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Associations of Perceived Parent-Child and Sibling Relationship Quality
with Social Competence: Comparing Dutch, Moroccan-Dutch, and Turkish-
Dutch Early Adolescents

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Abstract

Aim The aims of the present study were (a) to examine whether Dutch, Moroccan-Dutch, and Turkish-Dutch early adolescents differ in their parent-child and sibling relationship quality and social competence, (b) to compare the associations between parent-child and sibling relationship quality for Dutch, Moroccan-Dutch, and Turkish-Dutch early adolescents, and (c) to investigate whether cultural identity moderates the relationship between the quality of the parent-child and sibling relationship on social competence. **Method** Among 35 primary schools in the Netherlands, questionnaire data on parental support, parent-child negative interaction, sibling warmth and conflict, as well as social competence and cultural identity were collected from 964 Dutch (M_{age} = 11.31 years), 35 Moroccan-Dutch (M_{age} = 11.63 years), and 22 Turkish-Dutch (M_{age} = 11.41 years) early adolescents. **Results** Significant mean level differences were found between the three samples. Dutch early adolescents reported higher on social competence, while Moroccan-Dutch early adolescents reported higher on social competence as well as sibling warmth. Differences between the three ethnic groups in the patterns of associations were also found, supporting the cultural values model. This means that the influence of family relationships differs across the three ethnic groups. However, we did not find a moderating effect of cultural identity in the link between parent-child and sibling relationship quality on social competence. **Conclusion** This study shows that ethnic differences may exist in sibling relationship quality and in social competence, and in the impact of family relationships on social competence. These results are not influenced by the different levels of cultural identity, suggesting that the level of cultural identity does not influence the link between relationships in the family and early adolescent social competence.

Keywords: cross-ethnic differences, parent-child relationship, sibling relationship, social competence, cultural identity, early adolescents

Associations of Parent-Child and Sibling Relationship Quality with Social Competence: Comparing Dutch, Moroccan-Dutch, and Turkish-Dutch Early Adolescents

In recent years, the investigation of social development in childhood and adolescence has shifted from a focus on risk factors or deficits for maladjustment to emphasize the impact of protective factors promoting positive adaptation and resilience (Fergus & Zimmerman, 2005; Wright, Masten, & Narayan, 2015). One such protective factor is social competence, that has been described as a global construct in which "the competent individual is one who is able to make use of environmental and personal resources to achieve a good developmental outcome" (Waters & Sroufe, 1983, p. 81). Although many researchers have attempted to define social competence and given its dynamic nature, there still seems to be no generally accepted definition of this concept. For the purpose of this study, social competence is conceptualized as the ability to engage successfully in social interactions and interpersonal relationships (Valkenburg & Peter, 2008).

Across the lifespan, social competence is seen as necessary for healthy functioning and wholesome development (Bornstein, Hahn, & Haynes, 2010; Parker, Rubin, Erath, Wojslawowicz, & Biskirk, 2006). Adolescents who have higher social competence are more likely to have successful and fulfilling interpersonal relationships (Steinberg, 2008), better mental health (Luecken, Roubinov, & Tanaka, 2013), and less substance use (Griffin, Nichols, Birnbaun, & Botvin, 2006). Social competence is also associated with higher self-esteem (Larson, Whitton, Hauser, & Allen, 2007), which therefore increases the chances for academic and social success (Denham, 2006; Elias & Haynes, 2008). Overall, social competence can be seen as a protective factor fostering positive psychological adjustment in the face of contextual demands (Masten & Coatsworth, 1998).

Conversely, being socially incompetent is a risk factor for negative outcomes across the lifespan and is associated with longitudinal links to both externalizing and internalizing problem behaviors (Bornstein et al., 2010; Burt, Obradovic, Long, & Masten, 2008). For example, socially incompetent children are more at risk for peer rejection and this rejection by normative peers raises the risk for drifting into relationships with deviant peers who may reinforce further antisocial behavior (Masten & Cicchetti, 2010; Obradovic, Burt, & Masten, 2010). Thus, children who are not equipped with social skills experience more difficulties adapting to their environments and, therefore, are more at risk for a potential cascade of problems (Denham, 2006).

There is individual variation in the development of social competence as its development is influenced by various factors, making it possible that not all individuals are able to successfully adapt to their environment (Hussong, Zucker, Wong, Fitzgerald, & Putller, 2005). One such influential factor is the family context in which the child resides. Family relationships are found to be important for the development of social competence (Renk & Phares, 2004). Since children are embedded in the larger family system, they can never be fully understood independently of their family context, as pointed out by the *family system theory* (Samerhoff, 1994). The family is a complex system consisting of different subsystems, including the individual level, the dyadic level, and the family as a whole

(Cox & Paley, 1997). Both the parent-child relationship and the sibling relationship are dyadic levels within the family, and reciprocal influences exist between and within these levels.

Studies have shown that positive family relationships stimulate the development of prosocial behavior (Davidov & Grusec, 2006) and healthy emotion regulation skills (Kennedy & Kramer, 2008) and may therefore increase the likelihood of positive friendships for adolescence (Theran, 2010). Hence, it is important to identify processes within the family for a correct understanding of the development of social competence, which will be one of the study aims.

Parent-Child Relationship Quality and Social Competence

The parent-child relationship is an important relationship that has been shown to be foundational for many components of a child's development. The parent-child relationship quality can often be defined as two separate yet related constructs: 1) perceived warmth and support, and 2) antagonism and negative interaction.

Various studies have found a link between high quality of parent-child relationship and higher social competence (Caputi, Lecce, & Pagnin, 2017; Rubin, Dwyer, Booth-LaForce, Kim, Burgess, & Rose-Krasnor, 2004). Early adolescents who reported greater support from both parents regarded themselves as more socially competent (Oudekerk, Allen, Hessel, & Molloy, 2015; Rubin et al., 2004). Moreover, parents' supportive behavior promotes adolescent supportive behavior towards their friends (Cui, Conger, Bryant, & Elder, 2002). Also, parental support helps children to regulate emotional arousal in an appropriate manner (Blair, Perry, O'Brien, Calkins, Keane, & Shanahan, 2014), which eventually predicts later social competence.

On the other hand, a conflictive and negative parent-child interaction is related to lower social competence (Scaini & Caputi, 2018). Indeed, children who have negative interactions with their parents have more emotion-regulation difficulties and, therefore, are more prone to behave aggressively (Blair et al., 2015), leading to the development of maladaptive social skills. Moreover, these maladaptive social skills lead to lower friendship quality. Also, adolescents who experience more hostility with their parents have a higher chance to be rejected at school (Zimmermann, 1999).

Taken together, the results of these studies provide evidence that a supportive parent-child relationship is important for the development of social competence, suggesting that a positive link exists between parental support and social competence and a negative link between negative parent-child interaction and social competence.

Sibling Relationship Quality and Social Competence

Sibling relationships are among the most enduring relationships in lifetime, as siblings spend a great deal of time together (Noller, 2005). Siblings also have significant influences on one another due to the fact that they are emotionally uninhibited (Dunn, 2002). The sibling relationship is therefore mainly seen as an emotionally intense relationship, as it is characterized by intense positive and negative affect, making it especially relevant to children's psychosocial adjustment. Specifically, both warmth and conflict are important indicators of sibling relationship quality (Brody, 1998; Buhrmester

& Furman, 1990). Sibling warmth is the degree of closeness, intimacy, and companionship between siblings, whereas the level of arguing, antagonism, and fighting between siblings are part of sibling conflict (Sanders, 2004).

Being in a sibling relationship that consists of high levels of warmth and low levels of conflict is related to the most positive psychosocial adjustment (Brody, 1998; Kim, McHale, Crouter, & Osgood, 2007; Pike, Coldwell, & Dunn, 2005), and has empirically been shown to be associated with higher social competence (Buist & Vermande, 2014; Yeh & Lempers, 2004). Specifically, a warm sibling relationship helps adolescents with a source of advice and support, which provides them to foster social opportunities with their peers (Kim et al., 2007). These positive support and warmth may, on the long term, lead to more positive peer relations (Lockwood, Kitzmann, & Cohen, 2001).

However, children that are in a conflictual relationship with their siblings are shown to have significantly lower social competence (Buist & Vermande, 2014; Lockwood et al., 2001). These children were more likely to be rejected by peers making the assumption that due to high sibling conflict, a negative attribution bias may be developed which may further lead to negativity in peer relations (Lockwood et al., 2001). This is in line with *social learning theory*, which suggests that negative interaction patterns with siblings may be generalized to other contexts (Stauffacher & DeHart, 2006). Additionally, this may result in antisocial behavior (Aguilar, O'Brien, August, Aoun, & Hektner, 2001), due to difficulties in perspective taking and empathy (Stocker, Burwell, & Briggs, 2002), leading in turn to the likelihood to be rejected by peers (Lockwood et al., 2001).

In sum, these results suggest a positive link between children with a warm sibling relationship and social competence. On the other hand, it is assumed that a negative link exists between children that are in a conflictual relationship with their sibling and social competence.

Cultural Background, Cultural Identity and Social Competence

Most of the studies that researched the possible association between the parent-child and sibling relationship quality on social competence conducted their studies with White, middle class samples, given little recognition for the multi-ethnic groups residing in Western societies. Indeed, many societies around the world, including the Netherlands, are ethnically and culturally diverse. This makes it challenging for researchers as it is unclear if these results can be generalized to various cultural groups (Henrich, Heine, & Norenzayan, 2010), even within the same country. Cross-ethnic research may also benefit the clinical field in identifying whether interventions are applicable to a broader range of cultures. Therefore, this study will focus on three different cultural groups in the Netherlands: Dutch, Moroccan-Dutch, and Turkish-Dutch early adolescents.

The Moroccans and Turks are among the largest migration groups in the Netherlands, each accounting for 350.000 – 400.000 people (first plus second generation, Statistics Netherlands, 2018). Someone is considered to be of Moroccan or Turkish origin if he or she was born in Morocco or Turkey or if one or both parents were born in Morocco or Turkey. Moroccan and Turkish youth in the Netherlands were found to have traditional hierarchical family structures and are known to be

collectivistic (Phalet & Lens, 1995; Stevens, Vollebergh, Pels, & Crijnen, 2007), meaning that they are more likely to focus on interpersonal relationships (Hofstede, 1994). Conversely, the Dutch culture can be considered as individualistic (Komter & Schans, 2008), and therefore are more likely to value a person as a unique and separate individual (Hofstede, 1994). As relationships are valued differently between collectivistic and individualistic groups, it could be suggested that cultural differences exist in parent-child and sibling relationship quality and social competence.

Indeed, research has shown that adolescents from collectivistic societies reported significantly lower levels of both parental warmth (Deater-Deckard et al., 2011) and parent-child conflict (Dmitrieva, Chen, Greenberger, & Gil-Rivas, 2004) compared to adolescents from individualistic societies. Similarly, the quality of the sibling relationship varies among cultures, as the sibling relationship is seen as warmer and less conflictive in collectivistic societies than in individualistic societies (Beals & Eason, 1993). Lastly, it is emphasized that social competence may be particularly valued in collectivistic cultures as they are more group-oriented and see themselves as connected with others (Brewer & Chen, 2007), making it plausible that they score higher in social competence than adolescents from individualistic cultures.

However, differences in quality of the parent-child and sibling relationship between collectivistic and individualistic groups, does not automatically presume that their impact on social competence is different. Two models have been suggested as to ethnic differences in the family relationships on adolescent outcomes: the cultural values model and the ethnic equivalence model (Lamborn & Felbab, 2003). The *cultural values model* states that there are ethnic differences in family relationship quality on adolescent outcomes. As ethnic minority families differ in ethnicity from the main culture, they are considered to have alternative value structures, causing similar experiences in the family context to have a different meaning within these ethnic minority families. Conversely, the *ethnic equivalence model* states that the impact of family relationships on adolescent outcomes are similar across ethnic groups, reflecting universality of influence.

The few studies that tested both models for the parent-child and sibling relationship quality researched their impact on externalizing and internalizing problem behavior. From these studies, only a few (e.g. Smith & Krohn, 1995) found results that confirmed the cultural values model, while most studies (Buist et al., 2014; Buist, Verhoeven, Hoksbergen, ter Laak, Watve, & Paranjpe, 2017; Eichelsheim et al., 2010) found empirical support for the ethnic equivalence model. However, both models have not been systematically tested for the possible impact of the parent-child and sibling relationship quality on social competence. Therefore, we will examine whether the association between the parent-child and sibling relationship quality on social competence is different (suggesting the cultural values model) or similar (suggesting the ethnic equivalence model) for Dutch, Moroccan-Dutch, and Turkish-Dutch early adolescents.

Although it is important to examine possible cross-ethnic differences, only examining the cultural background of early adolescents does not give insight into what level they identify themselves

with their cultural background. Therefore, this study also aims to examine the cultural identity as a possible moderator on the link between the parent-child and sibling relationship quality on social competence. However, there is little empirical evidence in the literature regarding cultural identity as a possible moderator.

What research does show is that the process of exploring one's own ethnic group membership is important for adolescence (Spencer & Markstrom-Adam, 1990). According to the *social identity theory*, the positive affect that adolescents feel toward their ethnic group is associated with positive adjustment across development. This is consistent with empirical findings that the positive meaning that youth ascribe to their cultural identity promotes a broad range of developmental outcomes, such as self-esteem (Umaña-Taylor & Updegraff, 2007). This suggests that adolescents who identify more with their cultural identity, have more chances to be socially competent. Moreover, the family is seen as one of the most influential contexts in shaping youth's cultural identity (Erikson, 1968). This assumes that early adolescence who have a higher quality relationship with their family members, are more likely to identify themselves with their cultural identity and therefore are more socially competent. Thus, high affective quality with family members might have a stronger effect on the social competence of adolescents who identify more with their cultural identity, because a higher cultural identification is seen as a promotive factor fostering youth's development.

The Present Study

The first aim of the present study is to examine whether Dutch, Moroccan-Dutch, and Turkish-Dutch early adolescents differ concerning their parent-child and sibling relationship quality and their self-perceived social competence. Based on earlier research we expect that both the Moroccan-Dutch and Turkish-Dutch early adolescents would have lower levels of parental support as well as lower levels of parent-child conflict compared to the Dutch early adolescents. Regarding sibling relationship quality, we expect that the Moroccan-Dutch and Turkish-Dutch early adolescents have more sibling warmth and less sibling conflict compared to the Dutch early adolescents. Moreover, we expect that the Moroccan-Dutch and Turkish-Dutch early adolescents would score higher on social competence than the Dutch early adolescents.

The second aim is to examine the presumed link between parent-child and sibling relationship quality on social competence and to examine whether these associations are similar or different for Dutch, Moroccan-Dutch, and Turkish-Dutch early adolescents, thus testing the applicability of the cultural values and ethnic equivalence models. We expect to find the parent-child and sibling relationship quality to be a predictor for early adolescent social competence. Specifically, we expect to find a significant positive effect between parental support and sibling warmth on social competence and a significant negative effect between negative parent-child interaction and sibling conflict on social competence. However, we expect to find similar effects for the three cultural groups, for the fact that more empirical evidence has been found for the ethnic equivalence model.

The third aim is to test whether cultural identity moderates the relationship between the parent-child and sibling relationship quality and social competence. As expectations concerning cultural identity as a possible moderator are difficult to make, due to the lack of studies in this specific field, we formulated an exploratory hypothesis to find a moderating effect of the cultural identity on the link between parent-child and sibling relationship quality and social competence. Specifically, we expect the effect of the parent-child and sibling relationship quality on social competence to be stronger for early adolescents with higher levels of cultural identity.

Method

Participants

The initial sample of this study included 1089 Dutch, 39 Moroccan-Dutch, and 23 Turkish-Dutch early adolescents. Based on listwise deletion, 133 cases were excluded from the study because they either had no sibling (n = 75) or had incomplete data (n = 58). Therefore, the analytic sample of the study included 964 Dutch, 35 Moroccan-Dutch, and 22 Turkish-Dutch early adolescents. Both Analysis of Variance (ANOVA) and Pearson's chi-square tests were conducted to test whether the differences between the samples were significant. Sample characteristics and the results of the ANOVA and the Pearson's chi-square tests of all three samples can be found in Table 1.

Table 1. *Means, Standard Deviations (Between Brackets), and Percentages for Sample Characteristics of Dutch, Moroccan-Dutch, and Turkish-Dutch Sample, and ANOVA and Chi-Square Differences.*

	Dutch (n = 964)	Moroccan-Dutch (n = 35)	Turkish-Dutch (n = 22)	Difference (ANOVA/chi-square)
Mean age (years)	11.31 (0.72)	11.63 (0.69)	11.41 (0.85)	1.81*
Mean number of siblings	1.57 (0.83)	3.23 (1.46)	2.05 (0.84)	48.02*
Percentage boys	48.5%	51.4%	45.5%	0.20
Percentage same-sex siblings	54.4%	60.0%	54.5%	0.43
Mean age difference between siblings (years)	3.06 (2.08)	3.77 (3.76)	4.16 (2.75)	18.53*
Percentage living in nuclear family	83.6%	82.9%	86.4%	22.00*

* $p < .05$.

Some significant differences were found between the three samples concerning several demographic variables. First, the Moroccan-Dutch sample was significantly older than the Dutch sample. Second, the Moroccan-Dutch sample had significantly more siblings than both the Dutch and Turkish-Dutch sample, whereas the Turkish-Dutch sample only had significantly more siblings than the Dutch sample. Third, the age difference between the siblings in years was significantly larger for the Turkish-Dutch sample in comparison to the Dutch and Moroccan-Dutch sample. Lastly, the Pearson's chi-square test for percentage living in nuclear family was statistically significant. The Turkish-Dutch sample had the largest amount of nuclear families in comparison to the Dutch and Moroccan-Dutch sample. No significant differences were found between the three samples concerning sibling gender composition.

Procedure

Data was collected during 6 consecutive years among 35 primary schools spread across the Netherlands. Different schools participated each year, resulting in a large cross-sectional data set. Selection of the schools was done by trained research assistants based on personal ties to the school, convenience, or randomly from a comprehensive list of available schools in their hometown. The schools that participated are representative of Dutch primary schools concerning educational system, class size, and religiosity (Statistics Netherlands, 2017). Schools were approached via telephone calls, emails or a letter in advance, followed by a meeting or telephone contact with the principle. When the principle gave permission, the parents received a letter in which the purpose and the procedures of the study were explained. The parents were asked to sign the letter when they did not want to give consent for participation of their child. When consent was obtained from the parents, the participating children received a printed copy of the questionnaires which they filled out all at the same time in their own classroom. Research assistants, as well as the children's regular teachers, were available for questions.

Measures

Social competence.   Perceived social competence was measured with 6-items of the Social acceptance subscale of the Dutch version of the Self-Perception Profile for Children (Harter, 1985; Veerman, Straathof, Ten Brink, & Treffers, 1996). The early adolescents were asked to indicate their agreement to statements concerning their social competence. They first had to choose one of two statements for each item, for example, "A. Some children find it difficult to make friends." or "B. Other children find it easy to make friends." When they made a decision for either A or B, they had to indicate whether this statement was a *little bit true* or *very true* for them. Three items of six had to be recoded, so that all high scores indicated higher self-perceived social competence. Based on all six items a mean was computed to reflect Social competence. Cronbach's alpha was .75 for the Dutch, .79 for the Moroccan-Dutch, and .83 for the Turkish-Dutch early adolescents.

Parent-child relationship quality.   The parent-child relationship quality was measured with the Support and Negative interaction scales of the Dutch version of the Network of Relationship Inventory (NRI; Furman & Buhrmester, 1985, 1992). Early adolescents answered 12 questions about

the relationship with their mother and father on a 5-point Likert scale (1 = *little or none* and 5 = *the most*). The *Support* scale consists of six items for each parent and had a Cronbach's alpha of .76 for mother and .79 for father in the Dutch sample, .68 for mother and .72 for father in the Moroccan-Dutch sample, and .82 for mother and .82 for father in the Turkish-Dutch sample. Based on all six items a mean was computed to reflect Support from mothers and fathers separately. A sample item is "How much does your mother treat you like you're admired and respected?". The *Negative interaction* scale consists of six items for each parent, and had a Cronbach's alpha of .85 for mother and .87 for father in the Dutch sample, .71 for mother and .63 for father in the Moroccan-Dutch sample, and .79 for mother and .78 for father in the Turkish-Dutch sample. Based on all six items a mean was computed to reflect Negative interaction with both mothers and fathers separately. A sample item is "How much do you and your father argue with each other?".

Sibling relationship quality.   The sibling relationship quality was measured with two scales of the Dutch version of the Sibling Relationship Questionnaire-Short version (SRQ-S; Buhrmester & Furman, 1990). Early adolescents were asked to fill out questions about the relationship with the sibling closest to them in age on a 5-point Likert scale (1 = *barely* and 5 = *extremely much*). The *Warmth* scale consists of 15 items of the SRQ scales Affection, Companionship, Intimacy, Admiration of and Admiration by sibling (e.g. "How much do you and your sibling care about each other?"). Based on all 15 items a mean was computed to reflect sibling Warmth. Cronbach's alpha was .93 for the Dutch, .87 for the Moroccan-Dutch, and .92 for the Turkish-Dutch early adolescents. The *Conflict* scale consists of six items of the SRQ Quarreling and Antagonism scales (e.g. "How much do you and your brother/sister argue with each other?"). Based on all six items a mean was computed to reflect sibling Conflict. Cronbach's alpha was .92 for the Dutch, .91 for the Moroccan-Dutch, and .91 for the Turkish-Dutch early adolescents.

Cultural identity.   The cultural identity of the early adolescents was measured using four statement items on only a small part of the sample. A sample item is "My ethnic background is an important part of myself". The early adolescents had to rate each statement on a 7-point Likert scale (1 = *totally disagree!* and 7 = *totally agree!*). After removing one item that lowered the reliability in the Turkish-Dutch sample to an unacceptable level, three items were used. Internal consistency of this three-item scale was .90 for the Dutch, .88 for the Moroccan-Dutch, and .94 for the Turkish-Dutch early adolescents.

Results

Cross-Ethnic Differences in the Parent-Child and Sibling Relationship Quality and Early Adolescent Social Competence.

The first aim of this study was to examine whether the Dutch, Moroccan-Dutch, and Turkish-Dutch early adolescents differed significantly in their mean scores on their relationship quality with both their mother, father and sibling as well as on their social competence. To examine these cross-cultural differences, a Multivariate Analysis of Variance (MANOVA) was conducted.

Before conducting the MANOVA, several assumptions were evaluated to ensure that all assumptions were met. The Shapiro-Wilk tests, boxplots and the Mahalanobis distance indicated that the assumption of univariate and multivariate normality could not be assumed. Furthermore, the assumption of homogeneity of variance-covariance matrices has been violated as Box's *M* was non-significant at $\alpha = .000$. Finally, both the assumption of multicollinearity and the assumption of linearity could be met as the correlations between the dependent variables were not excessive and the dependent variables were all roughly linear.

While not all assumptions could be met, the MANOVA was still conducted given the purpose of this study. The results of these analyses can be found in Table 2.

Table 2. *Means, Standard Deviations (Between Brackets) and Multivariate Analysis of Variance (MANOVA) Differences of Parent-Child and Sibling Relationship Quality, and Social Competence Between Dutch, Moroccan-Dutch, and Turkish-Dutch Early Adolescents.*

	Dutch (n = 964)	Moroccan-Dutch (n = 35)	Turkish-Dutch (n = 22)	F	*p*	η^2
Mother-child relationship						
Support	3.88 (0.67)	4.15 (0.61)	3.92 (0.75)	2.64	.07	.01
Negative interaction	1.57 (0.60)	1.52 (0.53)	1.64 (0.59)	0.25	.78	.00
Father-child relationship						
Support	3.68 (0.70)	3.89 (0.66)	3.51 (0.85)	2.16	.12	.00
Negative interaction	1.50 (0.56)	1.49 (0.47)	1.61 (0.63)	0.46	.63	.00
Sibling relationship						
Warmth	3.20 (0.72)	3.58 (0.64)	3.20 (0.87)	4.61	.01	.01
Conflict	2.70 (0.93)	2.50 (1.06)	2.51 (0.96)	1.16	.31	.00
Social Competence	3.11 (0.64)	3.15 (0.71)	2.70 (0.84)	4.50	.01	.01

The Dutch, Moroccan-Dutch, and Turkish-Dutch early adolescents reported significantly different on sibling warmth as well as on social competence. Post-hoc Bonferroni tests revealed that the Moroccan-Dutch early adolescents reported significantly more sibling warmth in comparison to the Dutch early adolescents ($p < .01$), while no significant differences were found between the Moroccan-Dutch and Turkish-Dutch, and between the Turkish-Dutch and Dutch early adolescents. Furthermore, both the Dutch early adolescents ($p < .01$) and the Moroccan-Dutch early adolescents ($p < .05$) reported significantly higher on social competence than the Turkish-Dutch early adolescents. The analyses showed no significant differences for social competence between the Moroccan-Dutch

and Dutch early adolescents. There were no significant differences found for support and negative interaction with both the mother and the father, nor with sibling conflict.

Cross-Ethnic Differences in Effects of the Parent-Child and Sibling Relationship Quality on Early Adolescent Social Competence.

The second aim of this study was to investigate the effects of the parent-child and sibling relationship quality on early adolescent social competence and to examine if these effects differ between the Dutch, Moroccan-Dutch, and Turkish-Dutch early adolescents. Two multiple regression analyses (MRA) were performed to estimate this association.

Prior to conducting the MRA, several assumptions were evaluated. Stem-and-leaf-plots and boxplots indicated non-normality in two out of seven variables and the Mahalanobis distance exceed the critical value, raising concern about multivariate outliers. The assumption of normality, linearity, and homoscedasticity could also not be met as inspection of the scatterplot showed non-normality, whereas the assumption of multicollinearity could be met as a result of relatively high tolerance for all predictors in the regression model.

While not all assumptions could be met, the MRA was still conducted given the purpose of this study. In total, the predictors support mother, support father, negative interaction mother, negative interaction father, sibling warmth, and sibling conflict accounted for a significant 9% of the variability in social competence, $R^2 = .09$, adjusted $R^2 = .08$, $F(6, 1016) = 16.45$, $p < .001$. Unstandardized (B) and standardized (β) regression coefficients, and squared semi-partial (or 'part') correlations (sr^2) for each predictor in the regression model are reported in Table 3.

Table 3. *Unstandardized (B) and Standardized (β) Regression Coefficients, and Squared Semi-Partial Correlations (sr^2) for the Regression Model Predicting Social Competence.*

Variable	B [95% CI]	β	p	sr^2
Support mother	0.06 [-0.02, 0.14]	0.06	.11	.05
Support father	0.11 [0.04, 0.18]	0.12	.00	.09
Negative interaction mother	- 0.08 [-0.16, -0.01]	- 0.08	.03	- .07
Negative interaction father	- 0.10 [-0.18, -0.03]	- 0.10	.01	- .08
Sibling warmth	0.06 [-0.01, 0.13]	0.07	.08	.06
Sibling conflict	- 0.02 [-0.06, 0.03]	- 0.02	.53	- .02

Note. N = 1021. CI = confidence interval.

The results showed significant effects of father-child support ($\beta = .12$, $p < .01$), father-child negative interaction ($\beta = -.10$, $p < .05$), and mother-child negative interaction ($\beta = -.08$, $p < .05$) on social competence. Early adolescents who perceive more support from their fathers, had a significant positive effect on social competence, meaning that early adolescents who have more father support report higher social competence. Concerning the father-child and mother-child negative interaction, a

significant negative effect on social competence was found, meaning that early adolescents who quarrel more often with their parents also report lower social competence. No significant effects on social competence were found for maternal support, sibling warmth or sibling conflict.

The second MRA was performed to examine if the effects of the parent-child and sibling relationship quality on social competence differ between the Dutch, Moroccan-Dutch, and Turkish-Dutch early adolescents. Because this analysis consisted of the same predictors as the first MRA, a second evaluation of the assumptions was not necessary. Standardized (β) regression coefficients for each predictor in the regression model for the three cultural groups are reported in Table 4.

For the Dutch early adolescents, the results showed significant positive effects of father-child support ($\beta = .15$, $p < .001$) and sibling warmth ($\beta = .08$, $p < .05$), and significant negative effects of mother-child negative interaction ($\beta = -.08$, $p < .05$) and father-child negative interaction ($\beta = -.09$, $p < .05$). Dutch early adolescents who perceive more paternal support and have a warm sibling relationship report higher on social competence, while having more negative interactions with both parents leads to lower levels of social competence.

For the Moroccan-Dutch early adolescents, the results showed a significant positive effect of mother-child support ($\beta = .62$, $p < .001$) and a significant negative effect of father-child support ($\beta = -.35$, $p < .05$). Moroccan-Dutch early adolescence who perceive more maternal support, report higher on social competence, whereas more paternal support results in lower levels of social competence.

For the Turkish-Dutch early adolescents, the results showed significant negative effects of mother-child negative interaction ($\beta = -.66$, $p < .05$), sibling warmth ($\beta = -.74$, $p < .05$), and sibling conflict ($\beta = -.67$, $p < .05$). Turkish-Dutch early adolescents who have more negative interactions with their mothers, have more sibling warmth, and have more sibling conflict reported lower levels of social competence.

Table 4. *Standardized (β) Regression Coefficients for the Regression Model Predicting Social Competence for Dutch, Moroccan-Dutch, and Turkish-Dutch Early Adolescence.*

	Dutch (n = 964)		Moroccan-Dutch (n = 35)		Turkish-Dutch (n = 22)	
	β	p	β	p	β	p
Support mother	0.02	.59	0.62	.00	0.66	.07
Negative interaction mother	- 0.08	.04	- 0.31	.19	- 0.66	.04
Support father	0.15	.00	- 0.35	.05	0.12	.76
Negative interaction father	- 0.09	.02	0.10	.68	0.47	.15
Warmth	0.08	.04	0.19	.29	- 0.74	.05
Conflict	- 0.03	.49	0.18	.32	- 0.67	.04

The Moderating Effect of the Cultural Identity on the Link Between the Parent-Child and Sibling Relationship Quality and Early Adolescent Social Competence.

The third aim of the study was to investigate the moderating effect of cultural identity between the parent-child and sibling relationship quality and early adolescent social competence. This question is only examined among a small group of the sample (N = 33) as these data were not available for the whole sample. To examine the moderating effect, a hierarchical multiple regression analysis (MRA) with interaction effects was conducted.

Table 5. *Unstandardized (B) and Standardized (β) Regression Coefficients, and Squared Semi-Partial Correlations (sr^2) of the Hierarchical Multiple Regression Predicting Early Adolescent Social Competence (N = 33).*

Variable	B [95% CI]	β	*p*	sr^2
Step 1				
Support mother	0.69 [-0.24, 1.62]	0.36	.14	.29
Negative interaction mother	- 0.78 [-2.53, 0.98]	- 0.30	.37	- .18
Support father	0.12 [-0.99, 1.23]	0.05	.83	.04
Negative interaction father	1.72 [-0.15, 3.59]	0.67	.07	.35
Sibling warmth	0.40 [-0.44, 1.24]	0.25	.34	.19
Sibling conflict	0.12 [-0.55, 0.79]	0.09	.71	.07
Cultural identity	0.05 [-0.33, 0.42]	0.05	.80	.05
Step 2				
Support mother	0.24 [-0.90, 1.37]	0.12	.67	.10
Negative interaction mother	- 2.04 [-4.24, 0.17]	- 0.79	.07	- .41
Support father	0.41 [-0.96, 1.78]	0.18	.54	.14
Negative interaction father	3.08 [0.65, 5.51]	1.19	.02	.52
Sibling warmth	0.56 [-0.46, 1.57]	0.35	.27	.26
Sibling conflict	0.11 [-0.65, 0.88]	0.09	.76	.07
Cultural identity	0.24 [-0.38, 0.86]	0.25	.43	.18
Support mother x Cultural identity	0.44 [-0.39, 1.26]	0.35	.28	.25
Negative interaction mother x Cultural identity	- 1.58 [-4.17, 1.02]	- 0.82	.22	- .28
Support father x Cultural identity	- 0.79 [-1.95, 0.38]	- 0.50	.18	- .31
Negative interaction father x Cultural identity	1.28 [-0.96, 3.51]	0.70	.25	.27
Sibling warmth x Cultural identity	- 0.45 [-1.42, 0.52]	- 0.35	.35	- .22
Sibling conflict x Cultural identity	0.00 [-0.78, -0.78]	0.00	.99	.00

Note. CI = confidence interval.

Before interpreting the results of the hierarchical MRA, several assumptions were tested, and checks were performed. Stem-and-leaf plots and boxplots indicated non-normality and the Mahalanobis distance showed multivariate outliers in the data. On the other hand, absence of any clear patterns in the scatterplot indicated that the assumption of normality, linearity, and homoscedasticity could be met, as well as the assumption of multicollinearity as a result of relatively high tolerance for all predictors in the regression model.

While not all assumptions could be met, the hierarchical MRA was still conducted given the purpose of this study. On step 1 of the hierarchical MRA, support mother, negative interaction mother, support father, negative interaction father, sibling warmth, and sibling conflict accounted for a non-significant 32% of the variance in social competence, $R^2 = .32$, $F(7, 33) = 1.65$, $p = .167$. On step 2, all interaction effects with cultural identity were added to the regression equation, and accounted for an additional 15.3% of the variance in social competence, $\Delta R^2 = .15$, $\Delta F(13, 33) = .91$, $p = .509$. In combination, the thirteen predictor variables explained 47% of the variance in social competence, $R^2 = .47$, adjusted $R^2 = .11$, $F(13, 33) = 1.29$, $p = .298$. Unstandardized (B) and standardized (β) regression coefficients, and squared semi-partial (or 'part') correlations (sr^2) for each predictor on each step of the hierarchical MRA are reported in Table 5.

The results of the hierarchical MRA showed that none of the interaction effects were significant, which indicates that cultural identity does not moderate the association between the parent-child and sibling relationship quality and early adolescent social competence.

Discussion

The aim of the present study was to examine (a) differences between Dutch, Moroccan-Dutch, and Turkish-Dutch early adolescents in the parent-child and sibling relationship quality and social competence, (b) the presumed association between the parent-child and sibling relationship quality on social competence for Dutch, Moroccan-Dutch, and Turkish-Dutch early adolescents, and (c) whether cultural identity moderates the relationship between the parent-child and sibling relationship quality and social competence.

First, we expected to find cross-ethnic differences in the parent-child and sibling relationship quality as well as on social competence. Our results confirm these hypotheses partially. The results show significant differences between the Dutch, Moroccan-Dutch, and Turkish-Dutch early adolescents in sibling warmth and social competence. The Moroccan-Dutch early adolescents reported significantly more sibling warmth, whereas both the Dutch and Moroccan-Dutch early adolescents reported significantly higher on social competence compared to the Turkish-Dutch early adolescents.

The ethnic differences in sibling warmth found in this study are consistent with earlier cross-cultural studies (Beals & Eason, 1993). Presumably, sibling harmony is more strongly emphasized in collectivistic cultural groups, like the Moroccan-Dutch group, whereas sibling rivalry and hostility are more likely to be discouraged. This could result in more sibling warmth in the Moroccan-Dutch sample compared to the Dutch sample. Furthermore, the results concerning the ethnic differences in

social competence are partially consistent with earlier cross-cultural studies (Brewer & Chen, 2007), as the Moroccan-Dutch sample scored high on social competence. However, the Dutch sample also scored high on social competence, whereas the Turkish-Dutch sample scored the lowest. One possible explanation for the fact that the Dutch early adolescents also scored high on social competence, is that children in individualistic societies are generally more encouraged to interact with peers compared to children from collectivistic societies, which gives these children more opportunities to foster their social competence (Edwards, 1992).

However, we found no significant differences between the three groups in our sample concerning both maternal and paternal support as well as father-child and mother-child negative interaction. Moreover, no significant differences were found concerning sibling conflict. These findings are inconsistent with our expectation that cross-ethnic differences would be found between the three groups. Specifically, it was expected that the Moroccan-Dutch and Turkish-Dutch early adolescents would report significantly less on parental warmth (Deater-Deackard et al., 2011), less on negative parent-child interactions (Dmitrieva et al., 2004), and less on sibling conflict (Beals & Eason, 1993) than the Dutch early adolescents. A possible explanation for this is the process of acculturation. It is plausible that family relationships are changing as these families have moved from a more collectivistic culture to a more individualistic culture, and therefore come in contact with a culture with different family relationships (Greenfield & Cocking, 1994). This may result in changes of the perceived importance of family relationships. Indeed, empirical research has shown that Moroccan and Turkish family relationships in the Netherlands change across generations, with first-generation immigrants having more traditional family values, while second-generation families are more likely to adapt to the Dutch family values (Arends-Tóth & Van de Vijver, 2008). Further cross-ethnic research is needed to confirm these statements and findings.

Second, we expected to find a significant positive effect of parental support and sibling warmth on social competence, and a significant negative effect on negative parent-child interaction and sibling conflict on social competence. Moreover, we expected to find similar results for all three cultural groups, supporting the ethnic equivalence model rather than the cultural values model. These hypotheses were partially confirmed in our results. As expected, we found that paternal support leads to higher levels of social competence, while a negative parent-child interaction leads to decreases in social competence, which is consistent with earlier studies (Scaini & Caputi, 2018; Rubin et al., 2004). This could be best explained with a developmental cascade model which proposes that early experiences in relationships with the parents lay the foundation for functioning in peer relationships (Masten & Cicchetti, 2010; Pepler, 2012), because parents are important for the development of early adolescent social competence.

However, there was only a significant association found for paternal, and not for maternal support on social competence. This suggests that mothers and fathers have a unique and different relationship with adolescents. A first possible explanation for this is the growing consensus that the

link between paternal support and early adolescent social competences may be stronger for fathers than for mothers (Grossman et al., 2002; Paquette, 2004). According to these studies, paternal support may play a bigger role than maternal support for autonomy in helping adolescents to adjust to the outside world, especially in regard to social competence. A second possible explanation is that the mother-child relationship may undergo more of a transformation during the transition to adolescence in comparison to the father-child relationship (Collins & Russell, 1991). This transformation may lead to an increase in conflictual interactions with early adolescents and may therefore explain that in this study only mother-child negative interaction and not maternal support is associated with early adolescent social competence. This is in line with the results of our study that showed lower standard deviations for mother-child negative interaction compared to maternal support, meaning that the mothers in our study varied less widely in their negative interactions with the adolescents, and this therefore could have resulted in a significant effect on social competence. More research needs to be conducted to explain these differences in parent-child and sibling relationship quality on social competence.

In examining whether cross-ethnic differences exist for the Dutch, Moroccan-Dutch and Turkish-Dutch early adolescents concerning the effect of the parent-child and sibling relationship quality on social competence, contradicting results were found. For both the Dutch and Turkish-Dutch sample, but not for the Moroccan-Dutch sample, mother-child negative interaction was related to lower levels of social competence, supporting the ethnic equivalence model and these results are therefore consistent with other cross-ethnic studies (Buist et al., 2014; Eichelsheim et al., 2010). However, more ethnic differences than similarities were found in our study, supporting the cultural values model rather than the ethnic equivalence model. We found significant ethnic differences for both paternal support and sibling warmth. Paternal support leads to higher levels of social competence for the Dutch sample, while it leads to lower levels of social competence for the Moroccan-Dutch sample. Sibling warmth also leads to higher levels of social competence for the Dutch sample, while a warm sibling relationship in the Turkish-Dutch sample is related to lower levels of social competence.

One explanation for these results is the fact that the samples of the two ethnic minority groups were relatively small, and therefore increased the probability of making a type II error due to a power problem. However, another explanation for the differences is the suggestion that children from collectivistic groups, like the Moroccan-Dutch and Turkish-Dutch early adolescents, come to understand the meaning of friendships in different ways (Chen, French, & Schneider, 2006), which may have led to different results regarding the effect of the family relationships on their social competence. Furthermore, some researchers have argued that maintaining intimate relationships with parents may be more important for adolescents from collectivistic groups, making the significance of extra-familial relationships, like friendships, somewhat diminished (French, Pidada, & Victor, 2005), and may therefore explain the significant negative effect between family relationships and social competence. Moreover, the studies that found results confirming the ethnic equivalence model, looked

at the link between family relationships and externalizing and internalizing problem behaviors (Buist et al., 2014, 2017; Eichelsheim et al., 2010). It is plausible that the link between family relationships are different in regard to positive developmental outcomes, like social competence, compared to the link between family relationships and psychopathology. Thus, given the fact that these models are not yet tested in regard to positive developmental outcomes, like social competence, clearly much more work is required before a conclusion may be drawn about ethnic differences or similarities in the link between family relationships and social competence.

Finally, we formulated an exploratory hypothesis expecting that a moderating effect of cultural identity would exist on the association between parent-child and sibling relationship quality and social competence. However, the results show no significant interaction effects, indicating that the association between the parent-child and sibling relationship quality and social competence is similar for early adolescents with different levels of cultural identity explorations. A possible explanation is that this study is conducted with early adolescents. Indeed, the theoretical work on cultural identity of Phinney (1990) suggests that individuals only achieve a sense of cultural identity after they have explored their ethnicity and what it means to them, and after they have accepted and internalized their ethnicity. Moreover, it is not until late adolescence that individuals possess the abstract thinking skills necessary to consider identity issues (Marcia, 2002). Another explanation is that the development of cultural identity is particularly important for ethnic minority adolescents as they are members of both their own ethnic group and of the mainstream society (Shrake & Rhee, 2004). As this study has only a limited number of participants from the Moroccan-Dutch and Turkish-Dutch sample, this could have led to no significant interaction effects of cultural identity. It would therefore be insightful for future research to collect more data among older adolescents and among ethnic minority samples in the Netherlands.

Limitation and Strengths

It is worth mentioning some limitations of the present study. Firstly, the study relied on self-reported data only. For example, it is suggested that social competence is reported differently between children, parents, and teachers (Hussong et al., 2005). Therefore, it might be informative for research purposes to examine the correspondence between the information adolescent provide and the information of other sources. Secondly, only cross-sectional data is used in this study, which might have influenced the results. Both the parent-child and sibling relationship quality as well as social competence may change over time, making it of interest to examine these associations over a longer period of time. Indeed, the lack of longitudinal perspective meant it was not possible to make conclusions regarding causality, direction of effects, and reciprocal patterns. Thirdly, the three ethnic samples differed significantly in age, mean number of siblings, mean age between siblings, and in percentage of adolescents living in nuclear families. However, we did not control for these variables in the analyses. Fourth, the early adolescents who participated in the current study all attended primary school. Future studies should examine whether these findings can be generalized to other groups such

as adolescents at secondary school. Fifth, the Moroccan-Dutch and Turkish-Dutch samples were very small, which could have led to power problems in the analyses. For future studies, it is important to collect more data among the Moroccan-Dutch and Turkish-Dutch early adolescents to investigate how, and to extent our understanding, regarding developmental concepts that may or may not translate across different ethnic groups in the Netherlands. Moreover, another limitation is the possibility that the same questionnaire items may have different meanings in different ethnic groups. For example, individuals from more collectivistic groups, like the Moroccan-Dutch and Turkish-Dutch samples, in which family harmony is very important, it is possible that even small amounts of sibling conflict may seem as a lot and may therefore lead to overestimation of the questionnaire items. However, in our study, this does not seem to be a problem as the reliability (as indicated by Cronbach's alpha) of the measures was highly similar between the three ethnic groups. A final limitation is that before the participants filled out the questionnaire about cultural identity, they were forced to choose one cultural group in which they thought they belonged the most to. This makes the questionnaire not sensitive for children and adolescents that may identify themselves with more than one cultural group, which is especially more likely to be the case for ethnic minority youth in the Netherlands, as they are born in families with a minority background while growing up in the Western world.

Despite these limitations, this study is one of the few that has examined possible differences of the parent-child and sibling relationship quality and social competence between majority Dutch and ethnic minority groups (Moroccan-Dutch and Turkish-Dutch) of early adolescents in a European context. It is also one of the first studies to test the cultural values model and ethnic equivalence model in the association between parent-child and sibling relationship quality on social competence. Moreover, this study is one of the few to examine cultural identity as a possible moderator. These results offer opportunities for future cross-ethnic research and expands our understanding of family and cultural influences on the development of early adolescents. Another strength is that we chose to study father-child and mother-child relationship separately, as this study gave indications that there are differences between the parents in regard to their influence on social competence. Indeed, research has shown that paternal and maternal warmth as well as conflict may affect the development of adolescents differently (Verhoeven, Bögels, & van Bruggen, 2012). Furthermore, this study also examined in what levels early adolescents' identity themselves with their cultural identity, which gives more information about their cultural identification rather than only examining their cultural background. Only measuring the cultural background of children and adolescents by looking at where a child or his or her parents are born, researchers miss out on lots of information regarding possible differences in identification of that specific cultural background for each child or adolescent. Indeed, ethnic minority youth in Western societies are more likely to have a dual reference point and are more likely to explore their cultural identity to find where they belong to (Phinney, 1990).

A last strength of this study is that it highlighted the ethnic and multicultural diversity in Western countries, such as the Netherlands, thereby increasing our understanding of possible ethnic

differences. This is very important and necessary, as many countries are rapidly becoming more ethnically diverse, which is highlighted in our results that supports the cultural values model more than the ethnic equivalence model. Practitioners should take these ethnic differences into account to develop educational programs to teach parents about their parenting influences on adolescents' outcomes.

Conclusion

In conclusion, this study indicates that cross-ethnic differences may exist in sibling relationship quality and social competence, therefore expanding our knowledge on cross-ethnic pedagogy. Specifically, mean level differences between the three ethnic groups were found for sibling warmth and social competence. The fact that no ethnic differences were found for parent-child relationship quality suggests that they are similar for the ethnic groups. In contrast to other studies, this study mainly supported the cultural values model, suggesting differences for the three ethnic groups in the patterns of associations between the quality of parent-child and sibling relationship on social competence, while no moderate differences in these associations were found by cultural identity. Given that family relationship influences on social competence may differ between Dutch, Moroccan-Dutch, and Turkish-Dutch early adolescents, it is important that practitioners are careful in using interventions designed in Western countries for ethnic minority families. These findings underline the importance that more cross-ethnic research needs to be conducted concerning parent-child and sibling relationship quality and its impact on social competence.

References

Aguilar, B., O'Brien, K. M., August, G. J., Aoun, S. L., & Hektner, J. M. (2001). Relationship quality
of aggressive children and their siblings: A multiinformant, multimeasure investigation.
Journal of Abonormal Child Psychology, 29, 479-489. doi:10.1023/A:1012273024211

Arends-Tóth, J., & Van de Vijver, F. J. R. (2008). Family relationships among immigrants and
majority members in the Netherlands: The role of acculturation. *Applied Psychology, 57*, 466-
487. doi:10.1111/j.1464-0597.2008.00331.x

Beals, A. R., & Eason, M. A. (1993). Siblings in North America and South Asia. In C. W.
Nuckolls (Ed.), *Siblings in South Asia: Brothers and sisters in cultural context* (pp. 71-101).
New York, NY: Guilford Press.

Blair, B. L., Perry, N. B., O'Brien, M., Calkins, S. D., Keane, S. P., & Shanahan, L. (2014).
The indirect effects of maternal emotion socialization on friendship quality in middle
childhood. *Developmental Psychology, 50*, 566-576. doi:10.1037/a0033532

Bornstein, M. H., Hahn, C. S., & Haynes, O. M. (2010). Social competence, externalizing,
and internalizing behavioral adjustment from early childhood through early adolescence:
Developmental cascades. *Development and Psychopathology, 22*, 717-735. doi:10.1017
/50954579410000416

Brewer, M. B., Chen, Y. (2007). Where (who) are collectives in collectivism? Toward conceptual
clarification of individualism and collectivism. *Psychological Review, 114*, 133-151.
doi:10.1037/0033-295X.114.1.133

Brody, G. H. (1998). Sibling relationship quality: Its causes and consequences. *Annual
Review of Psychology, 49*, 1-24. doi:10.1146/annurev.psych.49.1.1

Buhrmester, D., & Furman, W. (1990). Perceptions of sibling relationships during middle
childhood and adolescence. *Child Development, 61*, 1387-1398. doi:10.2307/1130750

Buist, K. L., Paalman, C. H., Branje, S. J. T., Deković, M., Reitz, E., Verhoeven, M., . . . Hale, W. W.,
III. (2014). Longitudinal effects of sibling relationship quality on adolescent problem
behavior: A cross-ethnic comparison. *Cultural Diversity and Ethnic Minority Psychology, 60*,
505-513. doi:10.1037/a0033675

Buist, K. L., & Vermande, M. (2014). Sibling relationship patterns and their associations with
child competence and problem behavior. *Journal of Family Psychology, 28*, 529-537.
doi:10.1037/a0036990

Buist, K. L., Verhoeven, M., Hoksbergen, R., ter Laak, J., Watve, S., & Paranjpe, A. (2017).
Association of perceived sibling and parent-child relationship quality with internalizing and
externalizing problems: Comparing Indian and Dutch early adolescents. *Journal of Early
Adolescence, 37*, 1163-1190. doi:10.1177/0272431616653473

Burt, K. B., Obradovic, J., Long, J. D., & Masten, A. S. (2008). The interplay of social

competence and psychopathology over 20 years: Testing transactional and cascade models. *Child Development, 79*, 359-374. doi:10.1111/j.1467-8624.2007.01130.x

Caputi, M., Lecce, S., & Pagnin, A. (2017). The role of mother-child and teacher-child relationship on academic achievement. *European Journal of Developmental Psychology, 14*, 141-158. doi:10.1080/17405629.2016.1173538

Chen, X., French, D., & Schneider, B. (2006). Culture and peer relationships. In X. Chen, D. French, & B. H. Schneider (Eds.), *Peer relationships in cultural context* (pp. 3-20). New York: Cambridge University Press.

Collins, W. A., Russell, G. (1991). Mother-child and father-child relationships in middle childhood and adolescence: A developmental analysis. *Developmental Review, 11*, 99-136. doi:10.1016 /0273-2297(91)90004-8

Cox, M. J., & Paley, B. (1997). Families as systems. *Annual Review of Psychology, 48*, 243-267. doi:10.1146/annurev.psych.48.1.243

Cui, M., Conger, R., Bryant, C., & Elder, G. H., Jr. (2002). Parental behavior and the quality of adolescent friendships: A social contextual perspective. *Journal of Marriage and Family, 64*, 676-689. doi:10.1111/j.1741-3737.2002.00676.x

Davidov, M., & Grusec, J. E. (2006). Untangling the links of parental responsiveness and warmth to child outcomes. *Child Development, 77*, 44-58. doi:0009-3920/2006/7701-0004

Deater-Deckard, K., Lansford, J. E., Malone, P. S., Alampay, L. P., Sorbring, E., Bacchini, D., . . . Al-Hassan, S. M. (2011). The associations between parental warmth and control in thirteen cultural groups. *Journal of Family Psychology, 25*, 790-794. doi:10.1037/a0025120

Denham, S. A. (2006). Social-emotional competence as support for school readiness: What is it and how do we assess it? *Early Education and Development, 17*, 57-89. doi:10.1207 /s15566935eed1701_4

Dmitrieva, J., Chen, C., Greenberger, E., & Gill-Rivas, V. (2004). Family relationships and adolescent psychosocial outcomes: Converging findings from Eastern and Western cultures. *Journal of Research on Adolescence, 14*, 425-447. doi:10.1111/j.1532-7795.2004.00081.x

Dunn, J. (2002). Sibling relationships. In P. K. Smith & C. H. Hart (Eds.), *Blackwell handbook of childhood social development* (pp. 223-237). Oxford, England: Blackwell.

Edwards, C. P. (1992). Cross-cultural perspective on family-peer relations. In R. D. Parke and G. W. Ladd (Eds.), *Family-peer relationships: Modes of linkages* (pp. 285-316). Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.

Eichelsheim, V. I., Buist, K. L., Deković, M., Wissink, I. B., Frijns, T., Van Lier, P. A. C. . . . Meeus, W. H. J. (2010). Associations among the parent-adolescent relationship, aggression, and delinquency in different ethnic groups. *Social Psychiatry and Psychiatric Epidemiology, 45*, 293-300. doi:10.1007/s00127-009-0071-z

Elias, M. J., & Haynes, N. M. (2008). Social competence, social support, and academic

achievement in minority, low-income, urban elementary school children. *School Psychology Quarterly, 23,* 474-495. doi:10.1037/1045-3830.23.4.474

Erikson, E. H. (1968). *Identity, youth and crisis.* New York, NY: W.W. Norton.

Fergus, S., & Zimmerman, M. A. (2005). Adolescent resilience: A framework for understanding healthy development in the face of risk. *Annual Review of Public Health, 26,* 399-419. doi:10.1146/annurev.publhealth.26.021304.144357

French, D., Pidada, S., & Victor, A. (2005). Friendships of Indonesian and United States youth. *International Journal of Behavioral Development, 29,* 304-313. doi:10.1177/01650250544000080

Furman, W., & Buhrmester, D. (1985). Children's perceptions of the personal relationship in their social networks. *Developmental Psychology, 21,* 1016-1024. doi:10.1037/0012-1649.21.6.1016

Furman, W., & Buhrmester, D. (1992). Age and sex differences in perceptions of network of personal relationships. *Child Development, 63,* 103-115. doi:10.1111/j.1467-8624.1992.tb03599.x

Greenfield, P. M., Cocking, R. R. (1994). *Cross-cultural roots of minority child development.* Hillsdale, NJ: Lawrence Erlbaum Associates.

Griffin, K. W., Nichols, T. R., Birnbaum, A. S., & Botvin, G. J. (2006). Social competence among urban minority youth entering middle school: Relationships with alcohol use and antisocial behaviors. *International Journal of Adolescent Medical Health, 18,* 97-106. doi:10.1515/IJAMH.2006.18.1.97

Grossman, K., Grossman, K. E., Fremmer-Bombik, E., Kinder, H., Scheuerer-Englisch, H., & Zimmerman, P. (2002). The uniqueness of the child-father attachment relationship: Fathers' sensitive and challenging play as a pivotal variable in a 16-year longitudinal study. *Social Development, 11,* 307-331. doi:10.1111/1467-9507.00202

Harter, S. (1985). *Manual for the self-perception of profile for children.* Denver: University of Denver.

Henrich, J., Heine, S. J., & Norenzayan, A. (2010). The weiredest people in the world? *Behavior and Brain Sciences, 33,* 61-83. doi:10.1017/S0140525X0999152X

Hofstede, G. (1994). Foreword. In U. Kim, H. C. Triandis, C. Kagiticibasi, S. Choi, & G. Yoon (Eds.), *Individualism and collectivism: Theory, method, and applications* (pp. ix-xiii). Thousand Oaks, CA: Sage.

Hussong, A. M., Zucker, R. A., Wong, M. M., Fitzgerald, H. E., & Puttler, L. I. (2005). Social competence in children of alcoholic parents over time. *Developmental Psychology, 41,* 747-759. doi:10.1037/0012-1649.41.5.747

Kennedy, D. E., & Kramer, L. (2008). Improving emotion regulation and sibling relationship quality: The More Fun With Sisters and Brothers Program. *Family Relations, 57,* 567-578. doi:10.1111/j.1741-3729.2008.00523.x

Kim, J. Y., McHale, S. M., Crouter, A. C., & Osgood, D. W. (2007). Longitudinal linkages

between sibling relationships and adjustment from middle childhood through adolescence. *Developmental Psychology, 43*, 960-973. doi:10.1037/0012-1649.43.4.960

Komter, A., & Schans, D. (2008). Reciprocity revisited: Give and take in Dutch and immigrant families. *Journal of Comparative Family Studies, 39*, 279-298. Retrieved from https://www.jstor.org /stable/41604215?seq=1#page_scan_tab_contents

Lamborn, S. D., & Felbab, A. J. (2003). Applying ethnic equivalence and cultural values models to African-American teens' perceptions of parents. *Journal of Adolescence, 26*, 601-618. doi:10.1016/S0140-1971(03)00059-0

Larson, J. J., Whitton, S. W., Hauser, S. T., & Allen, J. P. (2007). Being close and being social: Peer ratings of distinct aspects of young adult social competence. *Journal of Personality Assessment, 89*, 136-148. doi:10.1080/00223890701468501

Lockwood, R. L., Kitzmann, K. M., & Cohen, S. (2001). The impact of sibling warmth and conflict on children's social competence with peers. *Child Study Journal, 31*, 47-69. Retrieved from http://ovidsp.tx.ovid.com.proxy.library.uu.nl/sp-3.15.1b /ovidweb.cgi?&S-PBCOFPALGHDDJMIPNCKKDBIBHPJBAA00&Abstract

Luecken, L. J., Roubinov, D. S., & Tanaka, R. (2013). Childhood family environment, social competence, and health across the lifespan. *Journal of Social and Personal Relationships, 30*, 171-178. doi:10.1177/0265407512454272

Marcia, J. E. (2002). Identity and psychosocial development in adulthood. *Identity, 2*, 7-28. doi:10.1207/S1532706XID0201_02

Masten, A. S., & Coatsworth, J. D. (1998). The development of competence in favorable and unfavorable environments: Lessons from research on successful children. *American Psychologist, 53*, 205-220. Retrieved from https://psycnet.apa.org/buy/1997-38813-009

Masten, A. S., & Cicchetti, D. (2010). Developmental cascades. *Development and Psychopathology, 22*, 491-495. doi:10.1017/S09545794100000222

Noller, P. (2005). Sibling relationships in adolescence: Learning and growing together. *Personal Relationships, 12*, 1-22. doi:10.1111/j.1350-4126.2005.00099.x

Obradovic, J., Burt, K. B., & Masten, A. S. (2010). Testing a dual cascade model linking competence and symptoms over 20 years from childhood to adulthood. *Journal of Clinical Child and Adolescent Psychology, 39*, 90-102. doi:10.1080/15374410903401120

Oudekerk, B. A., Allen, J. P., Hessel, E. T., Molloy, L. E. (2015). The cascading development of autonomy and relatedness from adolescence to adulthood. *Child Development, 86*, 472-485. doi:10.1111/cdev.12313

Paquette, D. (2004). Theorizing the father-child relationship: Mechanisms and developmental outcomes. *Human Development, 47*, 193-219. doi:10.1159/000078723

Parker, J. G., Rubin, K. H., Erath, S. A., Wojslawowicz, J. C., & Buskirk, A. A. (2006). Peer

relationships, child development, and adjustment: A developmental psychopathology
perspective. In D. Cicchetti, & D. J. Cohen (Eds.), *Developmental psychopathology* (2nd ed.,
Vol. 1, pp. 419-493). New York: Wiley.

Pepler, D. (2012). The development of dating violence: What doesn't develop, what does develop,
how does it develop, and what can we do about it? *Prevention Science, 13*, 402-409.
doi:10.1007/s11121-012-0308-z

Phinney, J. S. (1990). Ethnic identity in adolescents and adults: Review of research. *Psychological
Bulletin, 108*, 499-514. doi:10.1037/0033-2909.108.3.499

Pike, A., Coldwell, J., & Dunn, J. F. (2005). Sibling relationship in early/middle childhood:
Links with individual adjustment. *Journal of Family Psychology, 19*, 523-532. doi:10.1037
/0893-3200-19.4.523

Renk, K., & Phares, V. (2004). Cross-informant ratings of social competence in children and
adolescent. *Elsevier, 24*, 239-254. doi:10.1016/j.cpr.2004.01.004

Rubin, K. H., Dwyer, K. M., Booth-LaForce, C., Kim, A. H., Burgess, K. B., Rose-Krasnor,
L. (2004). Attachment, friendship, and psychosocial functioning in early adolescence. *Journal
of Early Adolescence, 24*, 326-356. doi:10.1177/0272431604268530

Samerhoff, A. J. (1994). Developmental systems and family functioning. In R. D. Parke, & S.
G. Kellam (Ed.), *Exploring family relationships with other social contexts* (pp. 199-214). New
Jersey, NJ: Hillsdale.

Sanders, R. (2004). *Sibling relationships: Theory and issues for practice.* Basingstoke, UK:
Palgrave Macmillan.

Scaini, S., Caputi, M. (2018). The interaction between psychopathological symptoms and conflictual
parent-child relationship in predicting social skills and coping strategies. *International Journal
of Emotional Education, 10*, 159-162. Retrieved from https://eric.ed.gov/?id=EJ1197561

Shrake, E. K., & Rhee, S. (2004). Ethnic identity as a predictor of problem behaviors among Korean
American adolescents. *Adolescence, 39*, 601-622. Retrieved from https://www.ncbi.nlm
.nih.gov/pubmed/15673233

Smith, C., & Krohn, M. D. (1995). Delinquency and family life among male adolescents: The role of
ethnicity. *Journal of Youth and Adolescence, 24*, 69-93. doi:10.1007/BF01537561

Spencer, M. B., & Markstrom-Adams, C. (1990). Identity processes among racial and ethnic
minority children in America. *Child Development, 61*, 290-310. doi:10.1111/j.1467-
8624.1990.tb02780.x

Statistics Netherlands. (2018). *Jaarrapport Integratie 2018*. Den Haag: CBS.

Statistics Netherlands (2017). *Education: Key Figures*. Retrieved from https://longreads
.cbs.nl/trends17-eng/society/figures/education/

Stauffacher, K., & DeHart, G. B. (2006). Crossing social contexts: Relational aggression between

siblings and friends during early and middle childhood. *Journal of Applied Developmental Psychology, 27*, 228-240. doi:10.1016/j.appdev.2006.02.004

Steinberg, L. D. (2008). *Adolescence*. 8th edition. New York, NY. McGraw-Hill.

Stevens, G. W. J. M., Vollebergh, W. A. M., Pels, T. V. M., & Crijnen, A. A. M. (2007). Problem behavior and acculturation in Moroccan immigrant adolescents in the Netherlands: Effects of gender and parent-child conflict. *Journal of Cross-Cultural Psychology, 38*, 310-317. doi:10.1177/0022022107300277

Stocker, C. M., Burwell, R. A., & Briggs, M. L. (2002). Sibling conflict in middle childhood predicts children's adjustment in early adolescence. *Journal of Family Psychology, 16*, 50-57. doi:10.1037//0893-3200.16.1.50

Theran, S. A. (2010). Authenticity with authority figures and peers: Girls' friendships, self-esteem, and depressive symptomatology. *Journal of Social and Personal Relationships, 27*, 519-534. doi:10.1177/0265407510363429

Umaña-Taylor, A. J., & Updegraff, K. A. (2007). Latino adolescents' mental health: Exploring the interrelations among discrimination, ethnic identity, cultural orientation, self-esteem, and depressive symptoms. *Journal of Adolescence, 30*, 549-567. doi:10.1016/j.adolescence.2006.08.002

Valkenburg, P. M., & Peter, J. (2008). Adolescents' identity experiments on the internet: Consequences for social competence and self-concept unity. *Communication Research, 35*, 208-231. doi:10.1177/0093650207313164

Veerman, J. W., Straathof, M. A. E., Ten Brink, L. T., & Treffers, Ph. D. A. (1996). Measuring children's self-concept. Factorial validity and invariance across normal and clinical groups. *Journal of Personality Assessment, 67*, 142-154. doi:10.1207/s15327752jpa6701_11

Verhoeven, M., Bögels, S., van Bruggen, C. C. (2012). Unique roles of mothering and fathering in child anxiety: Moderation by child's age and gender. *Journal of Child and Family Studies, 21*, 331-343. doi:10.1007/s10826-011-9483-y

Waters, E., & Sroufe, L. A. (1983). Social competence as developmental construct. *Developmental Review, 3*, 79-97. doi:10.1016/0273-2297(83)90010-2

Wright, M. O., Masten, A. S., & Narayan, A. J. (2015). Resilience processes in development: Four waves of research on positive adaptation in the context of adversity. In S. Goldstein & R. B. Brooks (Eds.), *Handbook of resilience in children* (pp. 15-37). Springer, Boston, MA.

Yeh, H., & Lempers, J. D. (2004). Perceived sibling relationships and adolescent development. *Journal of Youth and Adolescence, 33*, 133-147. doi:10.1023 /B:JOYO .0000013425.86424.0f

Zimmermann, P. (1999). Structure and functions of internal working models of attachment and their role for emotion regulation. *Attachment and Human Development, 1*, 55-71. doi:10.1080 /1461673990013416