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Effects of internal displacement and resettlement on the mental health of Turkish children and adolescents

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Abstract

Aims—To evaluate the effects of internal displacement and resettlement within Turkey on the emotional and behavioral profile of children, age 5–18 after controlling for possible confounding and demographic variables.

Method—We conducted a national population survey using a self-weighted, equal probability sample. We compared the CBCL, TRF and YSR responses regarding children with (n = 1644) and without (n = 1855) experience of internal displacement. We examined the effects of gender, age, paternal employment, resettlement, urban residence and physical illness.

Results—The children and adolescents with internal displacement had significantly higher internalizing, externalizing and total problem scores on the CBCL and YSR, and higher internalizing scores on the TRF. The effect of displacement was related to higher internalizing problems when factors like physical illness, child age, child gender and urban residence were accounted. The overall effect was small explaining only 0.1–1.5% of the total variance by parent reports, and not evident by teacher reports.

Discussion—To our knowledge the present study is the first to examine Turkish children and adolescents with and without experience of internal displacement. The results are consistent with previous immigration studies: child age, gender, presence of physical illness and urban residence were more important predictors of internalization and externalization problem scores irrespective of informant source.

Keywords

Internal displacement; Mental health; Children; Adolescents

1. Introduction

The psychological status of immigrants and refugees in general and of their children in particular has been an important subject of investigation. Studies evaluating the psychological well being of individuals following international immigration have yielded conflicting results suggesting that these individuals represent heterogeneous groups exposed

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to varying risk factors [7,14]. There has, therefore, been limited uniformity in the results. While some studies have indicated that immigrants have more psychological problems than the native reference population [8,21,26], others have reported that these individuals may face similar or even reduced risk, especially if they have moved away from adverse to favorable circumstances [12,14,24,28,30]. Although it remains unclear as to whether immigrant populations have higher risk of psychopathology when compared with a reference population, the results challenge any presumption that distress caused by immigration and resettlement alone may inevitably cause maladaptive behavior [7].

The topic has recently been extended from studies of international immigration to those examining the effect of internal displacement and resettlement [18]. Internally displaced persons are defined as those who have not crossed an international State border but who are obliged to leave their homes or places of habitual residence for many reasons: natural and man-made disasters, civil war, armed conflict, terrorism, situations of generalized violence or other special circumstances of rights violations. Despite the increasing prevalence of such groups worldwide, its psychological effects, especially on children and adolescents has not been adequately investigated. One study found that internal displacement and resettlement did not seem to have a negative effect on psychological well being when possible confounders were controlled [15]. Another study found that residential stability was an important predictor of adult psychological health [19]. The topic of internal displacement is particularly salient in Turkey, a country with sudden downturns in its politics, regional disparities in its economy, compounded by ever increasing pace of urbanization and effects of major natural disasters at frequent intervals [10].

The focus on children and adolescents in Turkey is paramount as a third of the country's population is under 18 years of age. A large number of Turkish workers and their families have moved to Western European countries in the recent decades. A number of studies in the Netherlands and former West Germany have yielded conflicting results with high [8,21] and low [13] rates of psychopathology. A third study showed that the Turkish immigrant adolescents living in Netherlands experienced higher rate of problems than the reference Dutch youth or their peers living in Turkey [21]. The inconsistencies may in part also due to differences in informant source; the first study used parent reports, second study used teacher reports, and the third was based on youth self-reports (YSR). These studies suggested that Turkish immigrant youth had higher internalization problems with particularly high anxiety and depression scores; younger age, presence of family discord and divorce, and large family size all increased the risk of psychopathology [30].

Compared to the handful of studies of Turkish immigrant youth in Western European countries, the effects of internal displacement and resettlement on children living within Turkey have never been appraised. Yet, the issue is even a greater public health concern for Turkey since many more of its citizens have faced internal displacement than immigration. While the movement and resettlement, to some degree had been voluntary, in order to have a better life, more commonly it had been involuntary in order to seek refugee from ensuing armed conflict. The movement has predominantly been from rural to urban in particular from the South, South-East, Central Anatolian and North Black Sea provinces to the more prosperous West Aegean and North-West provinces. During the insurgency at the peak of terrorist activities from 1991 to 1994 over 380,000 citizens had moved from the South and South-East Anatolian predominantly rural provinces to urban centers across Turkey [31].

The internal displacement and resettlement question in Turkey represents heterogeneous populations facing transitions wrought with human rights challenges, economic hardship, poor educational attainment as well as physical and public health issues. The youth

concerned have been displaced within their nuclear families and have generally not been directly involved in the armed insurgency as combatants.

In this study we investigated the effects of internal displacement and resettlement on the mental health of children and adolescents in a nationally representative sample by comparing scores obtained from multiple informant sources with standard measures used in the Turkish Mental Health Profile Study. Our aim was also to evaluate the effects of internal displacement and resettlement on the emotional and behavioral problems by controlling for the effects of possible confounders like the child's age, gender, presence of physical illness and urban residence.

2. Materials and methods

Subjects were from the Turkish Mental Health Profile study of a nationally representative epidemiological sample. A self-weighted, multistage, stratified and clustered household sampling plan; two stratification criteria were used: one was the region (West, South, Central, North, and East Anatolia) with five categories, and the other was type of settlements (urban, suburban and rural) with three categories, constituting 15 strata. Cluster selection was done from household records kept and updated every year by the Ministry of Health that contained a list of dwelling units with their whole addresses (quarter, area, avenue, street, building and door number). A sampling list was created from these records. Systematic random selection was employed at each stage with a total of 3889 households with children and adolescents ages 5–18: 3499 CBCL's were obtained from the mothers for children ages 5–18; 1409 TRF's from the teachers for children and adolescents ages 7–18 attending school; and 1219 YSR's from the adolescents 13–18. The response rates were 83.9% for CBCL, 87.7% for TRF and 79% for YSR. The fewer number of TRF's compared to the CBCL's is due to very small number of children ages 5–7 who attend preschool in Turkey. The parent and teacher response rates were otherwise comparable for grade school age children. The fewer number of YSR's likewise reflect the eligible adolescent 12–18 age for this measure. Finally, at the time of the National Mental Health Profile study not all the eligible school age children and adolescents attended secondary school in Turkey as only 5-year public education was mandatory, a rule that has been extended to mandatory age 16 3 years ago. The selection of the epidemiological sample has been detailed in another study [16] (Table 1).

The present study sample represented a total of 1644 children and adolescents identified as internally displaced and resettled compared to 1855 who were not resettled. The operational definition of internally displacement was defined as a permanent change in home or place of habitual residence within Turkey. Data collection was carried out by 171 Ministry of Health field staff that included psychologists, social workers, nurses and midwives; field interviewers participated in a week long theoretical and practical training course. A letter describing the survey and a copy of the CBCL was presented to each parent. The field interviewer elicited responses on the CBCL and recorded the replies for consenting parents. Most encounters occurred on weekdays; to avoid biasing the sample against working parents, interviews were conducted after 17:30 h on weekdays or weekends. The parental permission letters were presented to teachers before eliciting TRF responses. Assent was also obtained from all eligible youth age 12–18 prior to completion of the YSR's.

2.1. Measures

2.1.1. Child behavior checklist (CBCL)—The Turkish version of the CBCL was used to obtain standardized parental reports of children's problem behaviors and competencies. The CBCL includes 20 competence items and 118 problem items [2]. The 118 problem items describe a wide array of problems that are rated on a three-point scale. There is also an

open-ended item for adding other physical problems without known medical cause, and an item for adding other problems. The parents scored each item by circling as 0, if the item is "not-true" of the child, a 1 if it is "some-what or sometimes true", and a 2 if it is "very true or often true" [2]. The test–retest reliability of the Turkish form was 0.84 for the Total Problems and the internal consistency was adequate (Cronbach alpha = 0.88) [16,17].

2.1.2. Teacher report form (TRF)—The Turkish version of the TRF includes items for rating academic performance, four adaptive characteristics, 118 specific behavioral/emotional problems and two open-ended items like those on the CBCL. Ninety-three TRF items have counterparts on the CBCL, although the wording differs slightly, such as referring to "pupils" instead of "children". Twenty-five CBCL items are replaced on the TRF with items that are more appropriate for teachers [3]. The test–retest reliability of the Turkish version was 0.88 for the Total Problems and the Internal consistency was 0.87 [16,17].

2.1.3. YSR—The Turkish version of the YSR includes 17 items for rating adaptive characteristics and 112 items for behavior and emotional problems [4]. Eighty-nine of the problem items are the same with the CBCL items however wording of the items is changed. The test–retest reliability of the Turkish version was 0.82 for the Total Problems and the Internal consistency was = 0.89.

2.2. Statistical analysis

First, independent sample *t*-test was used to compare CBCL, TRF, and YSR raw total problems, internalization and externalization scores of children and adolescents who resettled during their lifetime ($n = 1644$) and who did not ($n = 1856$). After this, forward selection linear regression was applied to select predictors for outcomes. Possible predictors entered the model if their probability of F is smaller than 0.05. Possible predictors were gender (male/female), age (continuous), paternal employment (mother or father; yes/no), internal resettlement status (yes/no), urbanization (urban, suburban, rural; as dummy variables), and physical illness (yes/no).

3. Results

3.1. Independent sample t-test

Significant differences were found for the CBCL internalizing ($t = 4.061$, df = 3498, $P < 0.001$), externalizing ($t = 3.217$, df = 3498, $P = 0.001$), and total problems scores ($t = 4.251$, df = 3498, $P = 0.000$), and resettled children and adolescents had higher scores.

The YSR scores showed similar patterns, with resettled adolescents reported to have more internalizing problems ($t = 3809$, df = 1218, $P = 0.000$), externalizing problems ($t = 1981$, df = 1218, $P = 0.048$), and total problems scores ($t = 3.415$, df = 1218, $P = 0.000$). However, only TRF internalization problems score was higher in the resettled group ($t = 1920$, df = 1408, $P = 0.055$), and there were no significant differences for externalization problems ($t = 0.034$, df = 1408, $P = 0.973$), and total problems ($t = 1.292$, df = 1408, $P = 0.197$) scores. Mean and standard deviation of CBCL, TRF, and YSR scores of the two groups are summarized in Table 1.

3.2. Multiple linear regression

3.2.1. Total problems and externalization problems

3.2.1.1. CBCL: The results of regression analysis indicate that a higher total problems score was predicted by the presence of physical illness, younger child age, and living in cities.

This model explained 7.3% of the total variance. Living in cities was the most important predictor, explaining 3.6% of the total variance by itself. Younger boys living in cities with physical illness had highest CBCL Delinquency and Aggressive Behaviors scores, and these variables explained 5.5% and 8.4% of the variances, respectively. Higher CBCL externalizing score was predicted by younger age, male gender, living in cities, and presence of physical illness. This explained 8.8% of the total variance. This time, the most important predictor was younger age (3.6% of the variance).

3.2.1.2. TRF: Higher TRF total problems score was predicted by male gender, presence of physical illness, living in cities and younger age. However, these predictors explained only 3.1% of the variance. Being male and presence of physical illness predicted higher TRF Delinquency and Externalization Problems scores (R^2 = 0.032 and 0.031, respectively). TRF Aggressive Behavior score was predicted by being younger male and the presence of physical illness (R^2 = 0.030).

3.2.1.3. YSR: Presence of physical illness, older child age, and living in cities explains 3.5% of the variance of YSR Total Problems score. Higher YSR Delinquency score was predicted by younger age and being male (R^2 = 0.013). Physical illness, along with living in cities, and younger age, increased the risk of having higher YSR Aggressive Behaviors and Externalization Problems scores (R^2 = 0.015 and 0.021, respectively).

3.2.2. Internalization problems

3.2.2.1. CBCL: A higher internalizing problems score was predicted by presence of physical illness, older child age, living in cities, internal resettlement history, and female gender. This explained 6.0% of the total variance. Presence of physical illness was the most important predictor (2.8% of the variance), and internal resettlement status explained a very small percent (0.1%) of the total variance. Higher CBCL anxiety/depression scores were predicted by the presence of physical illness, being female and living in cities (R^2 = 0.041). Higher somatic complaints score was predicted by the presence of physical illness, being female, being older, internal resettlement status and living in cities. This model explained 7.5% of the total variance, and internal resettlement was responsible of 0.4% of this. Social withdrawal scores were highest in older females with physical illness living in cities (R^2 = 0.036).

3.2.2.2. TRF: Only living in cities predicted higher TRF internalization problems (R^2 = 0.007), somatic complaints (R^2 = 0.004), and social withdrawal scores (R^2 = 0.004). TRF anxiety/depression scores were highest in female students living in cities with physical illness (R^2 = 0.015).

3.2.2.3. YSR: Physical illness, female gender, older age, and internal resettlement status (0.8%) predicted higher YSR internalization scores (R^2 = 0.064). Higher YSR somatic complaints scores were predicted by being female, internal resettlement (R^2 = 0.015), and presence of physical illness (R^2 = 0.052). Older females with physical illness had highest social withdrawal (R^2 = 0.037) and anxiety/depression scores (R^2 = 0.050).

4. Discussion

The question of international immigration remains a substantial concern in Europe and the rest of the world. The Commission of the European Communities' 2000 report about community immigration policy stated that almost 1.8 million people have been permitted to stay legally in European countries since 1970s [11]. According to the same report the Europol estimated that over 500,000 people per year immigrated to Europe illegally.

Similarly, during the 1990s, more than 9 million immigrants settled in the United States [32]. United Nations reported that in 2002, number of world immigrants reached 175 million people, not including internally displaced persons [20].

The effect of internal displacement and resettlement on the psychological well being of affected persons worldwide remains an equally important public health concern. As the topic often remains limited to developing countries, however it has not as much received adequate international attention as a topic of empirical investigation.

Our results indicated that, internal displacement and resettlement was related to higher internalizing problems scores when other factors like presence of physical illness, child age, gender and urban residence were taken into account. However, this effect was small, and internal resettlement status explained only 0.1–1.5% of the total variance, not evident in teacher reports.

As there is no data on plight of children and adolescents who have faced internal displacement and resettlement we will refer to the results of the previous studies on effects of immigration on psychological status of children and adolescents; these results, however, have not been consistent [14]. Many of the previous immigration studies reported equal or less psychopathology in affected children when compared with native reference children [13,14,24,30]. It has be argued that factors purported to be important for the psychological adjustment of immigrants, as in acculturation, may be less important when individuals are displaced and resettled within their own country. Therefore, the small magnitude of the within country effects of internal displacement and resettlement on the psychological status of the children and adolescents may not be too surprising. On the other hand, however, some studies suggested that high level of residential instability (more than three family moves) could be related with higher levels of depression even if this may occur within the same country [19]. Our very small effect sizes might also indicate that, despite statistical significance, which could be related to our large sample size, effects of internal displacement and resettlement could be clinically insignificant in the “real-world”.

Former studies conducted with Turkish immigrant children and adolescents in Netherlands that compared psychological status of these youth both with native reference Dutch and Turkish children and adolescents showed that these individuals had significantly higher levels of anxiety and depression scores [8,9,21]. Although the effect sizes were small, our results also indicated that the internal resettlement was related to higher levels of internalization problems, and in particular, somatic complaints in the children. Consistent with the Crijnen et al. [12] study, the teachers did not report higher internalization problems in the children. Former studies have also indicated that the teachers could not always evaluate internalization problems of the students accurately.

Obtaining information from multiple informants is important in child mental health research since the agreement between different informants is not high; correlation between mothers and fathers is in the range for 0.6, and even lower for other informants (parent/teacher, parent/adolescent, and teacher/adolescent) [3,25,27]. Despite methodological challenges, this makes obtaining information from multiple informant sources especially necessary. The use of the YSR particularly underscores that children and adolescents may be affected differentially from immigration or internal displacement. Adolescence is an important transitional period in the lifecycle particularly vulnerable to the effect of displacement on identity formation; it is important for adolescents to feel as part of the larger group. Immigration as well as internal displacement may both equally hamper this process. Adolescents may feel marginalized and unhappy, because of the different expectations from

their parents and other important adult figures or new peers [6]. This may lead to manifest emotional and behavioral symptoms.

Previous studies conducted with adult Turkish immigrants indicated higher somatic complaints in these individuals [9,22]. Our results were consistent with these studies and support the notion that somatization is indeed an important symptom of internalization problems in Turkish culture [9,22].

Controlling potential confounding variables that could affect the psychological well being is also important [14]. There are many factors that can change the impact of immigration or internal displacement on children and adolescents related to: (i) parental psychopathology, divorce, family dysfunction and supports; (ii) child's age, sex, intelligence and physical health; and (iii) socioeconomic status and cultural factors defining the adaptive environment [5,24,29]. Results of previous studies suggested that factors like socioeconomic status could be important confounders [14]. In the present study, the internally displaced and resettled group had significantly higher CBCL and YSR scores mainly attributable to factors other than socioeconomic status such as child's age, gender, presence of physical illness and urban residence. One study similarly found that when other factors like the individual's age, education and marital status was taken into account, effects of internal resettlement lost its significance [15]. Abbott et al. [1] indicated that many factors related with psychological status of the immigrants lost their significance after multivariate analysis.

Former studies with normal samples generally indicated that while girls and adolescents had higher internalization problems scores, boys and younger children had higher externalization problems scores [33]. One study that compared the problems reported by parents of children in 12 different cultures showed that gender and age effects were evident across all cultures [13]. Our results are consistent with the results of the previous studies that indicated that risk of psychopathology might be higher in individuals living at urban areas [2,26]. Finally, the relation of physical illness and psychopathology has been known for a long time; individuals with neurological disorders or other chronic disorders causing disability often have higher risk of psychopathology when compared with healthy people and patients with other illnesses [5,23].

The results of the present study should be interpreted in the light of a number of limitations. First, the children and adolescents were not evaluated with clinical interviews. Second, the socioeconomic status of the children was evaluated only by the employment status of the parents. This might have caused considerable income differences between individuals in the same category. Similarly, important variables on physical illness such as disability status and symptom chronicity were not taken into account. We also did not collect data about the causes of displacement and resettlement. Although this is an important question the present study was conducted within the larger Turkish Mental Health Profile study under the sponsorship of the Ministry of Health. Nonetheless, such a nationally representative epidemiological study had a number of strengths involving a relatively large sample size, standardized and efficient data collection procedures involving multiple informants and efforts to control the effect of potential confounding variables.

5. Conclusion

Internal displacement and resettlement is a prominent problem within many developing countries and emerging democracies such as Turkey [10]. Our results suggested that internal displacement and resettlement might be related to higher internalization problems when some of the other confounding variables were controlled for. However, this effect was small. Further studies are needed to address the specific needs of internally displacement on

affected individuals worldwide. This is especially important to identify rights and guarantees relevant to the protection of displaced children and adolescents. This is likely to focus attention and provide much needed assistance for the appropriate resettlement and future reintegration of the youth within these countries.

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References

1. Abbott MW, Wong S, Williams M, Au M, Young W. Chinese migrants' mental health and adjustment to life in New Zealand. Aust N Z J Psychiatry. 1999; 33:13–21. [PubMed: 10197881]
2. Achenbach, TM. Manual for the child behavior checklist and 1991 profile. Burlington, VT: Department of Psychiatry, University of Vermont; 1991.
3. Achenbach, TM. Manual for the teacher's report form and 1991 profile. Burlington, VT: Department of Psychiatry, University of Vermont; 1991.
4. Achenbach, TM. Manual for the youth self report and 1991 profile. Burlington, VT: Department of Psychiatry, University of Vermont; 1991.
5. Austin JK, Dunn DW, Huster GA. Childhood epilepsy and asthma: changes in behavior problems related to gender and change in condition severity. Epilepsia. 2000; 41:615–23. [PubMed: 10802769]
6. Bashir MR. Issues of immigration for the health and adjustment of young people. J Paediatr Child Health. 1993; 29(Suppl 1):S42–S45. [PubMed: 8268022]
7. Beiser M, Dion R, Gotowiec A, Hyman I, Vu N. Immigrant and refugee children in Canada. Can J Psychiatry. 1995; 40:67–72. [PubMed: 7788620]
8. Bengi-Arslan L, Verhulst FC, Van der Ende J, Erol N. Understanding childhood problem behaviors from a cultural perspective: comparison of problem behaviors and competencies in Turkish immigrant, Turkish and Dutch children. Soc Psychiatry Psychiatr Epidemiol. 1997; 32:477–84. [PubMed: 9409164]
9. Bengi-Arslan L, Verhulst FC, Crijnen AAM. Prevalence and determinants of minor psychiatric disorder in Turkish immigrants living in the Netherlands. Soc Psychiatry Psychiatr Epidemiol. 2001; 37:118–24. [PubMed: 11990008]
10. Cifter, I. Turkey. In: Kemp, DR., editor. International handbook of mental health policy. Westport, CT: Greenwood Press; 1993. p. 367-89.
11. Communication from the Commission to the Council and the European Parliament on a Community Immigration Policy. Brussels: Commission of the European Communities; 2000.
12. Crijnen AAM, Bengi-Arslan L, Verhulst FC. Teacher-reported problem behaviour in Turkish immigrant and Dutch children: a cross-cultural comparison. Acta Psychiatr Scand. 2000; 102:439–44. [PubMed: 11142433]
13. Crijnen AAM, Achenbach TM, Verhulst FC. Problems reported by parents of children in multiple cultures: the child behavior checklist syndrome constructs. Am J Psychiatr. 1999; 156:569–74. [PubMed: 10200736]
14. Davies LC, McKelvey RS. Emotional and behavioural problems and competencies among immigrant and non-immigrant adolescents. Aust N Z J Psychiatry. 1998; 32:658–65. [PubMed: 9805588]
15. De Almeida-Filho N. Internal migration and mental disorders: new evidence for an old hypothesis. Acta Psiquiatr Psicol Am Lat. 1982; 28:21–9. [PubMed: 7136823]
16. Erol, N.; Şimşek, Z. Mental health of Turkish children: behavioral and emotional problems reported by parents, teachers, and adolescents. In: Singh, NN.; Leung, JP.; Singh, AN., editors. International perspectives on child and adolescent mental health. London: Elsevier; 2000. p. 223-47.

17. Erol, N.; Arslan, BL.; Akçakın, M. The adaptation and standardization of the child behavior checklist among 6–18-year-old Turkish children. In: Sergeant, J., editor. Eunethydis: European approaches to hyperkinetic disorder. Zürih: Fotoratar; 1995. p. 97-113.
18. Fazel M, Stein A. The mental health of refugee children. Arch Dis Child. 2002; 87:366–70. [PubMed: 12390902]
19. Gilman SE, Kawachi I, Fitzmaurice GM, Buka L. Socio-economic status, family disruption and residential stability in childhood: relation to onset, recurrence and remission of major depression. Psychol Med. 2003; 33:1341–55. [PubMed: 14672243]
20. International Migration 2002. Department of Economic and Social Affairs, United Nations Population Division; 2002.
21. Janssen MM, Verhulst FC, Bengi-Arslan L, Erol N, Salter CJ, Crijnen AA. Comparison of self-reported emotional and behavioral problems in Turkish immigrant, Dutch and Turkish adolescents. Soc Psychiatry Psychiatr Epidemiol. 2004; 39:133–40. [PubMed: 15052395]
22. Mirdal GM. The condition of 'tightness': the somatic complaints of Turkish migrant woman. Acta Psychiatr Scand. 1985; 71:287–96. [PubMed: 3984770]
23. Mrazek, DA. Chronic pediatric illness and multiple hospitalizations. In: Lewis, M., editor. Child and adolescent psychiatry. 2. London: Williams & Wilkins; 1996. p. 1058-66.
24. Munroe-Blum H, Boyle MH, Offord DR, Kates N. Immigrant children: psychiatric disorder, school performance, and service utilization. Am J Ortopsychiatry. 1989; 59:510–9.
25. Najman JM, Williams GM, Nikles J, Spence S, Bor W, O'Callaghan M, et al. Mothers' mental illness and child behavior problems: cause–effect association or observation bias? J Am Acad Child Adolesc Psychiatry. 2000; 39:592–602. [PubMed: 10802977]
26. Offord DR, Boyle MH, Szatmari P, Rae-Grant NI, Links PS, Codman DT, et al. Ontario child health study: II. Six month prevalence of disorder and rates of service utilization. Arch Gen Psychiatry. 1987; 44:832–6. [PubMed: 3498458]
27. Öner Ö, Erol N, Öner P, Aysev A. Anne Babanın Psikolojik Durumları ile Çocukların Psikolojik Durumlarını Değerlendirmeleri Arasındaki İlişki [Relationship between the parents' psychological status and the psychological evaluation of their children]. Çocuk ve Gençlik Ruh Sağlığı Dergisi [Turkish J. Child. Adolesc Mental Health]. 2001; 8:69–77.
28. Rutter M, Yule W, Berger M, Yule B, Morton J, Bagley C. Children of West Indian immigrants. I. Rates of behavioural deviance and of psychiatric disorder. J Child Psychol Psychiatry. 1974; 15:241–62. [PubMed: 4459416]
29. Short KH, Johnston C. Stress, maternal distress, and children's adjustment following immigration: the buffering role of social support. J Consult Clin Psychol. 1997; 65:494–503. [PubMed: 9170773]
30. Sowa H, Crijnen AAM, Bengi-Arslan L, Verhulst FC. Factors associated with problem behaviors in Turkish immigrant children in Netherlands. Soc Psychiatry Psychiatr Epidemiol. 2000; 35:177–84. [PubMed: 10868083]
31. Turkyilmaz, A.; Cay, AH.; Avsar, BZ.; Aksoy, M. Doğu ve Güneydog u Anadolu'dan Terör Nedeniyle Göç Eden Ailelerin Sorunları [Problems of families immigrated from South and Southeast Anatolia because of terror]. Ankara: AAK Press; 1998.
32. US Department of Homeland Security. Yearbook of immigration statistics, 2002. Washington, DC: US Government Printing Office; 2003.
33. Verhulst, FC. Review of community studies. In: Verhulst, FC.; Koot, HM., editors. The epidemiology of child and adolescent psychopathology. Oxford: Oxford Medical Publications; 1995. p. 146-77.

Table 1

CBCL, TRF and YSR anxiety/depression, internalization problems, externalization problems, and total problems scores of resettled and resettled children and adolescents

Scale	Internal resettlement +		Internal resettlement −		*t*	*P*
	Mean	S.D.	Mean	S.D.		
CBCL anxiety/depression	4.98	3.57	4.59	4.59	3.285	0.001
Total problems	24.60	15.90	22.38	15.00	4.251	0.000
Internalization problems	8.70	6.36	7.85	6.02	4.061	0.000
Externalization problems	6.25	5.93	6.91	6.33	3.217	0.001
TRF anxiety/depression	7.10	5.08	6.64	4.74	1.735	0.083
Total problems	29.09	23.90	27.52	21.89	1.292	0.197
Internalization problems	11.12	8.45	10.28	7.85	1.920	0.055
Externalization problems	6.25	8.59	6.24	8.12	0.034	0.973
YSR total problems	33.69	20.13	29.74	20.18	3.415	0.001
Internalization problems	13.13	8.27	11.37	7.86	3.809	0.000
Externalization problems	7.88	6.30	7.17	6.25	1.981	0.048
Anxiety/depression	7.17	4.83	6.38	4.64	2.936	0.003