fewer positive affect when represented with neutral and positive stimuli, thus the results showed the impact of depression on the function of the human's affective system (Gollan et al., 2016).

A large body of research suggests that people react with various forms of negative emotions such as sadness, anger, irritation after stressful life events (Marco & Suls, 1993; Suls, Green, & Hillis, 1998; Swendson, 1998; Moberly & Watkins, 2008). Studying the relationship between major life events and their effects on adolescents' lives, Rowlison and Felner (1988) summarized that major life changes are significantly correlated with negative affect experienced by teenagers. More recent research, on the other hand, claimed that stressful life events have an impact on the experience of negative affect whereas desired life events have an influence on the frequency of positive affect (Rahm, Heise, & Schuldt, 2017). Another research by Peeters, Nicolson, Berkhof, Delespaul, and deVries (2003) found that even though negative events were associated with high levels of negative emotions, once a person is already depressed then he/she is more likely to react with higher rates of negative feelings than non-depressed adults. Therefore, we may infer that enduring negative feelings, after experiences of major negative life events, render people more vulnerable in the evaluation of stressful situations and unfortunately motivates them to have more negative affective reactions, thus creating a vicious cycle. House moving is a life-changing event in childhood. In this study, children's affective labels will be studied and their relationship with depression will be explored.

1.1.4.Depression and Residential Mobility as a Life Event

1.1.4.1.Life Events and Depression

Coddington (1972) defined life events as life changes that may bring about a desired or an undesired result in an individual's life. They necessitate readjustments to new conditions. Lin, Dean and Ensel (2013) proposed that independent of its consequences most of the life events are stressful since they are often an indicator of an important life change. Birth of a child, graduation, marriage, salary increase are usually examples of happy life events in adults' life. Children could be generally pleased with the life events like summer vacation, being

remembered on their birthdays and having nice trips with family members. Stress generating events in a child's life might be both similar to and different from the events in an adult's life. These events might include a variety of spectrum like minor daily hassles (e.g., fear of failing in English class) relatively normative challenges (e.g., rejection by peers) and/or major events like stressful changes in life (e.g., moving home), traumatic events (e.g., death of a family member), chronic stress generating situations (e.g., poverty, exposure to chronic neglect) (Skinner & Zimmer-Gembeck, 2007). Grant and colleagues (2003) emphasized that these stressful life events in children's life would impartially endanger their physical and/or mental health at any point in their lifetime.

Researchers have been long interested in the association between life events and psychopathology (Grant, Compas, Stuhlmacher, Thurm, McMahon, & Halpert, 2003; Tennant, 2002). They have emphasized exposure to stressful life events, especially in the early years, may lead to several psychological disorders (Pearlin, 1999). Pleasant life events, on the other hand, are regarded to be protective factors for mental health problems (Disabato, Kashdan, Short, & Jarden, 2017). Various studies showed the adverse effect of multiple life events on children's psychological well-being. They reported that multiple life events predicted a huge variety of childhood psychological disorders including depression, antisocial behaviors, mood disorders, enuresis, and eating disorders (Bøe, Serlachius, Sivertsen, Petrie, & Hysing, 2018; Goodyer, 1996; Haller, Harold, Sandi, & Neumann, 2014; Hillegers, Burger, Wals, Reichart, Verhulst, Nolen, & Ormel, 2004). In research done by Lu and colleagues (2013), it was found that elementary school students aged from 9 to 14 reported more depressive symptoms when they experienced more stressful life events and less positive life events. In another study with a sample of 398 adolescents with stressful life event(s), Stikkelbroek, Bodden, Kleinjan, Reijnders, & van Baar (2016) showed that the depressive symptoms were correlated with the situational and relational challenging life events such as being bullied, moving and changing school. The association between depressive symptoms and stressful life changes was mediated by maladaptive cognitive and emotional coping strategies. Moreover, childhood stressful life events predicted the adult's later

psychological well-being. Schilling, Assertine and Gore (2007) indicated a very strong relationship between negative life events experienced in childhood and later symptoms of depression in person in the early twenties. Studies from neuroscience research also support the link between life events and mental health. Heim and Nemeroff (2001) proposed that neurobiological changes and adaptations in response to stressful life events develop in childhood, especially in the early years.

Children's responses to major life events depend on various factors. Parenting styles and household characteristics are significant factors that determine the effect of a life change on a child's psychological well-being (Flouri, Midouhas, Joshi, & Tzavidis, 2015). Psychoanalytic personality theories emphasize the determinant role of early object relationships in later responses to life events (Freud, 1917; Klein, 1935, 1940; Winnicott, 1958; Bowlby, 1969). Any life events include a loss of the former situation. Life changes are a reminder of early losses. Thus, children need and ask their parents for a protection and safe environment after life changes. From the very beginning, if the child feels that his needs are consistently met by his parents and feels being in a safe and containing environment, then he knows that the external world is safe and he can rely on others in the presence of any stressful situations. With good parenting, children feel secure when faced with stressors. In the contrary case, with bad parenting, the child feels alone and vulnerable against the possible threats of the external world. The attachment research, the Strange Situation observations, supported the effect of good parenting on children's mental health (Ainsworth et al., 1978). Ainsworth and her colleagues claimed that babies will be attached to their caregivers in the first year and the type of this attachment will be either secure or insecure. A very recent research conducted by Bifulco and colleagues (2019) with 202 participants, including a clinical group of 72 people, indicated that major stressful life events are triggering agents for depression in adults when combined with the presence of some vulnerability determinants such as insecure attachment. Moreover, literature studying depressed children and parenting practices showed that parents of children who are depressed were more hostile and less nurturing in their relationship with the child, whereas parents of children in healthy group were warm and nurturing

(Puig-Antich, et al., 1985; Goodyer, Germany, Gowrusankur, & Altham, 1991). In sum, the early object relationships play a significant role in how a child perceives him or herself, others and the external world. Moreover the early relationship quality with caregivers determine the reactions of a child to any life changes as a reminder of early losses.

Changes following a life event do not influence only children, but also parents. Parents exposed to negative life events, while not seeing their children's needs, would need care and help because they would also struggle with increasing psychological difficulties (Ge, Conger, Lorenz, & Simons, 1994). Having an illness in the family, losing a family member, natural disasters, accidents, change in the family such as separation and divorce of parents, worsening economic situation, bankruptcy, migration, and even residential mobility affect the psychological well-being of adults who are close to children. Thus, it is not unlikely for a child to be overlooked by the stressful parents because life changes come with its own emotional, physical and economic challenges into parents' lives. On the other hand, children would seek extra support from their parents during major life events to deal with the loss and to adapt to the new situations properly. In that case, parents should be more responsive to children's needs. In a study conducted with 6227 Chinese children under 18 years old, researchers found that children who were left behind by their parents who migrated to another city for work were more vulnerable to negative life events when compared to their peers living with their parents (Guang et al., 2017). Children who were left by both parents were the most depressed group when faced with challenging situations. Furthermore, in another study by Slavich, Monroe and Gotlib (2011) involving one hundred adult participants diagnosed with major depressive disorder, it was shown that participants who experienced an early loss of parent needed a low level of triggering stressor to become depressed.

Stressful life events constitute risk factors for both children and adults. A disadvantaged environment with adverse parenting styles would elevate the risk for childhood mental health difficulties. Living in a poor neighborhood and struggling with poverty during early childhood has been indicated to negatively affect children's emotional development and psychological well-being (Bradley &

Corwyn, 2002). Children living in those conditions do not always react similarly to these factors, but their effect seems to follow multiple pathways combined with the vulnerability factors of unpleasant life events and/or depression in the parent(s) (Evans, Li, & Sepanski, 2013; Lorant et al., 2003). Parental depression seems to create emotional problems through the less warm atmosphere in the family, more physical and psychological punishment, or fewer routines, structures and rules in the household (Gershoff, Aber, Raver, & Lennon, 2007). However, parental depression, specifically maternal depression, appears to be elevated in the presence of poverty and poor neighborhood qualities (Petterson & Albers, 2001; Ross, 2000). In the transition phase of a life change, parents who are depressed could let their children unsupported because they also need care from others. In the research of Flouri and colleagues (2015) conducted with a sample of 16.916 young children, they found that neighborhood and economic adversity, as well as challenging life changes, increase both externalizing and internalizing problems in children, especially in the presence of unresponsive, inconsistent or distant parenting. On the other hand, the presence of parents with a positive parenting style during a transition phase becomes a protective factor against emotional difficulties in children.

1.1.4.2.Residential Mobility and Depression

Moving is a normative life event, but maybe stressful for all family members, particularly for children. Several theories have been proposed to enlighten the effects of residential mobility on the psychological and social wellbeing of children. Firstly, mobility-experience theory sees residential mobility as a series of psychological and social events bringing about easy or difficult adaptation to a new neighborhood (Hagan, MacMillan, & Wheaton, 1996). It emphasizes four aspects: experience of previous moves, the amount of available time committed to moving, motivations for the mobility and the distance of the mobility are considered as important dimensions moderating the impact of mobility on adaptation in this theory. Secondly, theories of stress and coping evaluate household moves as innately demanding and stressful to all family members' coping mechanisms (Scanlon & Devine, 2001). Bioecological models, lastly,

suggest experiences in housing such as residential instability will eventually influence children's development by altering the interaction between the children and their proximal developmental contexts such as family dynamics, neighborhood and school networks (Bronfenbrenner & Morris, 2006; Lerner, 2006; Coley, Leventhal, Lynch, & Kull, 2013). Theories acknowledge mobility demands change. Either mobility itself as a life event demands change or life events preceding moving and resulting outcomes demand change.

Extended research has demonstrated that residential mobility in childhood is linked to poor mental health, elevated risk of psychopathology, like suicide and depression (Boynton-Jarrett, Hair, and Zuckerman, 2013; Brown, Benzeval, Gayle, Macintyre, O'Reilly, & Leyland, 2012; Kessler et al., 2010; Potter et al., 2001; Qin, Mortensen, & Pedersen, 2009; Susukida, Mojtabai, Murcia, & Mendelson, 2016; Tseliou, Maguire, Donnelly, & O'Reilly, 2015). A recent longitudinal study by Mok, Web, Appleby and Pedersen (2016) using a huge nationwide data of all residents locating in Denmark between 1971 – 1997 (N = 1.439.363) presented a relationship between residential mobility experienced by children until the ages of 14 years old and heightened risk of developing depressive symptoms later life. Those findings were in agreement with the results from another research of Susukida et al. (2016) which addressed that teenagers who were relocated and changed environment in the last 5 years had higher risks of having a major depressive episode than their peers who were living in a stable environment. Gilman and his colleagues (2003) noted that children who moved before 7 years old could experience the onset of depression at higher rates before 15 years old than those who did not move.

The inclusion of life-changing events before and/or after residential mobility should be taken into account when investigating its impact on a child's life (Morris, Manley, & Sabel, 2016). Poor economic conditions are known to lead to residential instability and following disadvantageous outcomes (Adam & Chase-Landsale, 2002). Moving may be also due to family structure changes such as remarriage and divorce which are significant life changes. Although studies show that children whose parents are remarried are likely to live in a new and advantaged

neighborhoods whereas children with divorced parents are likely to move in poor and disadvantaged neighborhoods due to the declines in financial resources (Dewilde & Uunk, 2008), both conditions may threaten the interpersonal relationships for both children and parents which causes a stressor (Mays, 2011). The children may be feeling unsupported and uncared by their parents who are probably overwhelmed with their own issues due to moving home and its precipitating factor such as changes in the family structure. A recent study indicated that young children of single parents suffered more from externalizing and internalizing behavior problems if they moved houses relative to their stable peers (Ziol-Guest & Mckenna, 2014).

Residential mobility itself brings about significant life changes for the child, such as neighborhood and school changes. Moving has been documented to be linked with poorer social ties in children (South & Haynie, 2004) which, in turn, adversely influenced children's psychological well-being. The underlying reason might be that changes in neighborhood may disrupt preschool children's social skills development and, similarly, changes in schools and friends may give rise to feelings of loss followed by separation from the old friends, cliques and teachers (Simpson & Fowler, 1994; Gruman, Harachi, Abbott, Catalano, & Fleming, 2008). The children need extra support during moves for a proper transition. However, it is very likely for children to be overlooked by the stressful parents because moving brings its own emotional, physical and economic burdens on parents' shoulders. The family dynamics become tense and constrained while moving (Pribesh & Downey, 1999). Adolescents who are affirming their own sense of independence tend to feel out of control, helpless and powerless as the parents decide to move homes. The social relationships feeding the support system of the child may be strained or harmed during moves in complex and multiple ways (Taylor, & Edwards, 2012). Moreover, residential mobility is associated with the decline in academic performance of the student and increased rates of dropping out of school which may result in the student's poor mood (South, Haynie, & Bose, 2007; Pribesh and Downey, 1999). Academic performance is highly linked with psychological wellbeing. For example, students who are satisfied with themselves are expected to

higher achievement in academic tasks than students who are not (Pullman & Allik, 2008). Residential mobility often leads to school changes. These changes, as discussed above, may have an adverse influence on children's acceptance into new peer groups (Haynie et al., 2006; Adler & Adler, 1998) which hinders children's self-esteem and, consequently, their psychological well-being (Mann, Hosman, Schaalma, & De Vries, 2004). Likewise, moving children may find themselves at the bottom of social networks at their new school while dealing with the loss of previously established friendships (Haynie, South, & Bose, 2006; Goodwin et al., 2012). Being a member of bottom friendship groups at the school's social hierarchy usually leads to a poor level of academic achievement and school engagement in children (Haynie et al., 2006). School change has been found to be liked with depressive symptoms in children which may be worsened over time (Goodwin et al., 2012). At their new school, children often make friends with other peers who share similar depressive symptoms. After one year of their friendship, they have been found to have equal depression rates, because they influenced each other. All in all, mobility research cannot be considered independent of adverse life changes literature.

1.1.5.Assessment of Depression and Emotions in Children

Two main assessment types of psychological functioning are projective personality tests and objective personality tests. In order to measure depressive symptoms in children and adolescents, both types of assessments were widely used. Each of them has got its own advantages and disadvantages.

1.1.5.1. Assessment of Depression in Children

1.1.5.1.1.Objective Personality Tests and Depression

In objective tests, the options for each response are standardized to maximize its objectivity (Cattell, 1958). They are designed such that the person who

is taking the test can choose any option which they think to represent themselves the best. The tester should rely on standardized scoring procedures. The Beck Depression Inventory (BDI) is the most famous objective measure used in the assessment of depressive symptoms in the adult population (Beck, Ward, Mendelson, Mock, & Erbaugh 1961). In 1981, Kovacs extended downward the BDI for a new version of objective testing for children and youth between 7 and 17 years old. It was called the Children's Depression Inventory (CDI). It screens for depressive symptoms in children by measuring the scores in cognitive, behavioral, and emotional domains. In statistical analyses, negative affect, anhedonia, negative self-esteem, interpersonal problems and ineffectiveness have been found to be the factors for the CDI (Kovacs& Preiss, 1992). Numerous authors have advocated that the CDI measure negative affect in children (Goldberg, Rickels, Downing, & Hesbacher, 1976; Gotlib, 1984). There are other measurement tools focusing on children and adolescents' behavioral and emotional functioning. Psychologists widely use The Child Behavior Checklist (CBCL) which is a standardized and objective questionnaire searching for the behavioral and emotional problems in children aged 6-18 (Achenbach, 1966). Reynold's Child Depression Scale consists of 30 items asking children between 7-13 years old to how they are feeling (Reynolds, 1989). The Reynold's Adolescent Depression Scale is, on the other hand, one of the few instruments which was developed specifically for screening depressive symptoms in adolescents between 12 and 18 years old (Reynolds, 1986).

1.1.5.1.2.Projective Personality Tests and Depression

In projective personality tests, on the other hand, participants respond to ambiguous pictures, situations or words, the aim is to reveal the respondents' unconscious conflicts, emotions and internal dynamics projected onto the test. The answers usually may contain the storytelling of participants. In the psychometric properties of projective tests, there are standardized scoring procedures, however, the subjective nature of the scoring and administration procedures still continue. The Thematic Apperception Test and the Rorschach Inkblot Test are widely known

projective measures and used as psychological assessment tools for youth and adult populations. In one study, Joo and Park (2019) found that depressive symptoms were positively correlated with negative emotions, and the lack of agentic themes in the participants' narratives had got a mediating role in this relationship. There are various projective measures used for children. These are the Roberts Apperception Test, the Children's Apperception Test, the Draw a Person-Family-Tree Tests and The Rotter Incomplete Sentences Blank Test. The Robert's Apperception Test for Children. For example, in The Children's Apperception Test (CAT, Bellak and Bellak, 1971), there are 11 cards with animal or human figures in which social scenes are depicted. The child has to tell a story for each card which is then used to figure out, environmental conditions, significant needs and conflicts of the child's inner world. The CAT is used for children aged 3-10 years. Children with depressive symptoms tend to tell stories with an emotional tone of sadness and despair.

The Children's Life Changes Scale (CLCS) is a pictorial tool. By nature, pictorial tools can be designed as objective or projective tests. According to some psychologists, pictorial instruments are well suited for the effective screening of internalizing disorders of children, as the pictorial design captures children's attention, activates their interest, and increases their participation (Ernst, Goldfrey, Silva, Pouget, & Welkowitz, 1994; Valla, Bergeron & Smolla, 2000). In their study, Dubi and Schneider (2009) showed that the addition of a visual dimension to a solely verbal tool significantly increases the participation of the youth. In another research investigating child psychologists' attitudes about the use of standardized verbal psychological tests for children, Garland, Kruse, and Aarons (2003) found that clinicians think these instruments are difficult for children and youth to understand due to their low levels of literacy which may render the results invalid. A history of very severe stressful life events is associated with delays in receptive and expressive language capacities while the child respondents of these tools are more likely to experience such life events (NCTSN, 2003). Some psychologists, in turn, aimed to restrict verbal materials while emphasizing the visual ones. This pictorial format is becoming more popular in the child psychology and

psychopathology. The aforementioned widely-used and standardized instrument for the emotional and behavioral functioning of children, the Child Behavior Checklist (CBCL), is also available in pictorial design, Pictorial Child Behavior Checklist (PCBCL; Leiner, Rescorla, Medina, Blanc, & Ortiz, 2010). Moreover, Dominic Interview (DI; Valla et al., 2000) and Dominic Interview Adolescents (DIA; Bergeron et al., 2010) are pictorial self-report instruments of DSM symptoms for the most frequent internalizing and externalizing disorders ranging from MDD to ADHD. MDD is the most frequent mental disorder that is investigated in the images of DI. In the pictures, there is a character called Dominic who is a boy or girl according to the respondent's gender. Dominic is presented with problematic situations representing the DSM symptoms. The participant is asked whether he or she feels similar to the way Dominic is feeling in the situation. A yes or no answer is given to the images. Secondly, Pictorial Instrument for Children and Adolescents (PICA-R) is a semi-structured pictorial inventory that can be used for the assessment of depressive symptoms in children and adolescents (Ernst, Cookus, & Moravec, 2000). Visual communication with the child using pictorial instruments helps to attract the attention of the child while reducing the effect of language limitations. The PICA-R presents the child a picture and asks, "How much you are like him/her," then he/she is expected to rate him/herself on a visual Likert scale.

1.1.5.2. Assessment of Emotions in Children

The manifestation of depressive symptoms in children varies with age. Experience of increased negative affect, however, is distinctly felt. Besides, as Clark and Watson's (1991) proposed the critical characteristics of depression is the absence of positive emotions. As mentioned before, even though measuring emotional responses could be open to discussion through the history of psychology there exist several affective instruments for adults and children which are widely used in depression literature.

The Children's Life Changes Scale (CLCS) was designed to assess negative and positive emotions in children and adolescents, when they are moving house or

migrating. Among the several tools designed to measure emotional functioning, the Positive and Negative Affect Schedule (PANAS) is one of the broadly-used tools, which assesses emotions by its valence: Positive Affect (PA) and Negative Affect (NA). As stated by Watson and Tellegen (1985), NA may be the component of emotional symptoms of depression and anxiety, whereas lower scores of PA is one of the main features of depression. The need to assess positive and negative emotions and evaluate their relationship with depression in child and adolescent populations led the child version of the PANAS, PANAS-C (Laurent et al. 1999). It was developed as a 27 items scale consisting of 15 negative emotion and 12 positive emotion words to be rated on a 5-point Likert scale by school-aged children. Picture rating tasks are also employed in emotion studies in depressed individuals (Sloan, Strauss, & Wiesner, 2001). The International Affective Picture System (IAPS; Lang, Bradley, & Cuthbert, 2008) is the most widely used instrument consisting of 1,182 total images and designed for the experimental research of the emotional processing system. It aims to measure emotions across three dimensions— pleasure/valence arousal, and dominance (Mehrabian, 1996; Russell & Mehrabian, 1977). The instrument can be used combined with the Self-Assessment Manikin (SEM) in child participants to have a complete pictorial design (Hayashi, Posada, Maike, & Baranauskas, 2016). The SEM is an attempt for a pictorial instrument developed to assess the valence and intensity of emotional responses to an event (Hodes, Cook & Lang, 1985). Pictures in the SAM ranges from a happy figure to an unhappy figure when questioning whether the event was pleasurable, and ranges from an excited face to a relaxed face when investigating the intensity of aroused emotions in response to an event. It is easily applicable and comparable across different cultures due to its graphic design. As emotional responses assessing tools, the IAPS and SEM are widely used in depression studies.

1.1.6.The Present Study

Considerable research emphasizes the impact of childhood depression on the improvement of dysfunctional patterns for normal developmental processes in

children and adolescents. Moreover, depressive symptoms usually follow a chronic pathway and its recurring nature is evident. Literature links increased negative emotions to the risk of childhood depression (Luby et al., 2006). Children and adolescents who are diagnosed with depression manifest prolonged negative emotions of sadness, irritability, anger and anhedonia along with other behavioral and cognitive symptoms. Furthermore, researchers studied some individual and demographic variables that may have an aggregating role for depressive symptoms, such as age, gender, socioeconomic status and family environment. Therein, the present study aimed to develop a better understanding of the relationship between childhood depressive symptoms and experienced negative affect during life changes controlling for some demographic variables (age, income, and the number of family members in the house) suggested as confoundings in the literature.

Life changes are challenging in every person's life. Researchers state that they lead to negative emotions in children's life which increases the possibility of depression. Moving from one place to another place is a significant change in a child's life. The Population and Housing Census by the Turkish Statistical Institute (2011) report that approximately every 1 of 5 people who move houses between localities are children under 15 years old. In children, the negative emotions they experience could be ignored by adults and possible depressive symptoms could be unnoticed. In contrary to expectations, mental health specialists are not the first ones who diagnosed depression in children (Tolan & Dodge, 2005). School personnel such as teachers and school counsellers are frequently the first recognizers of the depressive symptoms in children and adolescents, especially negative affect such as intense sadness, agitation and irritability. In that matter, in this current study, a new pictorial scale, the Children's Life Changes Scale (CLCS), was used to screen the effect of mobility experience(s) on children's emotional functioning. It was aimed to investigate the link between children's negative and positive emotions attribution to characters on the images and any experience(s) of residential mobility in the last 5 years. For this purpose, not only the total valence of emotions for pictures in the test, but also the link between residential mobility and valence of emotions for each picture was explored in the study. In addition, the

relationship between residential mobility and children's depression scores was investigated.

In sum, the hypotheses of the present study are:

Hypothesis 1: *There will be a significant positive correlation between depression scores of children on the CDI-2 and their negative valence scores on the CLCS, when controlled for age, income, and number of family members.*

Hypothesis 2: *There will be a significant negative correlation between depression scores of children on the CDI-2 and their positive valence scores on the CLCS, when controlled for age, income, and number of family members.*

Hypothesis 3: *The correlation of the depression scores on the CDI-2 and negative valence scores on the CLCS in mobile children's group will be significantly higher than the correlation of the non-mobile children's group.*

CHAPTER 2

METHODS

2.1.Data

The present study is a part of a long-running project which was primarily designed to develop a new pictorial scale- The Children's Life Changes Scale (CLCS) - for children's' mobility experiences. The research project was approved by Istanbul Bilgi University Ethics Committee. A total of 233 children and adolescents participated in this study who were recruited from eight primary and secondary public schools in Eyup district of Istanbul in Turkey with the permission of Eyup District National Education Directorate. This data consists of the normative sample of the present study.

2.2.Participants

The current study was conducted with 233 Turkish children from eight different primary and middle public schools located in the Istanbul district called Eyüp. Participants' parents or legal guardians gave permission for their participation. Eyüp is a low-to-middle income district of Istanbul. The students in these schools had mostly socioeconomically disadvantaged parents. As stated in the most recent reports of Turkish Statistical Institute in 2016, the 55% of the residents living in Eyüp have very low education level, with either no school degree or primary school degree, 10% of them have secondary school degree, 21% have completed a high school degree and, lastly, 14% of them have finished a university and/or higher education degree. Ozkan (2015) in his research reported that 322 mothers (75%) of 428 participants, from middle schools in Eyüp district, were housewives whereas fathers' professions could be listed as 274 (64%) were artisans and tradesman, 70 (16,5%) were civil servants, and 55 (13%) were workers. Istanbul's Eyup district has been receiving serious numbers of immigrants. Istanbul Provincial Directorate

of Migration Management (2017) reports that 12.206 refugees coming from Syria have been living in Eyüp district under temporary protection (Korkmaz, 2018).

The age range of participants was between 8 and 14 years old (calculated as months of age) *(M=125.1, SD=17.9).* 48.9% of participants (n=107) were studying at an elementary school while 51.1% of them (n=114) were going to a middle school in Eyüp. The gender distribution of the sample was also nearly equal. It included 109 girls and 110 boys and 4 respondents did not answer the question about the gender of their child. 42.9% of the children had one sister or brother (n=90). 17.6% of them (n=37) was the only child in the family while 30.5% of them (n=64) had two sisters and/or brothers, 5.7% of them (n=12) had three sisters and/or brothers, and 3.4% of them (n=7) had more than three sisters and/or brothers. Respondents who filled out the demographic information form were mostly mothers (74% of mothers). Respondents of the demographic information form were aged between 21 and 63 (*M=39.1, SD=6.1*). All of the mothers were reported to be alive (6 missing data) but three fathers were deceased (8 missing data). Education levels of the parent who filled out the demographic form were; 1.4% (n=3) no school degree, 41% (n=89) had elementary school degree, 16.6% (n=36) had middle school degree, 30% (n=65) had high school degree, 10.6% (n=23) had university degree, and 0.5% (n=1) had master's degree. Household incomes of the participants' families were: 5.3% of the families (n=11) had an income between 0 and 1000 TL, 17.2% of the families (n=36) had an income between 1000 and 1500 TL, 34.9% of the families (n=73) had an income between 1501 and 2500 TL, 21.1% of the families (n=44) had an income between 2501 and 3500 TL, 13.4% of the families (n=28) had an income between 3501 and 4500 TL, 5.7% of the families (n=12) had an income between 4501 and 6000 TL, 0.5% of the families (n=1) had an income between 6001 and 7500, 1.4% of the families (n=3) had an income between 7501 and 9000 TL, and 0.5% of the families (n=1) had an income between 9001 and 10500 TL (see Table 2.1., below).

The descriptive features for the families' residential mobility experiences are as follows: 65.3% of the families (n=139) didn't move in the last five years whereas 74 of the families moved at least once in the last five years. 10 participants

did not answer the question about mobility. Descriptive analyses showed that 48 families moved once in the last 5 years while 15 families moved twice and 10 families reported to have moved three times in that time. 1 family reported having moved for five times. Moreover, among those at least once relocated families, 41 of them reported to have moved within the same district; 21 families moved to another district; 9 families moved to from one city to another city, and 3 families moved to a different country. Lastly, the first three reasons that were reported by families for their mobility were job (n=15), urban transformation (n=12), and familial issues (n=9).

Table 2.1. Frequency Statistics for Demographics

	Options in the Demographic Form									
Variables	0	1	2	3	4	5	6	7	8	9
Income level	11	36	73	44	24	28	12	1	3	1
Education level (respondent)	3	89	36	65	23	1	NE	NE	NE	NE
Number of family members	NE	1	3	25	91	67	16	6	4	2
Number of moves (last 5 years)	139	48	14	10	0	1	0	0	0	0

Note. NE: Non-exist (in the options)

2.3.Procedure

In this study, children were recruited from primary and middle public schools of Eyüp district, in Istanbul. The ethical approval of the main project was taken from Istanbul Bilgi University. Convenience sampling of method was used when collecting data since Eyüp and visited public schools were available on a close location. Informed consent and demographic information forms were sent to the parents of students by school counselors. Informed consents were obtained from all participants' parents/legal guardians and children who are 12 years old and older. The children whose parents gave consent for their participation were assessed after 2 to 8 weeks. Three administrators, trained graduate and undergraduate students, administered the CLCS along with the CDI – 2 in the classrooms during the one-course hour (40 minutes).

2.4.Measures

2.4.1.The Demographic Form

The Demographic Information Forms were completed by the parents or legal guardians. The form included questions such as child's gender, age, grade, number of siblings, rank order among siblings as well as the respondent's degree of relation, age, marital status and level of education There were also questions related to the family's socioeconomic conditions such as total income and number of working family members in the house. The questionnaire also comprised of questions related to life events such as the status of parents (deceased or alive), the number of moving from one place to another in the last 5 years and the reason for that relocation (See Appendix).

2.4.2.The Children's Life Changes Scale (CLCS)

The Children's Life Changes Scale (CLCS) is a pictorial instrument aimed to assess children who experienced mobility and subsequent life changes in their

lives. It consists of 11 black and white pictures. Every picture shows one situation with one or more figures such as children, parents, friends or relatives. One picture has got no figures. The pictures are carefully designed to be culturally sensitive. They are expected to stimulate life changes scenes, especially moving home. All pictures were intended to be neutral and ambiguous in terms of facial emotion expressions of people and depicted scenarios. They are designed vaguely so that the participants may project their inner world as a reaction to the pictures. Every drawing has one related multiple-choice question asking the emotion of the person in the picture. The first six pictures have one further narrative question asking participants to write a story about a picture which is the qualitative part of the tool. For the purpose of the present study, only the first emotion question was included. For each picture, the participants were asked to define how might the child in the picture may be feeling. The rationale here was that the participant would identify themselves with one child in the picture and answer the question accordingly, which would give us a clue about how they might be feeling if they were that child. Explicit and open questions such as 'How do you feel?' were avoided and a projective method such as 'How the child in the picture feels?' was preferred. It is suggested that an implicit method of questioning is rather suitable when studying child participants who may have experienced potential traumatic life events (Woolgar, 1999). They may have difficulties when expressing their emotions about traumatic experiences.

The pictures were described in the subsequent order: 1) father and son figures walk on an empty street, 2) two children (a girl and a boy) stands with a suitcase by them, 3) only a fence without any human figures, 4) two children play football while one sits alone in front of a tent in a camp setting, 5) a discrimination evoking image in which a student whispers to a friend's ear while one sits alone in a classroom setting, 6) a nuclear family with a son and daughter stands rear-facing, 7) household sits on the couch in the living room and a little child plays on the carpet, 8) three children are grouped together and one stands alone, 9) a girl shouts, 10) a girl and a boy stands rear-facing with open arms, and, lastly, 11) a daughter figure runs towards a father figure who stands towards her. For the emotion

question, the participant was asked to choose either one of the listed emotions or write the name of another emotion which is not listed. The listed emotions were as follows: happy, afraid, guilty, excited, unhappy, safe, angry and relief. For an equal balance of emotion valence four emotion words with positive associations and four emotion words with negative associations were employed.

2.4.3.The Children's Depression Inventory – 2 (CDI - 2)

The CDI - 2 is an inclusive measurement screening for the presence of depressive symptoms in the areas of cognition, affect, and behavior in children aged 7 to 17 years (Kovacs, 2011). This 2nd Edition is derived from the original CDI (Kovacs, 1985). The self-report form of CDI - 2 which is used in the current study consists of 28 items with three choices per item ranging from 0 (absence of symptom), 1 (mild or possible symptom), or 2 (presence of explicit symptom) (Kovacs, 2011). The item scores are combined into a total depression score, which ranges from 0 to 56. A higher CDI - 2 score means a higher depressive state. In addition to the total score, two-scale scores (emotional and functional problems), and four subscale scores (negative mood/physical symptoms, negative self-esteem, interpersonal problems, and ineffectiveness) may also be calculated. The CDI - 2 was designed to be applied either in the clinical or in classroom settings. The latter is good fitting for the purpose of screening the existence and the severity of depression signs in students.

The original CDI was translated into 43 different languages including Turkish. The validity and reliability study of the Turkish version of CDI was investigated by Öy (1991). The CDI-II, however, is not available in Turkish, but only in English and Spanish. For the purpose of the current study, two translators independently translated the three different questions which are included in CDI - 2 from English into Turkish regarding the linguistic and cultural appropriate conduct in order to preserve content validity. Items that are identical to the Turkish adaptation version of original CDI remained untouched. In addition to these translators, two other independent translators, then, gathered to control both

translations to decide which ones to use. The CDI - 2 Self Report includes a normative sample of 1,100 youth aged 7 from 17 in the U.S. including all four main regions. In addition, the clinical sample comprised 319 children and adolescents aged between 7 and 17 years old (Kovacs, 2011). The CDI - 2 has been found to have moderate (Cronbach's alpha = 0.67) to high levels of internal consistency (Cronbach's alpha = 0.91) (Bae, 2012). An excellent transient test-retest reliability has been assessed across a period of the half to one-month interval (M = 16.1 days). Moreover, a significant positive correlation with the aim of constructing convergent validity has also been demonstrated with the Beck Depression Inventory–Youth version (BDI-Y; Beck, Beck, Jolly, & Steer, 2001) (rs = 0.37) and Conners Comprehensive Behavior Rating Scales (CBRS; Conners, 2008) (rs = 0.57) (Kovacs, 2011).

Finally, a five-factor model was found to represent the content of the original CDI in the prior factor analyses study (Sitarenios & Stein, 2004). However, confirmatory factor analyses revealed a poor fit for the CDI – 2. Therefore, a new model was created consisting of four factors reflecting higher-order problem domains of Emotional and Functional Problems. Each of these two main higher-order dimensions included two subdomains of symptoms which were labeled as: The negative mood/physical symptoms and negative self-esteem subscales were to be loaded into the former domain whereas ineffectiveness and interpersonal problems subscales were loaded into the latter domain. No factor analyses could be run in the current study since it requires a higher number of participants.

2.5.Data Analysis

Prior to the main analysis, the data was screened in terms of outliers and missing values. There were no outliers. However, there existed missing values in the measures (18 missing data in the CDI -2 total scores and 14 missing data in both positive and negative valence scores in the CLCS). The CDI - 2 consists of 28 questions and even one unanswered question cause the total score of the participant to become missing data. CDI – 2 Manual reports that a maximum of three empty

questions is acceptable for each participant (Kovacs, 2011). In order to deal with missing data issues, three or less unanswered question(s) for each participant were ignored and the total score of those children was calculated. After this correction, the number of missing data for the CDI – 2 decreased to 5 participants. While scoring for the negative and positive valence scores, the "other" option has not been calculated by giving null points. Nonetheless, the number of participants who voted for the "other" option for equal to or more than 3 times was calculated and found to be fifteen participants. No adjustment was made for the missing values in the positive and negative valence scores for the CLCS since the range between minimum and maximum scores for the CLCS is limited varying from 0 point to 11 points and each question contributes to the total score as 0 or 1 point(s). No transformations to meet normality assumptions for the main measures were required because variables in the statistical analyses were normally distributed and all skewness and kurtosis values were under +/- .90 (Tabachnick & Fidell, 2007). After that, descriptive analyses and quantitative analyses were run. Descriptive analyses for the sample and measures of the study were presented in the next chapter. For hypothesis testing, partial correlations were calculated in order to reveal the relations between the CDI – 2 and positive and negative valence scores in the CLCS. For the last hypothesis, Fisher r-to-z transformation was used in order to compare Pearson correlation values calculated to explore the relations between CDI -2 and negative valence scores in the CLCS in both mobile and non-mobile groups of children. Factor analyses for CDI – 2 could not be run due to the restricted number of participants. Thus, U.S. norms of factor analyses in CDI – 2 which were previously presented should be taken into account. Finally, t-test analyses were calculated in order to compare mobile and non-mobile groups and both genders which was a controversial topic in the literature.

CHAPTER 3

3.1.Results

The present chapter, firstly, gives information about the descriptive characteristics of the measures and demographics. Later in the present chapter quantitative analyses will be presented with necessary tables in order to analyze the data.

3.1.1.Descriptive Characteristics for the Measures of the Study

Descriptive analyses for the CDI - 2 and positive and negative valence scores in the CLCS are illustrated in Table 3.1. Means, standard deviations, minimum and maximum scores were calculated. Secondly, descriptive for the demographics and measures are presented in two groups which are compared according to the mobility of the participant (see Table 3.2., below). Lastly, frequency analyses for each picture in the CLCS have been shown in Table 3.3.

Table 3.1 Descriptive Analyses for the Measures of the Study

Measures	N	M	SD	Min-Max
CDI-2 – total	218	.41	.23	0-1.18
CDI-2 – negative mood/ physical symptoms subscale	222	.39	.29	0-1.33
CDI-2 – negative self-esteem subscale	222	.42	.34	0-1.67
CDI-2 –ineffectiveness subscale	222	.51	.31	0-1.38
CDI-2 – interpersonal problems subscale	222	.23	.38	0-1.40
CLCS – positive valence	209	6.2	1.6	1-10
CLCS – negative valence	209	3.9	1.5	1-9

Note. CDI-2=Children's Depression Inventory-2, CLCS=Children's Life Changes Scale

Table 3.2 Descriptive Statistics of Non-mobile and Mobile Participants (for the Last Five Years)

	Non-mobile Children				Mobile Children			
	M	*SD*	*Min*	*Max*	*M*	*SD*	*Min*	*Max*
Child's age in months	125.3	18.1	93	164	124.9	17.8	99	170
Socioeconomic status								
Parent education	3.0	1.1	1	5	3.1	1.1	1	6
Family income	3.6	1.5	1	10	3.3	1.3	1	9
Number of household	4.5	1.2	1	10	4.6	1.2	2	9
Child's total CDI-2 score	.40	.23	0	1.18	.42	.24	0	1.07
Negative mood/ Physical symptoms Subscale	.38	.27	0	1.33	.43	.31	0	1.11
Ineffectiveness Subscale	.53	.31	0	1.38	.49	.30	0	1.25
Interpersonal Problems subscale	.23	.29	0	1.40	.24	.28	0	1.40
Negative self-Esteem subscale	.40	.32	0	1.67	.46	.34	0	1.50
Child's positive valence score (CLCS)	6.1	1.6	1	10	6.5	1.4	2	10
Child's negative valence score (CLCS)	4.0	1.5	1	8	3.7	1.9	1	9

Table 3.3. Frequency Statistics for Each Picture in the Children's Life Changes Scale (CLCS)

Picture	Total (N)	Emotion Items in the CLCS								
		Happy	Afraid	Guilty	Excited	Unhappy	Safe	Angry	Relief	Other
Picture 1 - Father and son	223	49	42	11	24	19	49	2	22	5
Picture 2 - Suitcase	219	83	3	13	50	37	7	0	16	10
Picture 3 - Fence	222	5	34	47	6	21	62	11	9	27
Picture 4 - Tent	220	57	2	4	18	96	2	7	7	27
Picture 5 - Classroom	219	13	9	46	31	10	6	17	63	24
Picture 6 - Nuclear family	220	118	0	0	2	11	50	1	21	17
Picture 7 - Household	222	71	6	1	3	57	31	7	36	10
Picture 8 - Friends	221	5	24	55	12	60	6	18	4	37
Picture 9 - Shouting girl	218	2	130	4	16	8	2	34	6	16
Picture 10 - A girl and a boy	220	110	5	1	12	3	16	0	59	14
Picture 11 - Father and daughter	217	121	4	0	46	1	21	1	12	11

3.1.2. Correlation Analyses Between the Variables of the Study

Zero-order correlation analyses indicated that among all variables there existed several significant correlations between the measures. Child depression scores were significantly correlated with negative valence scores (r=.16, p<.05), whereas negative valence scores were significantly correlated with positive valence scores (r=.-63, p<.01) and negative mood/psychosomatic symptoms score (r=.17, p<.05). Positive valence scores were significantly correlated with negative self-esteem scores (r=.-18, p<.05) and negative mood/psychosomatic symptoms score (r=.17, p<.05). All subscales of CDI – 2 were correlated with each other and with the total scores in CDI – 2. All correlation analyses are presented in Table 3.4., below.

Table 3.4. Pearson Correlation Coefficients Between the Scales and Subscales of the Study

Measures	CLCS-negative valence	CLCS-ositive valence	CDI - 2	CDI - 2 negative mood/physical symptoms	CDI - 2 ineffectiveness	CDI - 2 negative self-esteem	CDI -2 interpersonal problems
CLCS negative valence	1	-.64**	.16*	.17*	.12	.13	.02
CLCS-positive valence		1	-.12	-.17*	-.03	-.18*	-.01
CDI - 2			1	.80**	.77**	.78**	.70**
CDI - 2 negative mood/physical symptoms				1	.43**	.49**	.45**
CDI - 2 ineffectiveness					1	.46**	.43**
CDI - 2 negative self-esteem						1	.48**
CDI - 2 interpersonal problems							1

Note. CLCS= Children's Life Changes Scale, CDI - 2= Child Depression Inventory - 2, **= p<.01, *= p<.05

The correlation analyses between the CLCS and CDI – 2 scores and age, income and number of family members living in the same house with the child are illustrated in Table 3.5. A significant correlation between positive emotions and age was found (r=.-19, p<.05). Moreover, a significant correlation between income levels and the number of family members in the house was revealed (r=.-17, p<.05). Lastly, the number of the household was found to be correlated with depressive symptoms in children (r=.15, p<.05) and positive valence scores (r=.14, p<.05). The other variables were not correlated (see, Table 3.5., below).

Table 3.5. Pearson Correlation Coefficients Between the Measures of the Study and Age, Income and Number of Household

Measures	CLCS-negative valence	CLCS-positive valence	CDI - 2	Age	Income	Number of family members
CLCS-negative valence	1	-.63**	.16*	.03	-.02	-.01
CLCS-positive valence		1	-.07	-.16*	-.04	.14*
CDI - 2			1	-.04	.04	.15*
Age				1	-.08	.04
Income					1	-.17*
Number of family members						1

Note. CLCS= Children's Life Changes Scale, CDI - 2= Child Depression Inventory - 2, **= p<.01, *= p<.05

3.1.3.Main Analyses - Hypothesis Testing

Literature suggested age, SES level, and family environment are related to depressive symptoms and emotion valence. Similarly, according to the results of the zero-order correlations, age and number of family members in the house have been found to be related to the main variables of the current study. In conclusion, those variables were treated as confounding variables and controlled for the hypothesis testing.

Hypothesis 1: *There will be a significant positive correlation between depression scores of children on the CDI-2 and their negative valence scores on the CLCS when controlled for age, income, and the number of family members.*

In the first hypothesis, a positive relationship between depressive symptoms and negative emotions was hypothesized when controlled for age, income, and number of family members. In accordance with the hypothesis, results revealed a significant positive correlation between these two variables (r=.16, p=.04). Thus the first hypothesis was confirmed (see Table 3.6.).

Hypothesis 2: *There will be a significant negative correlation between depression scores of children on the CDI-2 and their positive valence scores on the CLCS when controlled for age, income, and number of family members.*

The second hypothesis suggested a significant negative relationship between depressive symptoms and positive emotions when controlled for age, income, and number of family members. However, there was no significant correlation between depression scores and positive valence (r=-.14, p=.06). Therefore the second hypothesis was not confirmed (see Table 3.6.).

Table 3.6. Partial Correlation Coefficients Between the CDI-2 and CLCS Positive and Negative Valence Scores

Controlling for Age, Income & Number of Family Members	Measures	CLCS-negative valence	CLCS-positive valence
	CDI - 2	.16*	-.14

Note. CLCS= Children's Life Changes Scale, CDI - 2= Child Depression Inventory - 2. **= p<.01, *= p<.05

Hypothesis 3: *The correlation of depression scores on the CDI-2 and negative valence scores on the CLCS in mobile children's group will be significantly more compared to the correlation in non-mobile children's group.*

In the third hypothesis, a stronger relationship between depressive symptoms and negative emotions in the mobile children's group compared to non-mobile children's group was expected. The correlational analyses between two variables in the group of children who were residentially stable for the last five years revealed no significant relationship (r=.15, p=.09). On the other hand, the correlation analyses between two variables in the group for children who moved at least once for the last five years also revealed no significant relationship (r=.19, p=.13). Both correlations were transformed into z-scores. Thus, the Fisher r-to-z transformation was employed. This test was performed in order to compare the potential differences between the correlations in the control group and mobile group. A two-tailed test of significance was used. However, the results revealed no significant difference between the correlations in two groups (z=.25, p>.05). In sum, the third hypothesis was not confirmed.

3.1.4. Additional T-test Analyses

The results of the hypothesis testing in the present study revealed a significant association between negative emotions and depressive symptoms in children and adolescents when controlled for age, income and the number of family members. In exploratory analyses, t-test analyses were run in order to compare the

main scale scores according to the mobility of child and gender of the child. Mobility of the child was defined as moving home once or more time in the last five years. No significant differences were observed between the two groups (see Table 3.7., below.)

Table 3.7 Results of t-test and Descriptive Statistics for CLCS Scores and CDI – 2 Total by Mobility in Last Five Years

	Mobility								
	Non-mobile			Mobile			95 % CI for Mean Diff.		
Measures	M	SD	n	M	SD	n		t	df
CLCS-negative valence	3.98	1.52	133	3.74	1.39	66	-0.20 - 0.68	1.10	197
CLCS-positive valence	6.11	1.63	133	6.50	1.37	66	-0.86 - 0.07	-1.69	197
CDI - 2	.40	.23	135	.42	.24	73	-.08 - .08	-.42	206

In further analyses, emotions and depressive symptoms according to the gender of the participants were analyzed with T-tests. No significant difference between the two groups was found (see Table 3.8., below).

Table 3.8. Results of t-test and Descriptive Statistics for Negative and Positive Valence Scores in the CLCS and CDI – 2 by Gender

	Gender						95 % CI for Mean Diff.		
	Male			Female					
Measures	M	SD	n	M	SD	n		t	df
CLCS –negative valence	3.9	1.5	106	3.9	1.4	99	-.33, .48	.35	203
CLCS –positive valence	6.4	1.6	3	6.1	1.5	99	-.70, .15	-1.27	203
CDI – 2	.41	.23	107	.31	.24	107	-.06, .06	.04	212

Note. CLCS= Children's Life Changes Scale, CDI – 2= Child Depression Inventory

CHAPTER 4

DISCUSSION

Depression is a serious psychological issue in children and adolescents. According to a recent epidemiological study analyzing the National Survey of Children's Health (NSCH), 1.7% of children aged between 6 and 11 were currently diagnosed with depression, while 6.1% of adolescents between 12 to 17 years old suffer from depression (Ghandour et al., 2019). In Turkey, Demir and colleagues conducted an epidemiological study (2011) and showed that the prevalence rate for depression in children was 4.2% among children. Among other symptoms, negative emotions are the most salient and prevalent symptoms of depression. Moreover, research well documented the association between depression and negative emotions and stressful life events (Abela & Skitch, 2007). In the present study, the relationship between depressive symptoms and emotions was analyzed in mobile and non-mobile Turkish children using the CLCS which is a pictorial tool designed to screen children exposed to mobility. The research hypotheses of the study were as follows:

Hypothesis 1: There will be a significant positive correlation between depression scores of children on the CDI-2 and their negative valence scores on the CLCS when controlled for age, income, and the number of family members.

Hypothesis 2: There will be a significant negative correlation between depression scores of children on the CDI-2 and their positive valence scores on the CLCS when controlled for age, income, and number of family members.

Hypothesis 3: The correlation of depression scores on the CDI-2 and negative valence scores on the CLCS in mobile children's group will be significantly more compared to the correlation in non-mobile children's group.

In this part, the results of the main and additional analyses will be discussed in the light of depression, emotions and residential mobility as a stressful life event.

Firstly, the results of the main analyses, hypotheses testing, will be discussed. Then, the results of additional analyses (correlation and t-test analyses) will be evaluated. Finally, the strengths and limitations of the present study and suggestions for future research will be presented and conclusions will be shared.

4.1.Evaluation of the Main Analyses - Hypothesis Testing Results

First of all, for the first two hypotheses, correlational analyses between negative and positive emotions and depressive symptoms in total after controlling for age, gender, income and number of the household were investigated. According to the vast number of literature, these variables were reported to be linked with depressive symptoms and emotion valence in children (Kryspin-Exner & Felnhofer, 2012; Bansal, Goyal, & Srivastava, 2009). Moreover, in the additional analyses of the current study, significant effects of those variables on the measures have been observed. Thus, they were controlled in order to prevent any confounding effects. These confounding effects will be discussed later in this chapter.

The first hypothesis suggested that depressive symptoms will be experienced more as children attribute more negative emotions to the pictures. Depressed children experienced various problems in healthy functioning in emotional, cognitive and behavioral areas. The current study focused on the relationship between emotions and depressive symptoms since emotions are significant concepts for childhood depression. This study objectively indicated a strong association between the experience of negative emotions and an increase in depressive features in children. In other words, the first hypothesis was supported, children who are likely to experience more symptoms of depression attributed more negative feelings to the characters in the pictures. This finding is noteworthy since it suggests a convergent validity for negative valence scores in the CLCS indicating that the CLCS measures the variable which is assessed by the CDI-2.

The confirmation of the first hypothesis is supported by the literature which documented the intensity of negative emotions in childhood depression (Cicchetti & Toth, 1998). The listed negative emotions that participants could associate with

were “afraid”, “angry”, “unhappy” and “guilty”. Participants who had higher depressive symptoms marked those unpleasant feelings more than others. These unpleasant feelings were related to the depressed people’s mostly experienced feelings according to Blumberg and Izard’s research of negative emotional patterns in children (1985). Depressed participants were likely to report emotional patterns strongly related to sadness in depressive scenarios. Anger, guilt, self-directed hostility, shame and fear were the other reported negative emotions according to the ranked order.

The relationship between negative emotions of feeling unhappy, guilty, afraid and angry could be explained by two distinct theories of depression: cognitive theory and psychoanalytic theory. Children with depression not only experience unpleasant emotions more but also are more sensitive in the perception of subtle signs of negativity (Gollan, Pane, McCloskey, & Coccaro, 2008) which contributed to their negative schemas about others, environment and future. These negative schemas which were also mentioned by Harkness and Tucker (Lewis & Granic, 2002) were enhanced by those negative emotions. According to Harkness and Tucker, the etiology of depression could be defined by the presence of disadvantaged environment and the deficit of arousal in the early years of life which, then, could be followed by the building of self-schemas based on themes of low self-worth, hopelessness, and loss, in addition to a vulnerability to suffer from depressive symptoms. The psychoanalytic theories on depression, on the other hand, highlights the role of the variables of aggression, early mother-child interaction and guilt in the development of depression (Freud, 1917; Klein, 1935, 1940; Winnicott, 1958; Bowlby, 1969). In the early mother-child relationship, the mother’s attuned responsiveness to her baby provides him/her with a protective environment, where all his/her excessive inner aggression could be contained. The function of motherhood modifies the infantile aggression, fear and anxiety, whereas a failure in the motherhood later results in a depressed individual who is burdened with feelings of helplessness, hopelessness and anger since the person is likely to turn his aggression against the self in order to protect love object. Those internal conflicts grow into being negative feelings of increased sadness, guilt,

anger, fear, insecurity and self-directed hostility. Psychoanalytic theories claim that depression is significantly associated with the loss. Separation from the mother's womb is evaluated as the earliest lost which is followed by object losses in the early mother-infant relationship. Then, the individual responds to experiences of life changes based on these earliest type of loss. For instance, for an adolescent, this transition phase is intertwined with the loss of childhood and depending on the early experiences the depressive symptoms that are likely to occur in adolescence.

Another support for the confirmed hypothesis is related to the logic of projective tests and face recognition studies with depressed participants. The CLCS is a pictorial instrument in which participants are asked to attribute a feeling to the character in the image depicting a possible frame of mobility experience. The pictures are expected to trigger previous mobility experiences of participants and identify themselves with the person living in the depicted scenario. Namely, participants projected their own emotions onto the characters in the CLCS cards. Similarly, the face recognition studies with depressed patients also acknowledged the link between depression and negative emotions using logic of a projective methodology. The ability to recognize, identify and understand emotions from non-verbal cues such as facial expressions is one of the key features for healthy psychological development. Nonetheless, a remarkable number of studies claimed that depression disorders are accompanied by elevated impairment in the attribution of emotions to facial expressions (Gollan, Pane, McClosky & Coccaro, 2008). Depressed individuals are found to be negatively biased to the neutral visual cues such as facial expressions misinterpreting them as sad faces whereas they need more intensity in happiness level in order to notice a happy face. These result were replicated with children samples: depressed participants selectively evaluated the low-intensity facial expressions as sad faces whereas the control group interpreted those low-intensity faces as happy (Schepman, Taylor, Collishaw, & Fombonne, 2011). Those studies supported the results of the current study: the more negative emotions attributed by the participants to the neutral faces in the CLCS pictures, the more depression symptoms they scored in the depression inventory.

Secondly, in the light of the literature, the second hypothesis claimed that participants who were likely to be depressed would mark pleasant feelings less while they were assessing the feelings of the person in the image when controlled for the aforementioned confounding demographics. The options for these positive feelings that participants could associate with the person in the images were "happy", "excited", "safe" and "relief". However, the hypothesis suggesting a negative correlation between positive emotions and depression scores of children was not confirmed even though the correlation was negative as estimated. These findings are surprising regarding previous studies. The history of the categorization of emotions in terms of valence is rooted in the theoretical model of Watson and Tellegen (1985). They claimed that emotions are linked with internalizing disorders. In detail, positive feelings of happiness, pleasantness, joyfulness and rest are expected to be negatively correlated with depressive symptoms, whereas unpleasant negative feelings are expected to be positively correlated with them (Watson, Clark, & Tellegen, 1988). In their findings, they showed that the affective construct of depression is characterized by an increase in negative feelings of apprehension, guilt and anger with a lack of pleasurable feelings. Positive psychologist, on the other hand, helps their depressed patients by promoting positive emotions of interest, pride, joy and hope in them. Depressed individuals' thresholds to experience unpleasant feelings are higher than healthy people (Sheeber et al., 2009). Furthermore, the core emotional symptom of depression, anhedonia, includes a shortfall in the capacity to experience positive feelings (American Psychiatric Association, 2000). Contrary to the existing literature, however, the current result revealed no significant correlation between positive emotions and depressive tendencies.

One explanation for the result of positive emotions' not being correlated with depressive symptoms in children would be related to the specification of distinct positive emotions that are diminishing with depression. In simpler words, depression may be related to the deficit of some specific positive feelings. In the current study, however, happiness, excitement, safety and relief were included. Most of the depression studies relied on positive affectivity measures that focused

on the experience of feelings of happiness and amusement among individuals. Most experiments designed to elicit positive feelings in the participants showed them only one class of positive stimuli which are usually amusing films or positive photos (e.g., Berenbaum & Oltmanns, 1992; Rottenberg et al., 2002), or a variety of positive photos to examine general positive responses (Allen et al., 1999; Sloan et al., 2001). Thus, researchers have not answered this question yet: are deficits in the experience of positive emotion in depressed people specific to one emotion such as amusement or are they general across several positive feelings? In their study, Gruber and colleagues (2011) found that depression may be related to a greater degree of deficit in feelings of pride rather than other positive feelings as well as a decreased positive emotional reaction to the pride-eliciting object. This separates from the idea that depression is linked with a global and uniform deficit in all types of positive feelings. Depression appears to be associated with decreased feelings of happiness, amusement and pride according to most of the studies. Feeling excited, safe and relief may not be related to emotional functioning in depression.

Another possible account for this result might be the variety in emotional responses between more serious types of depression disorders. That is to say, a person diagnosed with major depression disorder distinguishes from another person diagnosed with dysthymic disorder in terms of emotional experiences. Participants in the studies diverge from patients diagnosed with a major depressive disorder to the analog samples. On the other hand, existing research studying the association between negative and positive feelings with depression in children is mostly conducted with inpatient participants (Lonigan, Carey, & Finch, 1994). In the current study, however, a normal sample was used and no pre-screening for severe forms of depression was made. Thus, the experience of general positive emotions may decrease in a high level of depression whereas it is difficult to observe this trend in a normal sample or other types of depression.

Another reason for the rejection of second hypothesis could be cultural differences between Turkish and Western samples which usually dominate the depression literature. In opposition to Western culture studies, the current finding

claims that Turkish children who tend to show more symptoms of depression when assessed with a self-report do not attribute less positive feelings to the characters in the CLCS pictures. It might be that Turkish children perceive others from a more positive perspective and judge them to be happier while overrating their own negative feelings and maintaining negative self-esteem. However, no study has been found to investigate a comparison between Turkish children's perception of others and self-esteem patterns. In support of this account, it was found that 30% of children in the sample of the current study is above the recommended cutoff score for clinical significance whereas only 14% of children need attention of clinicians when the distribution of CDI – 2 scores in standardization sample was investigated (Kovacs et al., 2011).

Thirdly, in the present study, it was hypothesized that the correlation of depression scores on the CDI-2 and negative valence scores on the CLCS in mobile children's group would be significantly higher when compared with the correlation in the non-mobile children's group. It is apparent to observe that negative emotional states increase with depression in children and adolescents (Lonigan et al., 1994). According to life events literature, high rates of mobility is linked with unpleasant emotions and childhood depression (Brown & Orthner, 1990; Stoneman, Brody, Churchill, & Winn, 1999), since being frequently mobile asserts as a stressor on individuals which may trigger negative feelings and precipitate depression (Inoko, Ioki, Miyashita, Kodaira, & Osawa, 2010). Thus, it was expected to see a stronger correlation between depressive symptoms and negative emotions in mobile children compared to the control group. However, the third hypothesis was not confirmed.

One explanation for this result may be that residential mobility has a multifaceted and complex influence on children. Psychoanalytic theories state that every individual differs in their reaction to life changes based on their early experiences in object relations (Klein, 1935, 1940; Winnicott, 1958; Bowlby, 1969). Infants who are exposed to a valuable object loss in the very early years, may feel angry about it for many years. Life changes may have a triggering function as a reminder of these early memories which would awake negative feelings of

sadness, anger, irritability. Children who do not find support from their parents could have difficulties to deal with changes. Thus, they could feel depressed when exposed to this loss and in extreme cases, they might have depressive episodes. Moving home came along with losing the old home and the neighborhood. However, not every child reacts the same to moving a home based on several factors. Children's emotional intensity (temperamental style), regulation skills, degree of family conflict and child's relationship with other family members were found to be moderating factors of mobile children's reactions to change (Stoneman et al., 1999). Children with low emotional intensity and high emotion regulation skills, children living in a family which is rather harmonious and stable and, lastly, children who feel safe in family environment were reported to be non-depressed with fewer experience of unpleasant feelings. Moreover, these results were acquired from a study conducted with children of low SES families which is similar to the demographic characteristics of the current study. On the other hand, the current study did not include any measure to assess children's temperament styles, which may have played a role as a confounding variable of negative valence and depression symptoms. Furthermore, in the present study, a normal sample was used. There existed only three deceased fathers while all the mothers were reported to be alive in the total sample. In the residentially mobile group, approximately every nine children out of ten were living either in an only nuclear family or in a nuclear family with at least one member of close relatives such as grandmother and/or grandfather. Every one mobile child out of ten, however, was reported to live in a family where mother or father was absent. More than half of the participants had only one sibling or none. These statistics about the family characteristics showed us the sample was not quantitatively chaotic and most of them appeared to have their parents in the same home. Most importantly, mobile children group consisted of families most of whom moved only once in the last 5 years. In other words, those mobile children seem to experience only one moving home experience with their families, which could be an important explanation for this result.

Another reason for the rejection of the third hypothesis could be the wide scope of the operation definition for being a mobile child. In the literature, the

frequency of moves is commonly asked to the participants in order to explore the effects of residential mobility (Jelleyman & Spencer, 2008). In the current research, being mobile was defined as moving home at least once in the last five years due to the restricted number of mobile children in the sample; out of 74 mobile families, 48 families moved once in the last five years while 15 families moved twice and 10 families reported to have moved three times in that time. Only one family reported having moved five times. However, in the literature frequent moves were associated with following mental health difficulties. For example, in a Canadian survey conducted with 11 years old children, it was claimed that a lifespan moving place for 3 or 4 times was linked to asking for psychological counseling (Jelleyman & Spencer, 2008). Moreover, literature indicated that the more distance the family moves, the more negative effects they experience, especially in terms of social disruption. Nevertheless, among those at least once relocated families in the current study, 41 of them reported to have moved within the same district; 21 families moved to another district; 9 families moved to from one city to another city; and 3 families moved to a different country. It may be the case that for the majority of the mobile children in the present study the mobility experience was not followed by challenging changes of neighborhood change, school change, peer environment change etc. since they did not move far from the previous home.

4.2.Evaluation of the Results of the Additional Analyses

First of all, further correlational analyses were made between the measures and three variables of the study, age, income, and the number of households, which were reported to be associated with depressive symptoms according to previous studies. Previous research investigated the link between depression and family variables. Crowded families have been found to be related to depressive symptoms (Evans, Saltzman & Cooperman, 2001). In general, household chaos was also documented to be correlated with an increase in internalizing problems of children and adolescents. In those studies, chaotic family environments were to be characterized by several features, i.e., the greater number of family members in the household, increased number of moves in the last year, low family income,

parenting stress (Dumas et al., 2005). Specifically, Lewinsohn and colleagues (1994) reported that the number of biological parents present at home and age was related to depressive symptoms in adolescents. Socioeconomic status of the family and depressive symptoms have been found to be associated with greater income indicating decreased symptoms of depression (Zimmerman & Katon, 2005). In the current study, positive feelings have been found to be negatively correlated with age, that is, with the adolescence feelings of happiness, excitement, safety and relief reduced. This result was parallel with the previous research claiming an increase in depressive symptoms in adolescence which were portrayed by the diminishing experience of positive emotions. On the other hand, the number of the household as an independent variable was found to be correlated with three research variables: positive emotions, depressive symptoms, and income. Interestingly, the present analyses showed that depressive symptoms and positive emotions increased with the number of family members. The former result is in support of previous findings linking depressive symptoms with household chaos (Dumas et al,. 2005). One explanation for this result could be that the child may feel unsupported by parents in the presence of other siblings/family members. The positive correlation between pleasant emotions and crowded houses seem to be challenging. The children may feel more cheerful and encouraged to express their pleasant feelings with the presence of other close relatives in the home, such as grandparents which may be the case for the latter result. However, most importantly, the number of siblings has been found to be related with the theory of mind skills of children. In detail, children with 2 or more siblings yielded significantly higher scores on the batteries designed for the assessment of theory of mind performance than those with no siblings (McAllister & Peterson, 2007) since they grow through more conversational and social experiences in those family environments. Lastly, the increased number of family members in the home was reported to be correlated with decreased income levels. It may be the case that, as the number of children increases, mothers tend to stay at home in order to care for children, which means a significant decrease in total income. On the other hand, the mothers in crowded families may have more difficulties to find a job since they may also have lower education levels.

The correlations among measures and sub-measures of the study were investigated. Unpleasant feelings were also found to be in association with negative mood/physical symptoms. On the other hand, positive feelings were detected to be negatively correlated with negative mood and physical symptoms and negative self-esteem. These results were in support of previous research and symptoms of depression (DSM-V; American Psychiatric Association, 2013). As described in DSM-V, increased negative feelings and diminished experience of positive feelings are related with other depressive symptoms which are characterized by decreased pleasure experience, anhedonia, physical symptoms of tiredness and sleep problems, as well as, seeing self, others, and world with negative lenses (Watson & Tellegen, 1985; Sheeber et al., 2009). Put differently, negative mood and self-esteem increase as positive feelings decreases. Furthermore, people with low self-esteem were found to be exposed to and experience unpleasant feelings more frequently than those with high self-esteem (Goswick & Jones, 1981).

The present study investigated the effect of mobility on the interaction between children's emotions and depressive symptoms. Thus, a stronger relationship between negative feelings and depressive symptoms in mobile children group rather than the non-mobile group was suggested. However, this hypothesis was not supported. Therefore, further analyses were conducted in order to compare emotion valence experiences and total depressive symptoms of participants between mobile and non-mobile groups. A better understanding of the effect of mobility on children's emotions and depressive symptoms was aimed. The results revealed no significant differences between the two groups in terms of the CLCS and CDI – 2 total scores. The explanations that were presented for the rejection of the third hypothesis could be also valid for the current result acquired in the further statistical analyses: the multifaceted effect of mobility on children according to the individual, familial and environmental moderating variables and the wide operational definition of being mobile in the current study.

In the light of the existing literature gender differences in depressive symptoms and emotion valence were explored in exploratory statistical analyses.

No differences between girls and boys were observed in terms of their depression and emotion valence scores. Differences in the rates of depression according to the gender of individuals have been well-documented so far, with female adults nearly twice as likely to suffer from depression symptoms as males (Angold, Erkanli, Silberg, Eaves, & Costello, 2002; Costello, Mustillo, Erkanli, Keeler, & Angold, 2003; Hasin, Goodwin, Stinson, & Grant, 2005). Remarkably, gender differences in the rates of depression start to emerge with the beginning of adolescence, with similar rates among boys and girls until puberty, but much more rapidly elevating rates among adolescent girls compared to adolescent boys (Hankin et al., 1998). Since the age range of the current sample includes children between eight and fourteen years old, the result of the additional analyses appears to be consistent with the previous research claiming that differences between gender in depressive symptoms start with puberty. Literature also suggested that negative emotions of sadness and fear are easier to express for girls than boys because during the socialization of children in the family especially fathers rewarded their daughters for expressing such feelings whereas disapproved and punished their sons for such disclosure (Brody & Hall, 1993). Birnbaum and Croll (1984) reported that parents were more welcoming of feelings of anger expressed by boys than by girls. Brody and Hall (1993) stated that boys compared to girls tend to express more feelings of anger. However, in the present study, those internalizing and externalizing feelings were classified into one cluster of emotion valence, negative emotions, which may be one reason for finding no difference in negative emotions according to the gender. Another explanation for that result could be the use of a projective tool since boys may feel more comfortable to express their feelings through a person in the image that they feel identified and they could project their suppressed feelings onto. On the other hand, no research has been found investigating the gender differences in the expression of positive feelings.

4.3.Strengths and Limitations of the Study

The current study was conducted with 233 Turkish children from whom demographic information related to gender, age, family members and atmosphere,

socioeconomic status, and mobility experiences were gathered. Those variables were important to analyze their effects on the measures of the study and they are one of the strong sides of the study. However, more information regarding familial parameters such as parental stress and depression, parent-child relationship, family conflict, and if exists, divorce or separation of parents was not gathered even though all these factors were found to be related to depression and emotions in children. Moreover, more information considering the experience of moving home(s) was not asked such as parents' and child's interpretation of this life event as an advantage or disadvantage. Even though the sample size is not small for the current study, the unequal proportion of non-mobile and mobile children was a limitation, which could be a reason for not significant results. On the other hand, larger sample size was necessary to run factor analyses for the current study. Besides, the age range was also restricted to children between 8 and 14 years old, which was both a strength and a limitation for the present work. A restricted age range helps to analyze findings in a more detailed scope whereas the age range of the study includes both latency children, pre-puberty children and adolescents which may act as a confounding variable.

In order to assess emotion valence of participants, a pictorial projective tool called the CLCS was used which could be counted as the strong feature of the study, since children tend to focus better and enjoy pictorial instruments more than structured totally verbal tests. Moreover, projective tests are a better way to get information from children about their emotions because they may have difficulties when questions were asked directly (Woolgar, 1999). Nonetheless, there exist some limitations regarding the CLCS. The order of the images in the CLCS was altered as a result of the pilot testing process. The original order was depicting a residential mobility/migration experience from beginning to end. However, due to the time restrictions qualitative part of the images which were not included in the study was reduced and as a result of this change the order was restructured, but this time creating independent stories for each image rather than a whole mobility story. The images contain themes about peer relations, school environment, family atmosphere and relationship with specific family members.

In the CLCS, no card regarding relationship with mother was involved which was a significant issue in assessment of emotion valence and impact of mobility on children. Furthermore, the original CLCS was including answer option "other" which could be selected by participants who were then asked to write any emotion that they think the character in the card may predominantly feel. The evaluation of these options was not included in the scoring phase, which is a limitation for the study. Lastly, only the valence of emotions was taken into consideration in the analyses, whereas emotion activation was disregarded since emotion options in the CLCS scale could not properly cover activation levels of emotions according to the findings of Watson and Tellegen (1985). According to Izard (1977), classification of emotions in terms of valence brings about a reductionism, and this could be a limitation for the current work.

The data was collected from children and demographic information was gathered from the parents, mostly mothers. Child participants were the only source for children's depressive symptoms and emotion valence. Although collecting the data from the direct source was the strong side of this study, the informant variety was limited. There exist a lack of data from multiple sources such as parents, teachers, and peers, which would increase the reliability of the results. According to the Achenbach System of Empirically Based Assessment (ASEBA, Achenbach & Rescorla, 2013), clinicians should adopt a comprehensive research approach in which they would employ multi-informant assessment. Moreover, the study design included mostly correlational analyses which make it impossible to infer any causality relationships among those variables.

The convenience sampling method was employed in order to choose participants. This sampling method has its own disadvantages because it does not offer a random sampling. That is, the sample consisted of students in the public schools of a low-income district called Eyüp which could not be generalized into the whole society. Furthermore, school counselors decided the selection of the classrooms which would participate in the project. The classroom conditions and

the time restriction of data collection were also limitations that may have distracted their attention.

4.4.Future Directions for Research

A further study including comparable numbers of non-mobile and mobile children and assessment of depression and emotion valence by multiple informants would provide further information for the investigation of the relationship between depressive symptoms and emotion valence in samples of mobile and non-mobile children. When the clinical and demographic characteristics of the sample are regarded, a replication of the study together with a nonclinical sample and a sample consisting of participants diagnosed with depression would provide valuable information on the association among the current variables. In this study, all mothers were reported to be alive while three fathers were deceased. Looking into the current analyses with more detailed lenses revealed that children whose fathers were deceased moved at least once in the last 5 years and they were more depressed. The presence of parent(s) while moving and its effects on emotions and depression should further be examined. Similarly, additional measures and variables on child and parental characteristics would strengthen the results of the study in terms of inferring more controlled conclusions on the effects of mobility on depressive symptoms and emotion valence. For this purpose, information about the temperament of children, familial parameters such as parental stress and depression, parent-child relationship, family conflict, divorce or separation of parents should be collected in future research, since all these factors were found to be related to depression and emotions in children. The current study revealed that the relationship between household chaos and depression and emotions needs more attention from researchers. In light of previous studies, income levels and the number of family members were used as a variable to represent the chaotic family environment. However, more variables should be added such as life events experienced by a family in the last one year, quality of neighborhood environment and residents in the home and their closeness to the child.

Future studies should also take more information regarding the experience of moving home from different sources, such as parents' and child's interpretation of this experience as a pleasant or unpleasant event. The operational definition of mobility should become more restricted compared to the one in this study, i.e., frequency of the mobility could be increased or time frame including the mobility could be shortened. In the current study, no effect of gender on depression and emotion valence was found which was contrary to previous findings conducted with adults and adolescent samples. Thus, the antecedents and etiology of depressive disorders according to gender should be further investigated since it seems that a divergence in the prevalence of depression in terms of gender begins only after adolescence.

In the present study, in order to classify the emotions, the valence of emotions has been used. Emotions were classified as positive and negative for an inference of correlational analyses with depressive symptoms. Further research should explore the association between depressive symptoms and distinct affect experiences, such as excitement, safety and relief. Moreover, the relationship of depressive symptoms with not only emotion valence, but also with emotion activation should be studied in the light of existing theories. Researchers should also investigate the feelings marked in the other section of the CLCS. A theme about mother-child interaction could also be added to the CLCS cards. Moreover, an adult version of the CLCS should be developed in order to produce further studies on parent-child dyads. Further studies should be done using the CLCS, especially with children who were exposed to major life events of relocation such as migration, since the CLCS is designed as a tool to investigate the effects of life events related to mobility on children.

4.5.Implications and Conclusions

To the best of the knowledge, the current study is the first study investigating the impact of the experience of moving home(s) on school-aged children's emotions and depressive symptoms using a projective technic in a

Turkish sample. Teachers encounter a lot of students who have been exposed to stressful life events in Turkey, particularly in public schools in low to middle-income neighborhoods. It was aimed that this newly developed instrument would support school counselors in screening the psychological symptoms in children and adolescents and, if needed, refer them to further assessment and treatment.

The current study found that negative feelings and depressive symptoms were closely related. Participants who reported high symptoms of depression tended to reflect negative feelings of unhappiness, anger, fear and guilt onto the person in the picture whom they were expected to identify with. The CLCS, a projective scale, found depressive signs in adolescents like the CDI. It could be suggested that clinicians working with depressive but resistant children could use projective techniques to learn about their patients' emotional world. Experience of negative feelings constitutes an important part of depressive symptoms. The result of this study showed that mental health professionals should prepare treatment plans focused on the feelings of their depressed clients.

In exploratory analyses, it was revealed that the experience of positive feelings decreases as the age increases. In other words, adolescent participants were found to report less positive feelings when they evaluated the emotional world of the person in the picture with life events. Clinicians should be aware of adolescents' depressive feelings and in schools there should be regular mental health screening for them. The Ministry of education should develop policy and regulations for children with life events. In further analyses, the number of the family members living at the same home with a child has been found to be linked with the two main measures of the study. It was documented that the experience of positive emotions and depressive symptoms is greater in crowded families. In crowded families, either with high number of siblings and/or with other close relatives (mostly grandmothers and grandfathers) children might be living with demanding and preoccupied parents. Thus, bad parenting practices might negatively affect children's psychology. On the other hand, children would have more play partners with the presence of other siblings and close relatives. The multiple dimensions and their

effects on childhood depression in crowded families should further be explored. All in all, clinicians should investigate the family dynamics of a patient since household environment has got a greater influence on children's emotional world. Furthermore, the present study stated that negative mood and physical complaints and negative self-esteem elevates as experience of positive emotions diminishes when controlled for several demographic variables. Feeling positive is not only important for mental health but also for body health. Considering the association between positive emotions and negative self-esteem, it could be suggested that children who have rather poor self-image tend to perceive others and world from a negative perspective. Lastly, the current study did not reveal significant results for the effect of mobility on emotions and depressive symptoms of children which could be further investigated. Mobility could be a huge stressor in children's life. In the light of the existing literature, teachers should be informed about the mobility experiences of students so that they could provide them with emotional support as they needed. Children should also be informed before they move so that they may feel some control about this life event.

In conclusion, the present work indicated the close relationship between experience of unpleasant feelings and depressive symptoms in children while exploring influence of various demographic variables on their internal world. It is hoped that mental health professionals would benefit from the findings considering the strong link between emotions and depression in children. Further research should be conducted to shed light on the mediating roles of possible other variables which are related to depression, emotions and mobility experiences.

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APPENDICES

Appendix 1. The Parental Consent Form

Sayın Veli,

Bu araştırma İstanbul Bilgi Üniversitesi Klinik Psikoloji Yüksek Lisans Programı öğretim üyesi Yard. Doç. Dr. Elif Akdağ Göçek tarafından yürütülmektedir. Araştırmanın amacı çocukların yaşam olayları algısını anlamak üzerinedir.

Araştırmaya katılmayı kabul ettiğiniz takdirde size ve velisi olduğunuz çocuğa doldurması için bazı formlar verilecektir. Dolduracağınız bu formlar araştırmacılar dışında hiç kimse tarafından görülmeyecek, tamamen gizli kalacaktır. Bilgileriniz bilgisayar ortamına isimleriniz kaldırılarak geçirilecek ve kilitli dolaplarda tutulacaktır. Araştırma verileri yalnızca bilimsel amaçlar için kullanılacaktır.

Araştırma için onay verdiğiniz takdirde çocuğunuzla 50 dakika süresince uygulama yapılacaktır. Bu formu imzaladıktan sonra da araştırmadan ayrılma hakkına sahipsiniz. Bu araştırma için gerekli resmi izinler alınmış bulunmaktadır.

Araştırma hakkında daha fazla bilgi almak için İstanbul Bilgi Üniversitesi Klinik Psikoloji Yüksek Lisans Programı Öğretim Üyesi Yard. Doç. Dr. Elif Akdağ Göçek (e-posta: elif.gocek@bilgi.edu.tr) veya Psk. Serra Küpçüoğlu (e-posta: serra.kupcuoglu@bilgiedu.net) ile iletişim kurabilirsiniz.

Lütfen kararınızı aşağıda işaretleyiniz:

İZİN VERİYORUM : ☐

İZİN VERMİYORUM : ☐

Veli Adı-Soyadı: .....

Yakınlık Derecesi: …….

İmza: ..... Tarih: ……

Appendix 2. The Youth Consent Form

Merhaba.

Bu çalışmada çocukların yaşam olayları algısını anlamak istiyoruz. Eğer katılmayı kabul edersen senden bazı formları doldurmanı isteyeceğim. Dolduracağın formlar araştırmacılar dışında hiç kimse tarafından görülmeyecek, bilgilerin tamamen gizli kalacaktır.

Velin bu çalışmaya katılmana izin verdi. Sen de istiyorsan aşağıdaki onay kutusunu işaretle.

Fikrini değiştirirsen çalışmadan istediğin zaman çıkabilirsin.

Bu araştırma İstanbul Bilgi Üniversitesi Öğretim Üyesi Yard. Doç. Dr. Elif Akdağ Göçek tarafından yürütülmektedir. Araştırma hakkında daha fazla bilgi almak istersen Psk. Serra Küpçüoğlu (e-posta: serra.kupcuoglu@bilgiedu.net) ile iletişim kurabilirsin.

Lütfen kararını aşağıda işaretle:

Bu çalışmaya katılmayı **İSTİYORUM**: ☐

Bu çalışmaya katılmayı **İSTEMİYORUM**: ☐

Tarih:

Adı-Soyadı:

Okul Adı:

Sınıf:

Appendix 3. Demographic Information Form

<table>
<tr><td colspan="2">Çocuğun Adı ve Soyadı:</td></tr>
<tr><td colspan="2">Çocukla olan yakınlığınız: ☐ Annesi ☐ Babası ☐ Diğer (belirtiniz) :</td></tr>
<tr><td>Yaşınız:</td><td>Çocuğun annesi: ☐ Sağ ☐ Hayatta değil
Çocuğun babası: ☐ Sağ ☐ Hayatta değil</td></tr>
<tr><td>Çocuğun Cinsiyeti: Kız / Erkek</td><td>Çocuğun Doğum Tarihi: …. / … / ……</td></tr>
<tr><td>Ailedeki çocuk sayısı: _____ Kaçıncı Çocuk: _____</td><td>Çocuk kaçıncı sınıfa gidiyor: _____</td></tr>
<tr><td>Eğitim Durumunuz:
☐ Okula gitmemiş
☐ İlköğretim
☐ Ortaokul
☐ Lise
☐ Üniversite
☐ Yüksek Lisans/Doktora</td><td>Ailenin Aylık Ortalama Geliri:
☐ 0 – 1000 TL ☐ 4501 – 6000 TL
☐ 1000 – 1500 TL ☐ 6001 – 7500 TL
☐ 1501 – 2500 TL ☐ 7501 – 9000 TL
☐ 2501– 3500TL ☐ 9001 – 10500 TL
☐ 3501 – 4500 TL ☐ 10501 TL ve üzeri</td></tr>
<tr><td>Evde çalışan kişi sayısı: _____</td><td>☐ Kirada oturuyoruz ☐ Ev sahibiyiz</td></tr>
<tr><td colspan="2">Evde yaşayan kişi sayısı :_____
Evde yaşayanların kimler olduğu (anne, baba, kardeş, teyze, amca vs.):</td></tr>
<tr><td colspan="2">Bulunduğunuz adreste kaç yıldır yaşıyorsunuz?</td></tr>
<tr><td colspan="2">Son 5 yılda taşındınız mı? ☐ Evet ☐ Hayır
Evet ise; nereden nereye taşındığınızı ve kaç kez taşındığınızı belirtiniz.
☐ Aynı ilçe içerisinde 0-----1---- 2-----3----4-----5----6---- Daha fazla : …….
☐ Farklı ilçeye 0-----1---- 2-----3----4-----5----6---- Daha fazla : …….
☐ Farklı ile 0-----1---- 2-----3----4-----5----6---- Daha fazla : …….
☐ Farklı ülkeye 0-----1---- 2-----3----4-----5----6---- Daha fazla : …….
Taşınma nedenini yazınız. (örn. aile, iş, doğal afet, savaş, terör gibi):</td></tr>
<tr><td colspan="2">*Bu çalışma göçmen kişilerle de yapıldığından aşağıda size uygun olmadığını düşündüğünüz soruları boş bırakabilirsiniz.
Türkiye’ye başka bir ülkeden taşındıysanız;
Hangi ülke veya ülkelerden geldiniz? :
Türkiye’ye geliş yılı :</td></tr>
<tr><td colspan="2">Mülteci Kamplarında kaldıysanız süresi:</td></tr>
</table>

Appendix 4. The Children's Life Changes Scale

CLCS

"Burada birçok resim var. Her resimdeki çocuğun duygusunu işaretlemeni istiyorum. İlk 6 resimde senden resimle ilgili bir hikaye yazmanı da isteyeceğim. Resme dikkatle bak. Hayal gücünü kullanarak satırlara kendi hikayeni yazabilirsin. Bu hikayelerde doğru ya da yanlış olmayacak. Herkes kendi hikayesini istediği gibi yazabilir."

Adı-Soyadı:

Okul Adı:

Sınıfı:

Yaşı:

Doğum Tarihi:

Bugünün Tarihi:

Resimdeki çocuk ne hissediyor?

Resimdeki çocuk için aşağıdaki duygulardan en uygun olan bir tanesini işaretle. Eğer aşağıdaki duygular uymuyorsa "diğer" kısmına çocuğun hissettiği bir duyguyu yaz.

a) mutlu b) korkmuş c) suçlu d) heyecanlı e) mutsuz f) güvenli g) öfkeli h) rahat

ı) diğer:

Resimle ilgili bir hikaye yaz:

_____

_____

_____

_____

_____

_____

_____

_____

(Arka sayfaya devam edebilirsiniz)

Resimdeki çocuk ne hissediyor?

Resimdeki çocuk için aşağıdaki duygulardan en uygun olan bir tanesini işaretle. Eğer aşağıdaki duygular uymuyorsa "diğer" kısmına çocuğun hissettiği bir duyguyu yaz.

a) mutlu b) korkmuş c) suçlu d) heyecanlı e) mutsuz f) güvenli g) öfkeli h) rahat

ı) diğer:

Resimle ilgili bir hikaye yaz:

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_____

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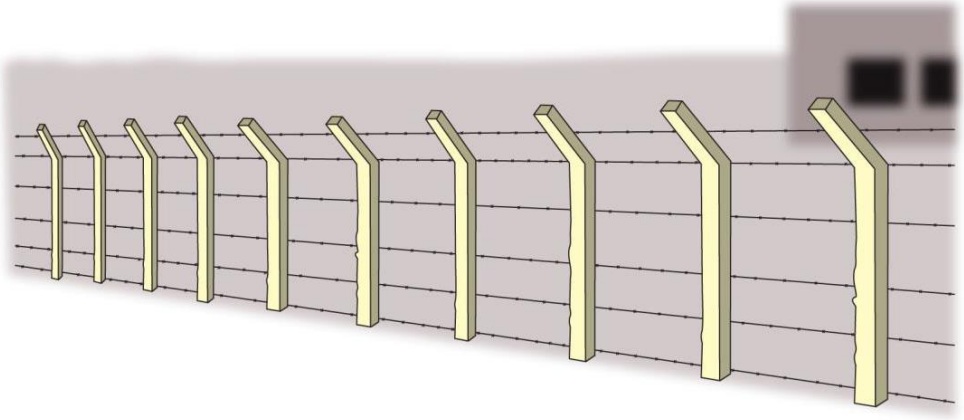
_____

_____

_____

_____



Resme bakınca ne hissediyorsun?

Eğer aşağıdaki duygular uymuyorsa "diğer" kısmına hissettiğin bir duyguyu yaz.

a) mutlu b) korkmuş c) suçlu d) heyecanlı e) mutsuz f) güvenli g) öfkeli h) rahat

ı) diğer:

Bu resimde hiç insan yok. Yine de resme bak ve hayal gücünü kullanarak resimle ilgili aklına gelen bir hikaye yaz:

_____

_____

_____

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_____

_____

Resimdeki çocuk ne hissediyor?

Resimdeki çocuk için aşağıdaki duygulardan en uygun olan bir tanesini işaretle. Eğer aşağıdaki duygular uymuyorsa "diğer" kısmına çocuğun hissettiği bir duyguyu yaz.

a) mutlu b) korkmuş c) suçlu d) heyecanlı e) mutsuz f) güvenli g) öfkeli h) rahat

ı) diğer:

Resimle ilgili bir hikaye yaz:

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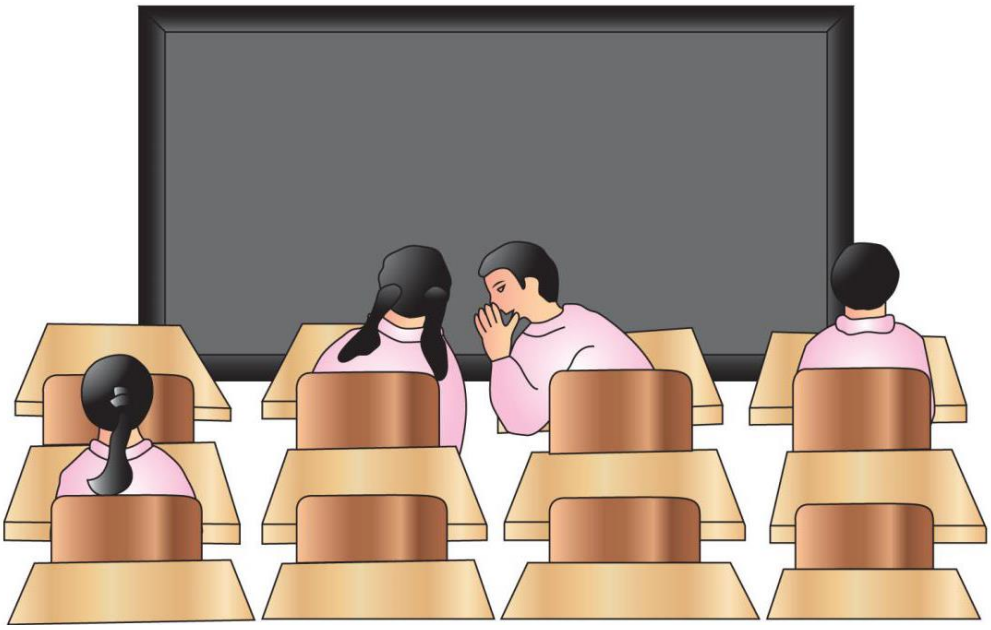
_____



Resimdeki çocuk ne hissediyor?

Resimdeki çocuk için aşağıdaki duygulardan en uygun olan bir tanesini işaretle. Eğer aşağıdaki duygular uymuyorsa "diğer" kısmına çocuğun hissettiği bir duyguyu yaz.

a) mutlu b) korkmuş c) suçlu d) heyecanlı e) mutsuz f) güvenli g) öfkeli h) rahat

ı) diğer:

Resimle ilgili bir hikaye yaz:

Resimdeki çocuk ne hissediyor?

Resimdeki çocuk için aşağıdaki duygulardan en uygun olan bir tanesini işaretle. Eğer aşağıdaki duygular uymuyorsa “diğer” kısmına çocuğun hissettiği bir duyguyu yaz.

a) mutlu b) korkmuş c) suçlu d) heyecanlı e) mutsuz f) güvenli g) öfkeli h) rahat

ı) diğer:

Resimle ilgili bir hikaye yaz:

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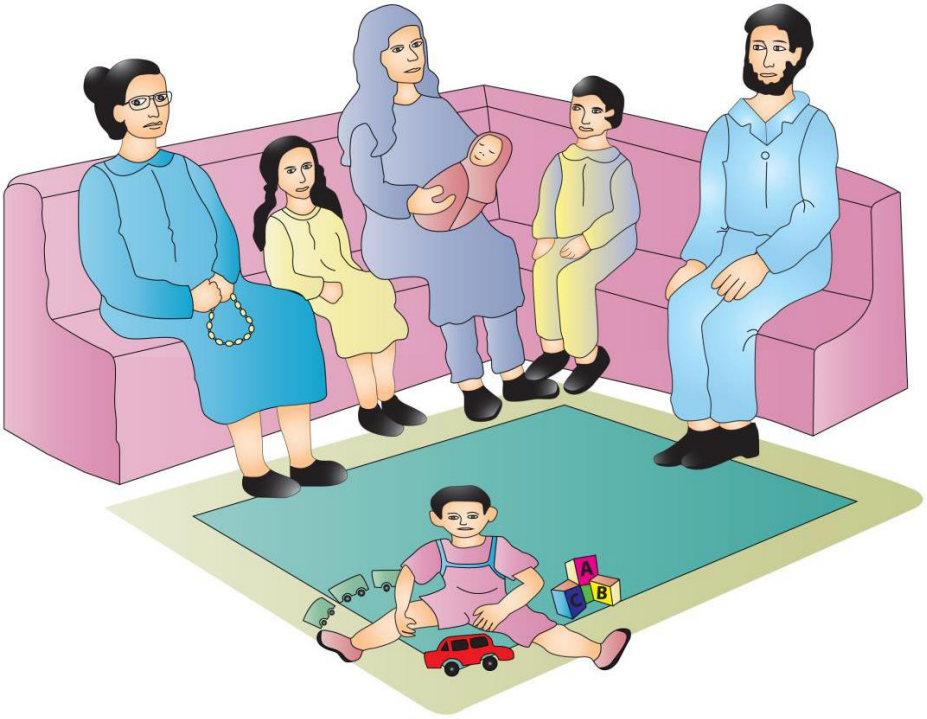
_____



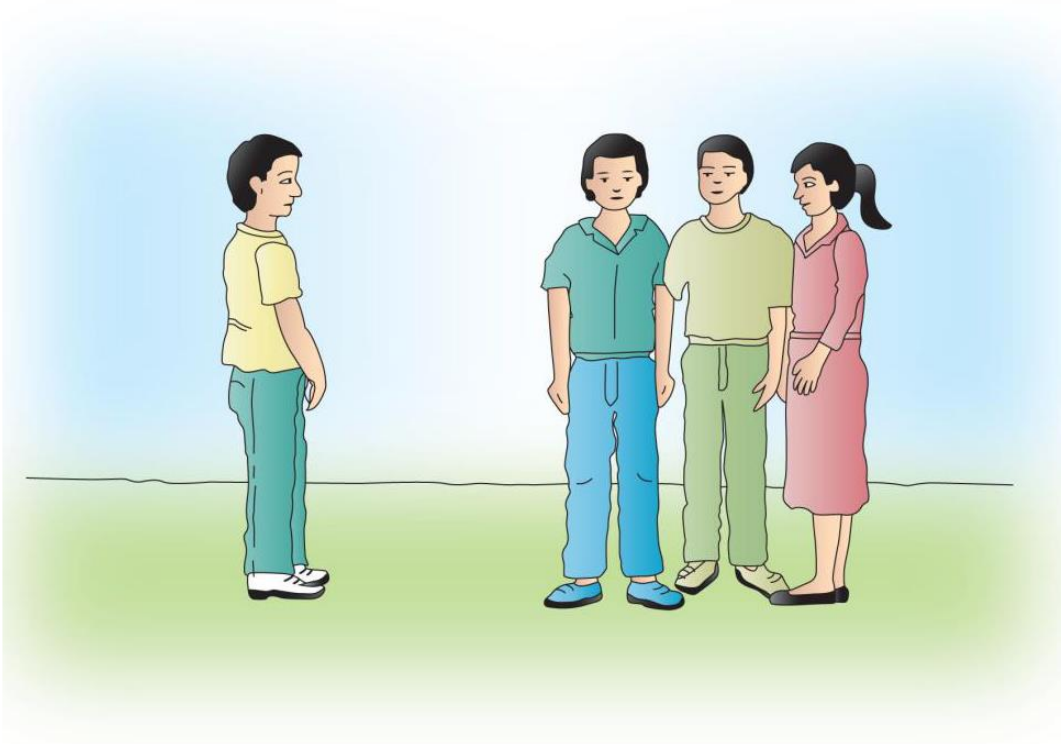
Resimdeki çocuk ne hissediyor?

Resimdeki çocuk için aşağıdaki duygulardan en uygun olan bir tanesini işaretle. Eğer aşağıdaki duygular uymuyorsa “diğer” kısmına çocuğun hissettiği bir duyguyu yaz.

a) mutlu b) korkmuş c) suçlu d) heyecanlı e) mutsuz f) güvenli g) öfkeli h) rahat

ı) diğer:

Bu ve bundan sonraki resimler için hikaye yazılmayacak. Sadece çocuğun duygusunu işaretlemen yeterli.



Resimdeki çocuk ne hissediyor?

Resimdeki çocuk için aşağıdaki duygulardan en uygun olan bir tanesini işaretle. Eğer aşağıdaki duygular uymuyorsa “diğer” kısmına çocuğun hissettiği bir duyguyu yaz.

a) mutlu b) korkmuş c) suçlu d) heyecanlı e) mutsuz f) güvenli g) öfkeli h) rahat

ı) diğer:

Hikaye yazılmayacak.

Resimdeki çocuk ne hissediyor?

Resimdeki çocuk için aşağıdaki duygulardan en uygun olan bir tanesini işaretle. Eğer aşağıdaki duygular uymuyorsa "diğer" kısmına çocuğun hissettiği bir duyguyu yaz.

a) mutlu b) korkmuş c) suçlu d) heyecanlı e) mutsuz f) güvenli g) öfkeli h) rahat

ı) diğer:

Hikaye yazılmayacak.

Resimdeki çocuk ne hissediyor?

Resimdeki çocuk için aşağıdaki duygulardan en uygun olan bir tanesini işaretle. Eğer aşağıdaki duygular uymuyorsa "diğer" kısmına çocuğun hissettiği bir duyguyu yaz.

a) mutlu b) korkmuş c) suçlu d) heyecanlı e) mutsuz f) güvenli g) öfkeli h) rahat

ı) diğer:

Hikaye yazılmayacak.

Resimdeki çocuk ne hissediyor?

Resimdeki çocuk için aşağıdaki duygulardan en uygun olan bir tanesini işaretle. Eğer aşağıdaki duygular uymuyorsa “diğer” kısmına çocuğun hissettiği bir duyguyu yaz.

a) mutlu b) korkmuş c) suçlu d) heyecanlı e) mutsuz f) güvenli g) öfkeli h) rahat

ı) diğer:

Hikaye yazılmayacak.

Appendix 5. The Children's Depression Inventory

Aşağıda gruplar halinde bazı cümleler yazılıdır. Her gruptaki cümleleri dikkatlice okuyunuz. Her grup için, bugün dahil son iki hafta içinde size en uygun olan cümlenin yanındaki numarayı daire içine alınız.

1) 0. Kendimi arada sırada üzgün hissederim.
1. Kendimi sık sık üzgün hissederim.
2. Kendimi her zaman üzgün hissederim.

2) 0. İşlerim hiçbir zaman yolunda gitmeyecek.
1. İşlerimin yolunda gidip gitmeyeceğinden emin değilim.
2. İşlerim yolunda gidecek.

3) 0. İşlerimin çoğunu doğru yaparım.
1. İşlerimin birçoğunu yanlış yaparım.
2. Her şeyi yanlış yaparım.

4) 0. Birçok şeyden hoşlanırım.
1. Bazı şeylerden hoşlanırım.
2. Hiçbir şeyden hoşlanmam.

5) 0. Ailem için önemliyim.
1. Ailem için önemli olup olmadığımdan emin değilim.
2. Ailem bensiz daha iyi.

6) 0. Kendimden nefret ederim.
1. Kendimi beğenmem.
2. Kendimi beğenirim.

7) 0. Bütün kötü şeyler benim hatam.
1. Kötü şeylerin bazıları benim hatam.
2. Kötü şeyler genellikle benim hatam değil.

8) 0. Kendimi öldürmeyi düşünmem.
1. Kendimi öldürmeyi düşünürüm ama yapmam.
2. Kendimi öldürmeyi düşünüyorum.

9) 0. Her gün içimden ağlamak gelir.
1. Bir çok günler içinden ağlama gelir.
2. Arada sırada içimden ağlamak gelir.

10) 0. Her zaman huysuzumdur.
1. Çoğu zaman huysuzumdur.

2. Arada sırada huysuzumdur.

11) 0. İnsanlarla beraber olmaktan hoşlanırım.
1. Çoğu zaman insanlarla beraber olmaktan hoşlanmam.
2. Hiçbir zaman insanlarla beraber olmaktan hoşlanmam.

12) 0. Herhangi bir şey hakkında karar verememem.
1. Herhangi bir şey hakkında karar vermek zor gelir.
2. Herhangi bir şey hakkında kolayca karar veririm.

13) 0. Güzel/yakışıklı sayılırım.
1. Güzel/yakışıklı olmayan yanlarım var.
2. Çirkinim.

14) 0. Okul ödevlerimi yapmak için her zaman kendimi zorlarım.
1. Okul ödevlerimi yapmak için çoğu zaman kendimi zorlarım.
2. Okul ödevlerini yapmak sorun değil.

15) 0. Her gece uyumakta zorluk çekerim.
1. Birçok gece uyumakta zorluk çekerim.
2. Oldukça iyi uyurum.

16) 0. Arada sırada kendimi yorgun hissederim.
1. Birçok gün kendimi yorgun hissederim.
2. Her zaman kendimi yorgun hissederim.

17) 0. Hemen her gün canım yemek yemek istemez.
1. Çoğu gün canım yemek yemek istemez.
2. Oldukça iyi yemek yerim.

18) 0. Ağrı ve sızılardan endişe etmem.
1. Çoğu zaman ağrı ve sızılardan endişe ederim.
2. Her zaman ağrı ve sızılardan endişe ederim.

19) 0. Kendimi yalnız hissetmem.
1. Çoğu zaman kendimi yalnız hissederim.
2. Her zaman kendimi yalnız hissederim.

20) 0. Okuldan hiç hoşlanmam.
1. Arada sırada okuldan hoşlanırım.
2. Çoğu zaman okuldan hoşlanırım.

21) 0. Bir çok arkadaşım var.
1. Bir çok arkadaşım var ama daha fazla olmasını isterim.
2. Hiç arkadaşım yok.

22) 0. Okul başarım iyi.
1. Okul başarım eskisi kadar iyi değil.
2. Eskiden iyi olduğum derslerde çok başarısızım.

23) 0. Hiçbir zaman diğer çocuklar kadar iyi olamıyorum.
1. Eğer istersem diğer çocuklar kadar iyi olurum.
2. Diğer çocuklar kadar iyiyim.

24) 0. Kimse beni sevmez.
1. Beni seven insanların olup olmadığından emin değilim.
2. Beni seven insanların olduğundan eminim.

25) 0. İnsanlarla iyi geçinirim.
1. İnsanlarla sık sık kavga ederim.
2. İnsanlarla her zaman kavga ederim.

26) 0. Gün içerisinde her zaman uyuyakalırım.
1. Gün içerisinde çoğu zaman uyuyakalırım.
2. Gün içerisinde neredeyse hiç uyuyakalmam.

27) 0. Her zaman yemek yememi durduramam.
1. Çoğu gün yemek yememi durduramam.
2. Yemek yemem iyidir.

28) 0. Bir şeyleri kolayca hatırlarım.
1. Bir şeyleri biraz zor hatırlarım.
2. Bir şeyleri hatırlamakta oldukça zorlanırım.

ETİK KURUL DEĞERLENDİRME SONUCU/RESULT OF EVALUATION BY THE ETHICS COMMITTEE

(Bu bölüm İstanbul Bilgi Üniversitesi İnsan Araştırmaları Etik Kurul tarafından doldurulacaktır /This section to be completed by the Committee on Ethics in research on Humans)

Başvuru Sahibi / Applicant: Elif Göcek

Proje Başlığı / Project Title: Assessment of children's perception of life events: The Children's Life Changes Scale

Proje No. / Project Number: 2017-40024-16

1.	Herhangi bir değişikliğe gerek yoktur / There is no need for revision	XX
2.	Ret/ Application Rejected Reddin gerekçesi / Reason for Rejection	

Değerlendirme Tarihi / Date of Evaluation: 9 Şubat 2017

Kurul Başkanı / Committee Chair

Doç Dr. Itır Erhart

Üye / Committee Member

Prof. Dr. Aslı Tunç

Üye / Committee Member

Prof. Dr. Hale Bolak

Üye / Committee Member

Prof. Dr. Turgut Tarhanlı

Üye / Committee Member

Doç. Dr. Koray Akay

Üye / Committee Member

Prof. Dr. Ali Demirci

Üye / Committee Member

Doç Dr. Ayhan Özgür Toy