

Perceived family stress, parenting efficacy, and child externalizing behaviors in second-generation immigrant mothers

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Abstract

Objectives Examining family stress and parenting efficacy in relation to child externalizing problems in immigrant families.

Method In this study, we compared the levels of family stress, parenting efficacy, and toddler externalizing behaviors in Dutch ($n = 175$) and second-generation Turkish immigrant families ($n = 175$) living in the Netherlands. In addition, the influence of Turkish mothers' acculturation on toddler externalizing behaviors and its association with perceived stress and efficacy were examined.

Results Turkish mothers reported higher levels of daily stress and marital discord than Dutch mothers, but did not differ in perceptions of parenting efficacy and children's externalizing behaviors. The associations between child and family variables were similar in the Dutch and the Turkish groups, as more family stress was related to more externalizing behaviors in toddlers. Low parenting efficacy was the most important predictor of child externalizing behaviors in both groups. Acculturation of Turkish mothers was not associated with family and child variables, and did not moderate the association between family variables and child externalizing behaviors. However, emotional connectedness to the Turkish culture was related to less daily stress and fewer marital problems.

Conclusions The results support the no-group differences hypothesis and also imply that cultural maintenance may be adaptive for parental well-being.

Keywords Immigrant families · Family stress · Parenting efficacy · Toddlers · Externalizing behaviors

Introduction

Parenting toddlers can be a challenge to caregivers. Externalizing behaviors, such as oppositional and aggressive behaviors, are quite common during toddlerhood [1, 2]. Previous studies have shown that maternal experiences of daily stress, marital discord, and low parenting efficacy are related to externalizing behaviors in young children [3–5]. However, we do not know if these associations also pertain to immigrant families. The aim of our study was to compare the levels and correlates of maternal perceptions of family stress (daily stress and marital discord), parenting efficacy, and child externalizing behaviors in Dutch and second-generation Turkish immigrant families in the Netherlands. In the Turkish group, we also explored the role of maternal acculturation and its association with toddler externalizing behaviors, perceived family stress, and parenting efficacy.

The number of people who have migrated from their birth country to another country has almost doubled during the last 50 years to 191 million immigrants in 2005 [6]. As a response to the changing cultural context, immigrants undergo an acculturation process, in which identification with the culture of origin need not exclude identification with the host culture and vice versa [7, 8]. This two-dimensional acculturation model represents the connection to one's own heritage culture and to the host society. Changes associated with acculturation could lead to acculturative stress when immigrants experience these changes as stressors [8]. The second generation also can experience these stresses, because they may feel caught between their parents' and

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their own values and, therefore, may be more vulnerable to dealing with challenges in certain domains of their lives (e.g., child-rearing, daily situations, and marital relations), while struggling to maintain the culture of origin and to adopt the host culture [9]. Indeed, (acculturative) stress has shown to be related to parents' perceptions of low parenting efficacy (the perception of one's own efficacy in dealing with the child), daily stress, and stress in marital relations [e.g., 10, 11]. Thus, lower levels of acculturation might have a negative effect on parental and child well-being. In turn, feelings of parenting inefficacy, daily stresses, and low marital quality have been found to predict child externalizing behavior problems [12, 13]. Thus, children in immigrant families may be at risk to show more behavior problems than native children. However, inconsistent results on this issue have been found [14]. These inconsistencies may be illuminated when the link between parental acculturation and child behavior problems in immigrant families is taken into account [15, 16]. Moreover, the association between certain parenting factors and child behavior problems may vary with the acculturation levels of the parents. For example, higher acculturation levels may buffer the negative effects of family stress and parenting inefficacy on child externalizing behaviors, as more acculturated parents may be somewhat more tolerant to such problem behaviors, or may feel that they have easier access to support systems to help alleviate their problems.

In Western societies, an association between family stress and toddler behavior problems has been frequently found [2, 17]. According to the *group differences* hypothesis, child socialization is culturally relative and factors influencing child behaviors can differ in various ethnic populations. Thus, the relation between family characteristics and child behavior problems may differ across ethnic groups [18–20]. The *no-group difference* hypothesis states that associations in developmental processes are not altered by culturally specific experiences. This means that there can be differences in the levels of behavior problems or parenting characteristics, but the correlations among these variables do not differ among ethnic groups [21–23]. This was supported by studies on immigrant families living in the Netherlands [24, 25].

Studies that investigated child externalizing behaviors and family functioning in immigrant families living in the Netherlands focused mainly on school-age children and adolescents. Some studies showed more *parent-reported* behavior problems in Turkish children compared to Dutch children [26, 27], and other studies found equal or lower levels of *teacher or self-reported* externalizing behaviors in Turkish children [28, 29]. No studies have been conducted among toddlers, despite the fact that externalizing behaviors such as aggression already emerge in the 2nd year of life [e.g., 30], and are predictive of problems in several

domains of functioning, including personal, social, and academic development [31]. Family functioning in immigrant families has also focused mostly on older children [24, 32]. Thus, the study of early childhood externalizing problems and their association with family characteristics within immigrant families warrants further research.

The Turkish population is the largest immigration population (360,000) in the Netherlands and includes more than 70,000 children younger than 10 years [33]. We specifically focused on *second-generation* Turkish families, because the growth of the number of Turkish inhabitants is mostly due to the increase in the second-generation population (born in the Netherlands, with at least one parent born in Turkey), and much less due to migration [34].

Based on the literature, our hypotheses are (1) Turkish children show more externalizing behaviors than Dutch children, as previous findings have shown that Turkish parents report more child behavior problems than Dutch parents; (2) the associations among family stress, parenting inefficacy, and toddler externalizing behaviors will be similar in both ethnic groups (no-group difference hypothesis), as most studies on immigrant families living in the Netherlands have supported this hypothesis; (3) high levels of acculturation are related to the experience of less family stress, more parenting efficacy, and lower levels of child externalizing behaviors because high levels of acculturation have been shown to be advantageous to parent and child well-being; (4) the association among family stress, parenting inefficacy, and toddler externalizing behaviors in Turkish families is moderated by the mothers' acculturation level, as high acculturation may buffer the negative effects of family stress and parenting inefficacy on child externalizing behaviors.

Method

Participants and procedure

Turkish mothers of 2-year-old children ($M = 25.17$, $SD = 1.64$, range 22–31, 87 boys) were recruited from the municipal registers in the Netherlands. Only second-generation Turkish mothers born in the Netherlands were selected to ensure the homogeneity of the sample and to control for the confounding effects of ethnicity and migration. In total, 384 families were reached and 230 of whom participated (60%). For 175 mothers who were also the primary caregivers, all questionnaires on child behavior problems and family functioning used in the present study were obtained (in the Dutch or the Turkish language). As much as 154 parents refused to participate, and 86 parents could not be reached. The majority (75%) completed the Dutch version of the questionnaires. The preference for the

Dutch version of the questionnaires may be explained by the fact that all second-generation Turkish mothers attended school in the Netherlands, and were thus more used to *reading and writing* in Dutch than in Turkish, even though they might prefer to *speak* Turkish in daily life. Since we did not have information on non-respondents, we could not examine whether they differed from the participating group on certain characteristics.

The Dutch comparison sample for the current study is derived from the descriptive part of the SCRIPT study (screening and intervention of problem behavior in toddlerhood). For a detailed description of the recruitment of Dutch participants and the procedures of the SCRIPT study, we refer to Alink et al. [30] and Van Zeijl et al. [2]. Because the sample of 2-year olds from the SCRIPT study is about four times larger than the Turkish sample, we selected a comparable subsample of 175 Dutch 2-year olds ($M = 24.02$, $SD = 1.06$, range = 22–27, 87 boys). The sample was selected to be similar to the Turkish sample with regard to child gender, maternal education, and the presence of siblings. We were unable to use maternal age and family composition as selection criteria, because Turkish mothers were younger and more often a single parent than Dutch mothers. The results of an independent samples t test showed that Turkish mothers ($M = 26.78$, $SD = 3.27$) were significantly younger than Dutch mothers ($M = 32.12$, $SD = 3.50$, $t(174) = 14.77$, $p < 0.01$) and there were significant differences in family composition (one- versus two-parent families) between the Dutch and Turkish families. There were fewer two-parent families in the Turkish group (93.8%) than in the Dutch group (98.9%) $\chi^2(2, N = 350) = 10.57$, $p < 0.05$.

Measures

The Child Behavior Checklist for ages 1.5–5 (CBCL/1.5–5) [35] has previously been translated and validated in Turkish [36], and the Psychological Acculturation Scale has been used in the Netherlands and validated in research on immigrant groups [37]. The remaining questionnaires used in this study were translated by the first author from Dutch to Turkish and back-translated by a Turkish psychology student in order to ensure correct wording.

Externalizing behaviors

The CBCL/1.5–5 [35] was used to assess child externalizing behaviors. Primary caregivers indicated whether their child displayed any of the 100 behavioral descriptions in the last 2 months on a three-point scale (0 *not true*, 1 *somewhat or sometimes true*, and 2 *very true or often true*). The previous version of the CBCL/1.5–5 (the CBCL/2–3) was validated in a Dutch population [38], as well as in a Turkish population

living in Turkey [36]. In the current study, the internal consistencies (Cronbach's alphas) for Turkish and Dutch mother-reported CBCL were high for the Externalizing Problems syndrome (0.91/0.90), and the subsyndrome Oppositional (0.86/0.88) and Aggressive (0.78/0.77). For the subsyndrome Overactive, the internal consistency was acceptable for both groups with 0.66 and 0.61, respectively.

Perceived parenting efficacy

The extent to which mothers characterized themselves as competent caregivers was measured with the Parental Efficacy Questionnaire [39, Caprara, personal communication, 1998]. The questionnaire consists of 20 items (e.g., I can comfort my child within 5 min if he wakes up at night) rated on a five-point scale (ranging from -2 , *I am certainly not capable of doing this*, to $+2$, *I am certainly capable of doing this*). Cronbach's alpha for the Turkish group was 0.85 and for the Dutch group was 0.83.

Daily stress

To measure the daily hassles, mothers were asked to rate the intensity of 25 indices of potentially stressful events on a five-point scale (ranging from 0, *no hassle*, to 4, *big hassle*). The Parenting Daily Hassles questionnaire [40] contains 25 items asking about the daily hassles related to life in general [41], e.g., money problems, trouble at work. The Cronbach's alphas in the present study were 0.93 for the Turkish group and 0.90 for the Dutch group.

Marital discord

A subscale of the Dutch Family Problems Questionnaire [42] was used to assess marital discord. Mothers indicated on a three-point scale whether five statements about their partner relationship were: 0 *not true*, 1 *somewhat or sometimes true*, or 2 *true or often true* (e.g., I worry about my relationship with my partner). The internal consistencies of this subscale in this study for the Turkish and the Dutch group were 0.70 and 0.67, respectively.

Acculturation

We measured the acculturation level of the Turkish mothers by focusing on the Turkish and Dutch language use (language acculturation) and psychological acculturation with regard to the Turkish and Dutch culture. With regard to *language use* Turkish mothers were asked how often they spoke the Turkish and Dutch language with important others (their children, spouse, family members, and friends) [43] on a five-point scale (ranging from 0, *never*, to 4, *always/very often*). The internal consistencies for the use of the Turkish

and Dutch language were 0.81 and 0.75, respectively. Regarding the *psychological acculturation* of the mothers, the adapted version of the Psychological Acculturation Scale (PAS) was used [37]. Emotional connectedness of the mothers to the Turkish culture (six items) and the Dutch culture (six items) (e.g., I feel comfortable around Dutch/Turkish people) were rated on a five-point scale (ranging from 0, *totally disagree*, to 4, *totally agree*). The internal consistencies for the emotional connectedness to the Turkish and Dutch culture were 0.83 and 0.79, respectively.

Statistical analyses

There were a few missing values on several variables in the Dutch group (one for daily stress, one for parenting efficacy, two for marital discord) and in the Turkish group (three for daily stress, three for parenting efficacy, and three for marital discord). They were substituted with the mean score on the variable for children with the same sex, ethnicity, and maternal educational level, as a conservative imputation method [44], to uniformly include the total set of 175 Dutch children and 175 Turkish children in the analyses. The data showed some outliers. When outliers ($|z| > 3.29$) were winsorized (i.e., “moved in close to the good data”) [45] by replacement of the outlying scores with the next highest value (with $|z| < 3.29$) in the distribution, the results were the same.

Results

Preliminary analyses

Because we selected a sample of Dutch mothers who were similar to the sample of Turkish mothers regarding child gender, maternal education, and the presence of siblings, there were no significant differences between the groups on these characteristics. As our Turkish and Dutch samples were matched on mother’s educational level, differences between the two groups could not be associated with the mothers’ level of education. Since the Dutch and Turkish groups significantly differed on maternal age and family composition, analyses concerning group differences were controlled for the effects of these variables if these variables were also associated with the outcome variables. Turkish mothers were on average more strongly connected to the Turkish culture ($M = 21.61$, $SD = 4.60$) than to the Dutch culture ($M = 15.18$, $SD = 5.11$), $t(174) = -12.77$, $p < 0.01$. With regard to their language use, Turkish mothers spoke the Turkish language significantly more often ($M = 17.99$, $SD = 3.89$) than the Dutch language ($M = 12.30$, $SD = 4.38$), $t(174) = -10.55$, $p < 0.001$. To test the validity of the scales, we computed the associations

between language use and psychological acculturation. Turkish mothers who spoke the Turkish language more often with significant others, spoke the Dutch language less often ($r = -0.49$, $p < 0.01$), were emotionally less connected to the Dutch culture ($r = -0.25$, $p < 0.01$) and more to the Turkish culture ($r = 0.34$, $p < 0.01$). Similarly, Turkish mothers who preferred to talk Dutch with significant others connected more to the Dutch culture ($r = 0.32$, $p < 0.05$) and less to the Turkish culture ($r = -0.18$, $p < 0.05$). We, however, did not find a significant association between emotional connectedness to the Turkish and Dutch culture ($r = 0.06$, $p < 0.41$). More connectedness to one culture was not related to less connectedness to the other culture, which supports the independence of the two dimensions [8].

Differences between the Dutch and Turkish groups

To test for group differences, ANOVAs were performed in which we controlled for mother’s age for externalizing behaviors, and for mother’s age and family composition for daily stress. Table 1 shows significant group differences with regard to daily stress and marital problems, with higher mean scores for the Turkish group. No significant differences were found for parenting efficacy, total child externalizing behaviors, and on the three externalizing subsyndromes Oppositional, Aggression, and Overactive.

Family correlates of child externalizing behaviors

To examine the correlates of child externalizing behavior in the Dutch and Turkish groups, correlations between the externalizing composite score and family variables were computed (see Table 2). In both the Dutch and the Turkish group, all correlations with the family variables were significant. All associations were in the expected direction, meaning that more parenting efficacy was related to less externalizing behaviors in children, while more daily stress and marital problems were related to more externalizing behaviors in children in both ethnic groups.

To examine the independent predictors of child externalizing behaviors in both ethnic groups, we conducted hierarchical multiple regression analyses for each group, controlling for maternal age in the first step. The beta weights for the Dutch and the Turkish group were similar (see Table 2). The proportions of explained variance were 0.21 ($p < 0.01$) for the Dutch group and 0.13 ($p < 0.01$) for the Turkish group. For both groups, parenting efficacy was the most important predictor, whereas marital problems were a significant predictor only in the Dutch group and not in the Turkish group. More parenting efficacy predicted lower levels of child externalizing behavior.

Table 1 Differences between the Dutch and Turkish groups on family variables and child externalizing behaviors

	Dutch (<i>n</i> = 175)		Turkish (<i>n</i> = 175)		Group differences <i>F</i> -value
	Mean	(SD)	Mean	(SD)	
Child					
Externalizing behaviors ^a	15.38	(8.47)	19.50	(10.32)	1.70
Oppositional	9.43	(5.66)	12.24	(6.35)	2.83
Aggression	3.03	(2.55)	3.87	(3.15)	1.03
Overactive	2.95	(1.81)	3.40	(2.08)	0.30
Mother					
Parenting efficacy	24.24	(7.44)	23.54	(8.46)	0.67
Daily stress ^b	12.80	(10.47)	21.25	(15.96)	25.02***
Marital discord	1.44	(1.48)	2.17	(2.10)	13.67***

*** *p* < 0.001

Covariates used in ANOVAs:

^a Mothers' age; ^b Mothers' age and family composition**Table 2** Correlations and standardized beta weights for family variables in relation to child externalizing behaviors

Ethnicity	Externalizing behaviors			
	Pearson correlation (<i>r</i>)		Unique β^a	
	Dutch (<i>n</i> = 175)	Turkish (<i>n</i> = 175)	Dutch (<i>n</i> = 175)	Turkish (<i>n</i> = 175)
<i>R</i> ²			0.21**	0.13**
Parenting efficacy	−0.28**	−0.26*	−0.21*	−0.20*
Daily stress	0.27**	0.26**	0.11	0.15
Marital discord	0.27**	0.23*	0.19*	0.13

* *p* < 0.01, ** *p* < 0.001^a Beta weights are corrected for maternal age

To test whether the Dutch and the Turkish group showed a similar fit of the regression model, both regression equations were cross-validated in the other group. Results indicated that all equations cross-validated without significant shrinkage, implying that correlations between the estimated scores derived from each regression equation and the observed externalizing scores were equal in both groups. As shown in Table 3, the correlations between the observed scores for externalizing behaviors and the estimates based on the Dutch and Turkish models are very similar, with 0.37 and 0.38 for the Dutch group, and 0.34 and 0.33 in the Turkish group. Moreover, to investigate the sensitivity of the estimated scores with respect to the regression equation, estimated scores for externalizing behaviors from both regression equations were correlated within each group. Estimated scores from both regression models were similar (both *r*s > 0.97).

Acculturation, family variables, and child externalizing behaviors in the Turkish group

The associations between language use and psychological acculturation to the Dutch and Turkish culture on the one hand, and child externalizing behaviors and family variables on the other, are presented in Table 4. Turkish mothers' language use (Turkish and Dutch) and their emotional connectedness to the Dutch culture were not related to any of the child and family variables. However,

Table 3 Correlations between observed externalizing scores and estimated scores based on the Turkish and Dutch regression models in the Turkish and Dutch groups

	Turkish (<i>n</i> = 175)	Dutch (<i>n</i> = 175)
Observed–estimated Turkish	0.34**	0.37**
Observed–estimated Dutch	0.33**	0.38**
Estimated Turkish–Dutch	0.98**	0.97**

** *p* < 0.001

connection to the Turkish culture was significantly related to the experience of less daily stress and fewer marital problems. We also tested whether language use and psychological acculturation moderated the association between family variables and child externalizing behaviors. Hierarchical multiple regression analyses showed that none of the interaction terms were significant.

Discussion

Second-generation Turkish immigrant mothers perceived more family stress (daily stress and marital problems) than Dutch mothers, but did not report more toddler externalizing behaviors, nor differences in parenting efficacy. In both ethnic groups, the associations between family variables and externalizing behaviors were in the expected

Table 4 Correlations between Turkish mothers' language use, emotional connectedness to the Dutch/Turkish culture, family, and child variables

	1	2	3	4	5	6	7
1. Dutch language use	–						
2. Connection to Dutch culture	0.32**	–					
3. Turkish language use	–0.49**	–0.25**	–				
4. Connection to Turkish culture	–0.18*	0.06	0.34**	–			
5. Parenting efficacy	0.14	0.02	–0.08	0.10	–		
6. Daily stress	–0.05	0.06	0.04	–0.18*	–0.26*	–	
7. Marital discord	0.01	–0.05	–0.06	–0.17*	–0.22*	0.55**	–
8. Child externalizing behaviors	–0.05	0.12	0.02	–0.05	–0.26**	0.26**	0.23*

* $p < 0.01$, ** $p < 0.001$

direction, showing that more family stress and less parenting efficacy were related to more toddler externalizing behaviors. Parenting efficacy was the most important negative predictor in both groups. Further, Turkish mothers who were more strongly connected to the Turkish culture experienced less daily stress and fewer marital problems. No effects of acculturation on child externalizing behavior or family variables were found, and acculturation did not moderate the association between family variables and child externalizing behaviors.

Contrary to our hypothesis, we found that children from immigrant families do not show more externalizing behaviors than native children. Because previous research was inconsistent, our findings are in line with some, but not all, studies that focused on immigrant children [28, 46]. As there were no differences between Turkish and Dutch mothers in parenting efficacy (which was the most important negative predictor of externalizing behaviors in both groups), finding no differences in externalizing behaviors between the two ethnic groups is perhaps not so surprising. Importantly, the fact that we compared Turkish and Dutch families with similar family characteristics (such as maternal education) may explain the absence of differences in externalizing behaviors between the two ethnic groups, since we ruled out spurious effects due to differences in demographic characteristics.

The finding that Turkish mothers perceived more daily stress and marital problems than Dutch mothers may be due to the generational differences between partners within Turkish families, which were indicated by many respondents during conversations with the first author. Since the majority of the Turkish mothers in this study were married to partners who grew up in Turkey, an acculturation gap between the parents may be present [47]. Because the mothers have greater access to the host society (more knowledge of the Dutch rules) and more fluency in the Dutch language, they have to arrange most of the organizational and administrative tasks (e.g., filling out forms), which could lead to more daily stress.

Interestingly, we found no differences between Turkish and Dutch mothers in parenting efficacy, which is somewhat surprising given that Turkish mothers report more daily stress and marital problems. However, we measured daily stress (e.g., money problems or problems with friends and acquaintances), which could mean that Turkish mothers are not affected in their parenting competences when dealing with everyday minor stresses. Future studies are needed to examine the factors that buffer against the negative effects of daily stress on parenting efficacy in immigrant families.

Finally, we cannot rule out the possibility that cultural differences in answering closed-ended questions played a role in our findings. For example, in some cultures reporting that there are no problems could be perceived as arrogant, whereas in other cultures it is more accepted to report positively [48]. In our study, we found significant differences between Turkish and Dutch mothers in perceptions of negative issues, such as daily stress and marital discord, but *not* in positive issues, such as parenting efficacy.

As in several previous studies [49, 50], our findings confirm the no-group difference hypothesis: we found mean level differences in family stress, but associations among family stress, low parenting efficacy, and child externalizing behaviors were similar in both ethnic groups. In both ethnic groups, feelings of parenting efficacy were the strongest predictors of toddler externalizing behaviors, which confirm the importance of maternal perceptions of her competence as a parent when dealing with the potentially difficult toddler years [51].

In examining the association between acculturation and family and child variables, we found that more emotional connectedness to the Turkish culture was associated with the experience of less daily stress and fewer marital problems. We found no associations with parenting efficacy and child externalizing behaviors. Experiences of less daily stress could be due to the fact that mothers may experience fewer conflicts with their immediate

environments when they consist of primarily Turkish family and friends. In addition, most of the Turkish families in this study lived in areas where many residents had a Turkish background. Fewer marital problems may be due to the fact that the acculturation gap between the mothers and their partners may be smaller when mothers feel more attached to the Turkish culture, and this may lead to fewer marital conflicts. Our results are consistent with previous studies reporting that cultural maintenance was more adaptive for parental and child well-being [15]. Finally, we did not find that maternal acculturation acted as a moderator in the relation between family variables and child externalizing behaviors. Family stress effects on children were not different when Turkish mothers were less or more acculturated to the Dutch society. This finding can be seen as an extension of the no-group hypothesis in that associations among family and child variables are the same, regardless of culture, and in this case acculturation. One of the limitations of our study is that we had a moderate response rate in the Turkish group (60%). Low participation rates may have resulted in lower representativeness of the general Turkish population. However, the educational level in the Turkish group was comparable with the national data on the educational level of the second-generation Turkish immigrant group in the Netherlands, indicating that our sample was at least in that respect representative. Further research is needed to elucidate the role of fathers in family processes related to acculturation, parenting, and toddler behavior problems. In addition, future studies using observational measures of child externalizing behaviors could shed light on issues of cultural bias in parent-report measures.

In conclusion, our findings point to the importance of investigating protective factors that mitigate the negative effects of family stress on maternal parenting efficacy and the development of toddler behavior problems in immigrant families. Our findings can help to make health and social service professionals more aware of the higher prevalence of daily stress and marital discord in immigrant families compared to their native counterparts, combined with the risk that these factors pose to child externalizing problems. With regard to acculturation, our results show that the maintenance of the culture of origin in the host society can be adaptive to parental well-being and, importantly, more connectedness to the culture of origin does not necessarily lead to less connectedness to the culture of the immigration country, as these two dimensions were statistically independent. It is important to make professionals who work with immigrant families more sensitive to the importance of maintaining one's own cultural heritage, and to make them aware that this does not automatically hamper the identification with the culture of the host country.

References

1. Keenan K, Shaw D (1994) The development of aggression in toddlers: a study of low-income families. *J Abnorm Child Psychol* 22:53–77
2. Van Zeijl J, Mesman J, Stolk MN, Alink LRA, Van IJzendoorn MH, Bakermans-Kranenburg MJ, Juffer F, Koot HM (2006) Terrible ones? Assessment of externalizing behaviors in infancy with the Child Behavior Checklist. *J Child Psychol Psychiatr* 47:801–810
3. Belsky J, Woodworth S, Cicic K (1996) Trouble in the second year: three questions about family interaction. *Child Dev* 67:556–578
4. Carter AS, Briggs-Gowan MJ, Davis NO (2004) Assessment of young children's social-emotional development and psychopathology: recent advances and recommendations for practice. *J Child Psychol Psychiatr* 45:109–134
5. Johnston C, Mash EJ (1989) A measure of parenting satisfaction and efficacy. *J Clin Child Psychol* 18:167–175
6. UNFPA (2006) United Nations Population Fund: State of World Population 2006. The good, the bad, the promising: migration in the 21st century. In: A passage to hope: women and international migration (chap. 1). Retrieved June 23, 2008, from <http://www.unfpa.org/publications/detail.cfm?ID=311&filterListType=5>
7. Berry JW, Poortinga YH, Segall MH, Dasen PR (2002) Cross-cultural psychology: research and applications, 2nd edn. Cambridge University Press, Cambridge
8. Berry JW (1997) Immigration, acculturation, and adaptation. *Appl Psychol Int Rev* 46:5–68
9. Sadowsky GR, Maestas MV (2000) Acculturation, ethnic identity, and acculturative stress: evidence and measurement. In: Dana RH (ed) *Handbook of cross-cultural and multicultural personality assessment*. Erlbaum, Mahwah, pp 131–172
10. Berry JW (2006) Acculturative stress. In: Wong PTP, Wong LCJ (eds) *Handbook of multicultural perspectives on stress and coping*. Springer, New York, pp 287–298
11. Wells-Parker E, Miller DI, Topping JF (1990) Development of control-of-outcome scales and self-efficacy scales for women in four life roles. *J Pers Assess* 54:564–575
12. Baker BL, Heller TL (1996) Preschool children with externalizing behaviors: experience of fathers and mothers. *J Abnorm Child Psychol* 24:513–532
13. Reid WJ, Crisafulli A (1990) Marital discord and child behavior problems: a meta-analysis. *J Abnorm Child Psychol* 18:105–117
14. Stevens GWJM, Vollebergh WAM (2008) Mental health in migrant children. *J Child Psychol Psychiatr* 49:276–294
15. Atzaba-Poria N, Pike A, Barrett M (2004) Internalising and externalising problems in middle childhood: a study of Indian (ethnic minority) and English (ethnic majority) children living in Britain. *Int J Behav Dev* 28:449–460
16. Weiss SJ, Goebel P, Page A, Wilson P, Warda M (1998) The impact of cultural and familial context on behavioral and emotional problems of preschool Latino children. *Child Psychiatr Hum Dev* 29:287–301
17. Campbell SB, Breaux AM, Ewing LJ, Szumowski EK (1986) Correlates and predictors of hyperactivity and aggression: a longitudinal study of parent-referred problem preschoolers. *J Abnorm Psychol* 14:217–234
18. Ogbu JU (1981) Origin of human competence: a cultural-ecological perspective. *Child Dev* 52:413–429
19. Deater-Deckard K, Dodge KA, Bates JE, Pettit GS (1998) Multiple risk factors in the development of externalizing behavior problems: group and individual differences. *Dev Psychopathol* 10:469–493

20. Lansford JE, Chang L, Dodge KA, Malone PS, Oburu P, Palmerus K, Bacchini D, Pastorelli C, Bombi AS, Zelli A, Tapanya S, Chaudhary N, Deater-Deckard K, Manke B, Quinn N (2005) Physical discipline and children's adjustment: cultural normativeness as a moderator. *Child Dev* 76:1234–1246
21. Rowe DC, Vazsonyi AT, Flannery DJ (1994) No more than skin deep: ethnic and racial similarity in developmental process. *Psychol Rev* 101:396–413
22. Ho C, Bluestein DN, Jenkins JM (2008) Cultural differences in the relationship between parenting and children's behavior. *Dev Psychol* 44:507–522
23. Lau AS, Litrownik AJ, Newton RR, Black MM, Everson MD (2006) Factors affecting the link between physical discipline and child externalizing problems in black and white families. *J Community Psychol* 34:89–103
24. Wissink IB, Dekovic M, Meijer AM (2006) Parenting behavior, quality of the parent–adolescent relationship, and adolescent functioning in four ethnic groups. *J Early Adolesc* 26:133–159
25. Gaffari N (2004) Opvoeding, acculturatie en delinquent gedrag. Een vergelijkend onderzoek onder autochtone, Turkse en Marokkaanse jongeren. [Parenting, acculturation, and delinquent behavior. A comparative study among native Dutch, Turkish and Moroccan youth]. Unpublished master's thesis. Leiden University, Leiden, The Netherlands
26. Bengi-Arslan L, Verhulst FC, van der Ende J, Erol N (1997) 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* 32:477–484
27. Stevens GWJM, Pels T, Bengi-Arslan L, Verhulst FC, Vollebergh WAM, Crijnen AAM (2003) Parent, teacher and self-reported problem behavior in the Netherlands. Comparing Moroccan immigrant with Dutch and with Turkish immigrant children and adolescents. *Soc Psychiatry Psychiatr Epidemiol* 38:576–585
28. Crijnen AAM, Bengi-Arslan L, Verhulst FC (2000) Teacher-reported problem behaviour in Turkish immigrant and Dutch children: a cross-cultural comparison. *Acta Psychiatr Scand* 102:439–444
29. Murad SD, Joung IMA, van Lenthe FJ, Bengi-Arslan L, Crijnen AAM (2003) Predictors of self-reported problem behaviours in Turkish immigrant and Dutch adolescents in the Netherlands. *J Child Psychol Psychiatr* 44:412–433
30. Alink LRA, Mesman J, Van Zeijl J, Stolk MN, Juffer F, Koot HM, Bakermans-Kranenburg MJ, Van IJzendoorn MH (2006) The early childhood aggression curve: development of physical aggression in 10- to 50-month-old children. *Child Dev* 77:954–966
31. Campbell SB (1995) Behavior problems in preschool children: a review of recent research. *J Child Psychol Psychiatr* 36:113–149
32. Sowa H, Crijnen AAM, Bengi-Arslan L, Verhulst FC (2000) Factors associated with problem behaviors in Turkish immigrant children in the Netherlands. *Soc Psychiatry Psychiatr Epidemiol* 35:177–184
33. CBS (2006) Allochtonen in Nederland [Migrants in The Netherlands]. Centraal Bureau voor de Statistiek Voorburg/Heerlen
34. Distelbrink M, Hooghiemstra E (2005) Allochtone gezinnen: Feiten en cijfers. [Migrant families: facts and numbers]. In: Den Haag Nederlandse Gezinsraad: NGR
35. Achenbach TM, Rescorla LA (2000) Manual for ASEBA preschool forms and profiles. University of Vermont, Research Center for Children, Youth & Families, Burlington
36. Erol N, Şimşek Z (1997) Türkiye Ruh Sağlığı Profili: Çocuk ve gençlerde yeterlik alanları ile sorun davranışların dağılımı [Mental health profile of Turkey: distribution of competence and behavioral problems]. In: Erol N, Kılıç C, Ulusoy M, Keçeci M, Şimşek Z (eds) Türkiye Ruh Sağlığı Profili: Ön Rapor [Mental health profile of Turkey: preliminary report]. Aydoğdu Ofset, Ankara, pp 12–33
37. Stevens GWJM, Pels T, Vollebergh WAM, Crijnen AAM (2004) Patterns of psychological acculturation in adult and adolescent Moroccan immigrants living in the Netherlands. *J Cross Cult Psychol* 35:689–704
38. Koot HM, Van den Oord EJCG, Verhulst FC, Boomsma DI (1997) Behavioral and emotional problems in young preschoolers: cross-cultural testing of the validity of the Child Behavior Checklist/2–3. *J Abnorm Child Psychol* 25:183–196
39. Van IJzendoorn MH, Bakermans-Kranenburg MJ, Juffer F (1999) The parental efficacy questionnaire. Unpublished Manuscript, Centre for Child and Family Studies, Leiden University, the Netherlands
40. Crnic KA, Greenberg MT (1990) Minor parenting stresses with young children. *Child Dev* 61:1628–1637
41. Kanner AD, Coyne JC, Schaffer C, Lazarus RS (1981) Comparison of two modes of stress measurement: daily hassles and uplifts versus major life events. *J Behav Med* 4:1–39
42. Koot HM (1997) Handleiding bij de vragenlijst voor gezinsproblemen [Manual accompanying the Dutch family problems questionnaire]. Sophia Kinderziekenhuis/Erasmus Universiteit, Afdeling Kinder- en Jeugdpsychiatrie Rotterdam
43. Van Oort FVA, van der Ende J, Crijnen AAM, Verhulst FC, Mackenbach JP, Bengi-Arslan L, Joung IMA (2006) Cultural ambivalence as a risk factor for mental health problems in ethnic minority young adults. Unpublished doctoral dissertation, Erasmus Medical Center Rotterdam, The Netherlands
44. Tabachnick BG, Fidell LS (2007) Using multivariate statistics, 5th edn. Allyn and Bacon, Boston
45. Hampel FR, Ronchetti EM, Rousseeuw PJ (1986) Robust statistics: the approach based on influence functions. Wiley, New York
46. Mistry RS, Biesanz JC, Chien N, Howes C, Benner AD (2008) Socioeconomic status, parental investments, and the cognitive and behavioral outcomes of low-income children from immigrant and native households. *Early Child Res Q* 23:193–212
47. Leyendecker B, Schölmerich A, Çıtlak B (2006) Similarities and differences between first- and second-generation Turkish migrant mothers in Germany: the acculturation gap. In: Bornstein MH, Cote LR (eds) Acculturation and parent–child relationships: measurement and development. Erlbaum, London, pp 297–315
48. Diener E, Suh EM, Smith H, Shao L (1995) National differences in reported subjective well-being: why do they occur? *Soc Indic Res* 34:7–32
49. Deater-Deckard K, Atzaba-Poria N, Pike A (2004) Mother- and father–child mutuality in Anglo and Indian British families: a link with lower externalizing problems. *J Abnorm Child Psychol* 32:609–620
50. Vazsonyi AT, Trejos-Castillo E, Huang L (2006) Are developmental processes affected by immigration? Family processes, internalizing, and externalizing behaviors. *J Youth Adolesc* 35:799–813
51. Edwards CP, Liu WL (2002) Parenting toddlers. In: Bornstein MH (ed) Handbook of parenting. Volume 1: Children and parenting, 2nd edn. Lawrence Erlbaum Associates Inc, Mahwah, pp 45–71