

Anna Neubauer, Parvin Nemati, Johanna Schmid, Caterina Gawrilow
& Marcus Hasselhorn

Prosocial motivation and behavior in children with and without Turkish immigrant background in Germany and in Turkish children in Turkey

Abstract

The present study compares prosocial motivation and prosocial behavior of children with a Turkish immigrant background in Germany (n = 44) to German children living in Germany (n = 50) and Turkish children living in Turkey (n = 68). Only girls living in Germany with Turkish immigrant background were found to achieve high levels of prosocial motivation and behavior. Whereas boys with Turkish migrant background and German children without immigrant background showed low levels of prosocial motivation and prosocial behavior. In contrast, Turkish children without immigrant background were high in prosocial motivation but low in prosocial behavior.

Keywords

Turkish immigrant background; Prosocial motivation and behavior; Preschool children; Family model of interdependence; Gender differences

Dr. Anna Neubauer (corresponding author), DIPF | Leibniz Institute for Research and Information in Education, Rostocker Straße 6, 60323 Frankfurt, Germany & IDEa-Center, Frankfurt, Germany
e-mail: kontakt@pt-neubauer.de

Dr. Parvin Nemati, Department of Psychology, University of Tübingen, Schleichstr. 4, 72076 Tübingen, Germany
e-mail: pariyanemati@gmail.com

Dr. Johanna Schmid, Department of Child and Adolescent Psychiatry, Psychosomatics and Psychotherapy, University of Tübingen, Osianderstr. 14–16, 72076 Tübingen, Germany & LEAD Research Network, University of Tübingen, Germany
e-mail: johanna.schmid@med.uni-tuebingen.de

Prof. Dr. Caterina Gawrilow, Department of Psychology, University of Tübingen, Schleichstr. 4, 72076 Tübingen, Germany & LEAD Research Network, University of Tübingen, Germany & IDEa-Center, Frankfurt, Germany
e-mail: caterina.gawrilow@uni-tuebingen.de

Prof. Dr. Marcus Hasselhorn, DIPF | Leibniz Institute for Research and Information in Education, Rostocker Straße 6, 60323 Frankfurt, Germany & IDEa-Center, Frankfurt, Germany
e-mail: hasselhorn@dipf.de

Prosoziale Motivation und Verhalten bei Kindern mit und ohne türkischen Migrationshintergrund in Deutschland sowie türkischen Kindern in der Türkei

Zusammenfassung

Die vorliegende Studie untersucht prosoziale Motivation und prosoziales Verhalten von deutschen Kindern ohne Migrationshintergrund (n = 50) und Kindern mit einem türkischen Migrationshintergrund in Deutschland (n = 44) sowie türkischen Kindern ohne Migrationshintergrund in der Türkei (n = 68). Nur Mädchen mit einem türkischen Migrationshintergrund weisen sowohl ein hohes Level an prosozialer Motivation als auch an prosozialem Verhalten auf. Jungen mit türkischem Migrationshintergrund und deutsche Kinder ohne Migrationshintergrund zeigten weder prosoziale Motivation noch prosoziales Verhalten. Dagegen zeigten türkische Kinder ohne Migrationshintergrund prosoziale Motivation, jedoch kein prosoziales Verhalten.

Schlagworte

Türkischer Migrationshintergrund; Prosoziale Motivation und Verhalten; Kindergartenkinder; Interdependentes Familienmodell; Geschlechterunterschiede

1. Introduction

Prosocial behavior is defined as voluntary behavior aimed to benefit others, like sharing or helping (Eisenberg, Fabes, & Spinrad, 2006). It is one of the foundations of social competence enabling the cooperation with other human beings and thus, it is an important and desirable outcome in itself in human's life. Furthermore, the importance of prosocial behavior as pertaining to success in life has also been identified and investigated over the past years (e.g., Bierman et al., 2010; Carlo, Mestre, Samper, Tur, & Armenta, 2011; Heckman & Kautz, 2012; Yeager et al., 2014). For instance, recent evidence shows that higher prosocial engagements in society like volunteering and activities in charities are associated with better opportunities in the labor market in terms of employment and wages (e.g., Baert & Vujić, 2016). Moreover, the importance of prosocial behavior has been further supported by evidence on its relevance for educational outcomes in children (e.g., Bierman et al., 2010). For example, prosocial behavior as demonstrated in peer relationships has been related positively to academic achievement, including classroom grades and standardized test scores (e.g., Wentzel, 2013). This might occur because prosocial behavior in the classroom might lead to positive interactions with teachers and classmates, which in turn provide academic support and positive feedback.

Children's prosocial motivation, thus the intention to demonstrate prosocial behavior, and actual prosocial behavior have been investigated for several decades in Germany as well as other countries (e.g., Staub, 1974, 1978, 1990; Kosse,

Deckers, Pinger, Schildberg-Hörisch, & Falk, 2020). Numerous factors such as personality characteristics (Staub, 1974), socioeconomic status (SES; Deckers, Falk, Kosse, Pinger, & Schildberg-Hörisch, 2017), and cultural context (Trommsdorff, Friedlmeier, & Mayer, 2007) have been found to influence prosocial behavior. Furthermore, previous studies demonstrated that prosociality and self-regulation are interconnected (e.g., see social dilemma studies; e.g., Houser, Montinari, & Piovesan, 2012; Sheldon & Fishbach, 2011). Self-regulation is described as the regulation of one's own cognition, behavior, and emotion (e.g., Blair & Ursache, 2011). Overall individuals require effective regulation of attentional processes, emotions, and behaviors to focus on the needs of others and to actually get involved in helping them (Carlo, Crockett, Wolff, & Beal, 2012).

Furthermore, previous research demonstrated that prosociality might vary across different countries and cultural contexts (e.g., Carlo et al., 2011; Köster, Schuhmacher, & Kärtner, 2015; Köster, Cavalcante, Vera Cruz de Carvalho, Dôgo Resende, & Kärtner, 2016; Kumru, Carlo, Mestre, & Samper, 2012). In interdependent societies, such as rural communities in non-Western countries, community goals and harmony are focused on, while independent societies, such as middle-class families in Western countries, focus on individual goals (e.g., Markus & Kitayama, 1991; Keller, 2007). Hence, in interdependent societies, social interactions and prosociality are mainly motivated by interpersonal responsibilities such as family obligations. On the other hand, in independent societies, prosociality is guided by an emphasis on personal choice (Köster et al., 2015). There is evidence for the culture-specific development of interpersonal responsibility and personal choice in children (e.g., Köster et al., 2016). For instance, the results of a cross-cultural study investigating prosocial behavior in German and Brazilian toddlers highlighted culture-specific aspects of maternal socialization practices (e.g., requesting or giving explanations) that influence helping behavior in children (Köster et al., 2016). Their findings suggest that German and Brazilian mothers employ different socialization practices during the early development of helping behavior in their toddlers. While German mothers' socialization strategies were based on toddlers' ability to take into account their personal choice in helping situations, Brazilian mothers emphasized toddlers' compliance and responsibility in social situations. In another example, strong family connections and responsibilities which prevail in interdependent countries were associated with overall prosocial tendencies (Carlo, 2006).

German culture is predominately characterized as an independent culture whereas interdependent context prevails in Turkey (e.g., Hofsteds, 1980; Lamm & Keller, 2007). Accordingly, prosociality guided by an emphasis on personal choice is expected to be observed in Germany, whereas prosociality mainly motivated by interpersonal responsibilities is expected to prevail in Turkey. Interestingly, it remains unclear, whether these different patterns of prosociality remain after migration to a new cultural context or even in the second generation of immigrants. Currently, the results from studies on prosociality of children with a Turkish immigrant background are heterogeneous. For example, in an intervention study

that focused on the causal effect of SES on the formation of prosocial motivation in German children, the authors reported that their results indicated no relationship between children's prosociality and Turkish immigrant background in Germany (Kosse et al., 2020). However, teachers in the U.K. rated preschool children with a Turkish immigrant background as less socially competent when compared to preschool children without immigrant background or Turkish children in Turkey without immigrant background, as rated by their teachers. In this study, social competence was measured by a composite factor derived from two questionnaires (including items on prosocial behavior) (Daglar, Melhuish, & Barnes, 2011).

In contrast, in a study on the prevalence of psychological problems between immigrant (89% from Turkey) and U.K.-born schoolchildren the immigrant children reported greater psychological distress, but also more prosocial behavior (e.g., willingness to share; Leavey et al., 2004). A reason for the heterogeneous results could be the assessment of prosocial behavior through questionnaires that might lead to biased reports on children's behavior. Some studies used self-reports, others informant-ratings. Both of these measurements can be biased (for informant bias see e.g., Lorenz, Gentrup, Kristen, Stanat, & Kogan, 2016; Jussim, Eccles, & Madon, 1996). More precisely, informants (i.e., teachers) may have specific expectations about children's behavior depending on their own ethnic background as well as depending on the ethnic background of the children (Sonuga-Barke, Minocha, Taylor, & Sandberg, 1993; Stevens & Vollebergh, 2008; Weisz, Chaivasit, Weiss, Eastman, & Jackson, 1995). For example, teachers in Thailand reported more problem behavior for Thai children than US-American teachers for US-American children, although observational results showed precisely the opposite (Weisz et al., 1995). A similar problem arises with self-reports in which participants of one culture compare themselves with different standards than those in another culture (Heine, Lehman, Peng, & Greenholtz, 2002). Moreover, children might have difficulties to self-assess their own abilities and behaviors (e.g., Demetriou & Kazi, 2006). Hence, the observation of overt behavior in cross-national/cultural research is strongly recommended (ibid; Weisz et al., 1995).

Accordingly, in the present study, we assessed overt, actual behavior when exploring the effect of cultural context and immigrant background on children's prosociality with and without Turkish immigrant background in Germany. This is of great interest, mainly because Turkish immigrants form the major immigrant group in Germany (Federal Statistical Office of Germany, 2011) and some positive attributes of children with Turkish immigrant background have already been addressed in previous research (e.g., Paulus & Blossfeld, 2007; Relikowski, Yilmaz, & Blossfeld, 2012; Salikutluk, 2016). For instance, it has been demonstrated that children with Turkish immigrant background living in Germany and their parents have higher educational aspirations than their German counterparts (e.g., Paulus & Blossfeld, 2007; Salikutluk, 2016). This can be explained by the immigrant optimism approach, suggesting willingness of immigrants in leaving their home countries to seek out a better life and socio-economic improvements (Kao & Tienda, 1995). However, despite their high educational ambitions, children with Turkish

immigrant background living in Germany show lower school performance when compared to their German peers (Stanat, Rauch, & Segeritz, 2010). Previous educational research on children living in Germany with a Turkish immigrant background indicated lower levels of school achievement for these children as compared to their German peers (e.g., Baier & Pfeiffer, 2008; Stanat, Rauch, & Segeritz, 2010). Therefore, studying prosocial behavior as a potentially protective factor for school adjustment for children with a Turkish immigrant background seems meaningful.

Moreover, gender needs to be taken into account as one of the important variables associated with prosocial behavior. Notably, gender differences in prosocial behavior favoring girls were observed in preschool children (Ladd & Profilet, 1996) and tend to remain stable throughout lifetime (e.g., Eisenberg et al., 2011). These findings are in line with the theories of gender-based socialization, suggesting that girls generally are more encouraged to show concern for others than boys (e.g., Brody, 1993; Maccoby & Jacklin, 1974). Therefore, gender was added as a factor to the study design.

2. Present Study

The present study aimed at comparing prosocial motivation and behavior in German children with a Turkish immigrant background in Germany (GCT) and German children without an immigration background (GC). However, since both immigration background and culture can influence prosociality (e.g., Carlo et al., 2011; Köster et al., 2015; Kumru et al., 2012) and the maintenance of cultural effects after migration remains unclear in children with a Turkish immigrant background, we aimed to disentangle the effect of an immigration background from culture (Quintana et al., 2006). Therefore, children with a Turkish immigrant background are not only compared to German but also to Turkish children without an immigrant background (TC).

Sharing is considered an important element of prosocial behavior. In a sharing task, children can gain numerous small rewards, which they can either share with others or keep for themselves (Iannotti, 1985). Hence, the children are in a conflict between their own interest and the interests of their peers. The tasks require the child to give up part or all of a reward for the benefit of others. In this paradigm, however, it might be possible that, in principle, children prefer to share (i.e., prosocial motivation) but cannot show actual sharing behavior (i.e., prosocial behavior) because they cannot actually give up their own desire when it conflicts with the interest of others (e.g., Reykowski, 1982) or because of lack of self-regulation (e.g., Carlo et al., 2012). Therefore, due to the association between prosociality and self-regulation, we combined the sharing task with a choice task which is originally used to assess self-regulation. We derived our specific choice task measurement from the delay of gratification paradigm assessing the self-regulation ability

“to defer immediate gratification for the sake of later but more valued outcomes” (Mischel & Gilligan, 1964, p. 411). In Mischel’s choice task, children have to decide between receiving a small reward immediately or waiting for a larger reward later on. Thus, our newly developed combination of a sharing and a choice task, the so-called group preference task, aims to assess prosocial motivation and actual prosocial behavior separately: Firstly, to assess prosocial motivation, children need to indicate their motivation to share with other children. Secondly, to assess actual prosocial behavior, the task creates a conflict between the children’s own needs and the needs of others.

Thus, unlike the original sharing task, the assessment of prosocial motivation in our group preference task involves no conflict between a child’s interest and the interests of their peers. By contrast, and similar to the sharing task, the assessment of prosocial behavior in our group preference task targets actual sharing behavior and also involves a conflict between a child’s interest and the interest of their peers. Analogous to the original sharing task our assessment of prosocial behavior in the group preference task could possibly be confounded with self-regulation abilities. Thus, to control for basic delay of gratification abilities, the original choice task (Mischel & Gilligan, 1964) was added to the present study design.

Research indicates higher levels of prosocial behavior in girls than in boys (e.g., Ladd & Profilet, 1996). Therefore, gender was added as a factor to the study design and girls were expected to show higher prosocial motivation and behavior when compared to boys.

3. Method

3.1 Design

The study followed a two-factorial design with the factors Group (GC vs. GCT vs. TC) and Gender (Female vs. Male). In order to compare the effects of Group and Gender, analyses of variance (ANOVA) were conducted with children’s responses in the group preference task as dependent variables. Moreover, responses in a delay of gratification task (i.e., choice task; Mischel & Gilligan, 1964) were added as a covariate. Further background measures were assessed in a parental questionnaire and included the socio-demographic data of the families (i.e., SES, language of the families).

3.2 Participants

Altogether 162 children from either Frankfurt (Germany) or Ankara (Turkey) participated in the study. Although Frankfurt and Ankara differ in the number of inhabitants (Federal Statistical Office of Germany, 2019; Turkish Statistical Institute,

2019), they are both major cities and economic centres. In Frankfurt, the sample was recruited in three public preschools and was part of a larger sample from a study on working-memory (Michalczyk, Krajewski, & Hasselhorn, 2010). The sample recruited in Frankfurt included 50 children without an immigrant background (GC; 32% boys; $M_{\text{age-boys}} = 72$ months, $SD = 3.0$; $M_{\text{age-girls}} = 71$ months, $SD = 4.3$) and 44 children with a Turkish immigrant background (GCT; 48% boys; $M_{\text{age-boys}} = 72$ months, $SD = 4.1$; $M_{\text{age-girls}} = 71$ months, $SD = 3.3$). Sample characteristics are displayed in Table 1 and Table 4. Inclusion criteria for GC were: (a) both parents were born in Germany and (b) German had to be the only language spoken at home. GCT had at least one parent born in Turkey (34% of the children) or both parents born in Turkey. The number of children with only one parent born in Turkey did not differ between boys and girls ($\chi^2 = 0.50$, $df = 1$, $p > .05$). The parents immigrated to Germany between 1962 and 2002. All children were born in Germany. Thus, in the present study, all children are second-generation immigrants (e.g., born in the resident country but one or both of their parents were born abroad; Camilleri et al., 2013).

The sample in Ankara was recruited in two private preschools and included 68 children without immigrant background (TC; 49% boys; $M_{\text{age-boys}} = 68$ months, $SD = 3.5$; $M_{\text{age-girls}} = 69$ months, $SD = 4.2$). This means that criteria for TC included (a) both parents were born in Turkey and (b) they solely speak Turkish at home. A differentiation between the Groups always means the differentiation between these three Groups: GC, GCT and TC.

Almost equal numbers of children were tested in each preschool in both countries. Recruitment took place in public preschool in Germany and private preschool in Turkey.

A Group \times Gender ANOVA on age revealed a significant main effect of Group, $F(2, 156) = 10.12$, $p < .001$, $\eta_p^2 = 0.12$, but no significant effect of Gender, $F(1, 156) = 0.12$, $p > .05$, or interaction of Group and Gender, $F(2, 156) = 2.15$, $p > .05$. Post-hoc comparisons revealed that TC were significantly younger than GC, $t(156) = -2.67$, $p < .001$, or GCT $t(156) = -2.68$, $p < .001$, but there was no difference between the two groups originating from Frankfurt (GC vs. GCT), $t(156) = .01$, $p > .05$. As seen in Table 1, the boys in Ankara are remarkably young. Therefore, planned contrasts were conducted separately for boys and girls. These contrasts evinced that the only significant age differences occurred between TC boys and GC boys (TC, $t(67) = 3.73$, $p < .001$; GC, $t(67) = 4.28$, $p < .001$).

Socioeconomic Background. As a proxy measure for socioeconomic status, parents were asked about their educational level and status of employment (Entwisle & Astone, 1994; Schöler et al., 2004). Due to differences in the school systems of Germany and Turkey, the educational level of parents was only divided into low (10 or less years of schooling) and high (more than 10 years of schooling). The mother's educational level is missing for one child and the father's level of education is missing for eleven children. A sum score for mothers' and fathers' education is calculated and missing data of one parent is substituted using data from the other parent. Likewise, a sum score of the mothers' and fathers' employment is

Table 1: Sample characteristics

Variable	Frankfurt				Ankara	
	GC		GCT		TC	
	Boys (n = 16)	Girls (n = 34)	Boys (n = 21)	Girls (n = 23)	Boys (n = 33)	Girls (n = 35)
Age in months (<i>SD</i>)	72 (3.0)	71 (4.3)	72 (4.1)	71 (3.4)	68 (3.9)	69 (4.2)
Mothers, ≤ 10 years of school, %	13	9	48	55	3	3
Fathers, ≤ 10 years of school, %	13	13	30	43	3	0
Mother, unemployed, %	31	21	50	71	0	4
Father, unemployed, %	0	3	5	18	0	0

Notes. GC = German children without the immigrant background living in Germany. GCT = German Children with a Turkish immigrant background living in Germany. TC = Turkish children without the immigrant background living in Turkey.

calculated. Employment was assessed as unemployed (not working) or employed (full time or part time). When information was missing for both parents, children were excluded from the study. The descriptive characteristics of the mothers’ and fathers’ education and employment are summarized in Table 1.

A Group × Gender ANOVA on the parent’s education score revealed no effect of Gender, $F(1, 156) = 0.04, p > .05$ or significant interaction of Gender and Group, $F(2, 156) = 0.92, p > .05$, but a significant effect of Group, $F(2, 156) = 29.42, p < .001, \eta_p^2 = 0.27$. Post-hoc tests showed that parents in the Group of GCT ($M = 1.57, SD = 0.31$) had a significantly lower level of education than the parents of GC ($M = 1.87, SD = 0.30, p < .001$) and TC ($M = 1.97, SD = 0.15, p < .001$). Differences between parents of GC and TC were not significant ($p > .05$).

For the mothers’ and fathers’ status of employment, a Group × Gender ANOVA did not show any effect of Gender, $F(1, 156) = 0.64, p > .05$ or significant interaction of Gender and Group $F(2, 156) = 0.74, p > .05$, but a significant effect of Group $F(2, 156) = 3.97, p < .05, \eta_p^2 = 0.05$. Post-hoc tests revealed that in the Group of GCT ($M = 1.56, SD = 0.67$) parents were significantly more often unemployed than parents of GC ($M = 1.78, SD = 0.67, p < .05$) or parents of TC ($M = 1.76, SD = 0.53, p < .05$). Differences between the parents of GC and TC were not significant ($p > .05$).

4. Procedure

In Germany. The tests were conducted in Frankfurt by one of four female experimenters. To control for effects of the experimenters’ cultural background (Rotenberg & Mayer, 1990), two experimenters were chosen with a Turkish immigrant background. The results were not explained by the interviewer effect (see Appendix). All investigations were conducted in German. The group preference

and choice tasks were part of a larger self-regulation assessment. The investigation was administered in two sessions each lasting about 25 minutes. In general, a week elapsed between the two sessions. Due to organizational difficulties the time lapse between the two sessions varied for 15 children in between an interval of one day to one month between the assessments. The sociodemographic questionnaire was administered to the parents in Turkish and German.

In Turkey. The tests were conducted in Ankara by one of two female experimenters and one male experimenter. The tests as well as the sociodemographic questionnaire were administered in Turkish. The group preference and choice tasks were part of the same larger self-regulation assessment as in Germany. However, due to organizational reasons the investigation was administered in one single session.

In both countries, each child was assessed individually in a quiet room in the respective preschool. In Frankfurt as well as in Ankara, participation required parental informed consent and completion of a sociodemographic questionnaire. Moreover, all children received the outcome of their decisions in the group preference task (i.e., either one toy for themselves immediately or a toy for themselves and their peers the next day) and the choice task (i.e., either one toy immediately or two toys the next day).

5. Measures

5.1 Group preference task

Our self-developed group preference task consisted of two questions: First, children had to decide if they prefer to receive a reward (small toys) for only themselves, or if they prefer for themselves plus every child in their preschool group to receive the same reward. When answering this question, the children are not in a conflict between their own interest and the interest of the group. Thus, this question aimed at assessing the specific motivation to share (i.e., prosocial motivation question). Afterwards, the children are confronted with another question. The children are given the choice of either receiving their reward immediately – but only for themselves; or waiting till the next day – and then not only for themselves but everybody in their peer group would receive a reward (i.e., prosocial behavior question). By introducing this time component in the assessment of prosocial behavior, children come into conflict between satisfying their own urge for an immediate reward and behaving in favour of the group. Prosocial behavior is characterized by this kind of conflict between one's own needs and the needs of others (Eisenberg, Lennon, & Roth, 1983). Thus, prosocial behavior here depends not only on self-regulation (i.e., being able to wait), but also on self-sacrifice when one's own need is in conflict with the needs of others. Accordingly, in the group preference task, we assessed prosocial motivation and actual prosocial behavior separately: for prosocial

motivation, children were not in a conflict between their own needs and the needs of others; however, to show prosocial behavior children had to sacrifice their own need in favour of the group.

For the prosocial motivation question, the experimenter showed the toy to the child and asked the child: *“Would you prefer to have this toy only for yourself or would you prefer yourself and every child in your preschool group to have such a toy?”* The question was followed by an explanation: *“You can either get this toy now or you and each of the children in your group can get the toy tomorrow.”* The child then had to paraphrase the options to ensure comprehension of the task and indicate their choice. Subsequently, the child was asked the prosocial behavior question: *“What do you prefer, one toy for yourself today, or one toy for each of the children in your group tomorrow?”*

Overall, the group preference task consisted of two trials with two different small toys as rewards. Separate scores were calculated for the prosocial motivation and prosocial behavior questions. In both trials of the prosocial motivation question, the child received one point every time it preferred the reward for her-/himself alone and two points the child preferred every child in the group to receive a reward. In both trials of the prosocial behavior question, a point was given each time the child chose the immediate reward for her-/himself and two points when the child chose to wait until the next day for every child in the group receiving a reward. Thus, possible scores for the prosocial motivation question and the prosocial behaviour question ranged from two to four points, respectively.

5.2 Assessment of self-regulation

The choice task (Mischel & Gilligan, 1964) consisted of four trials each with a different pair of toys. Each pair of toys consisted of two identical kinds of toys. In a pre-test preschool group, children could choose toys they liked best from a variety of toys and were asked if they would prefer to get either one or two of these toys. Only the toys that were asked for twice in the pre-test were chosen for the choice task paradigm used in this study. At the beginning of each trial, the experimenter showed a pair of toys to the child and explained: *“You can either get one of these toys now or you can get both toys tomorrow.”* Thereafter, the child was told that the preschool teacher would hand out the toys the following day. The child had to repeat the options to ensure comprehension of the task. Afterwards, the child was asked: *“What do you prefer, one toy today or both toys tomorrow?”* To calculate a score on the four trials, a point was given for every toy the child received. Thus, the possible score ranged from four to eight points.

6. Results

Since no significant correlation could be found between the prosocial motivation question and age ($r_s = -.03, p > .05$), parents' education ($r_s = -.05, p > .05$), or parents' employment ($r_s = -.01, p > .05$), nor between the prosocial behavior question and age ($r_s = -.12, p > .05$), parents' education ($r_s = -.09, p > .05$), or parents' employment ($r_s = -.08, p > .05$), they are not considered further in the following analyses (Bortz, 2005).¹ The choice task correlated significantly with the prosocial behavior question ($r_s = .20, p < .01$) but not with the prosocial motivation question ($r_s = -.03, p > .05$). Children who preferred to wait for the next day to receive two toys in the choice task also waited more often for the next day in the prosocial behavior question. Therefore, the choice task is added as a covariate to the analyses of the prosocial behavior question. Means and standard deviations of the group preference task for each group and gender are shown in Table 2.

Table 2: Mean scores of the prosocial motivation question and the prosocial behavior questions for the different groups

Variable	Frankfurt						Ankara		
	GC			GCT			TC		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Prosocial motivation	2.31 (0.60)	2.35 (0.65)	2.34 (0.63)	2.48 (0.68)	2.91 (0.90)	2.70 (0.82)	2.88 (0.82)	2.80 (0.83)	2.84 (0.82)
Prosocial behavior	2.31 (0.60)	2.35 (0.65)	2.34 (0.63)	2.29 (0.56)	3.22 (0.90)	2.77 (0.89)	2.73 (0.84)	2.54 (0.78)	2.63 (0.81)

Notes. Standard errors are in parentheses. GC = German children without the immigrant background living in Germany. GCT = German Children with a Turkish immigrant background living in Germany. TC = Turkish children without the immigrant background living in Turkey.

Group preference task

Prosocial motivation question. A Group \times Gender ANOVA (see Table 3) on the prosocial motivation question showed a significant main effect for Group, $F(2, 156) = 5.90, p < .01, \eta_p^2 = .07$, but not for Gender, $F(1, 156) = 1.12, p > .05$, nor for the Gender \times Group interaction, $F(2, 156) = 1.56, p > .05$. A post-hoc comparison revealed that significantly more TC preferred toys for the whole group than GC, $t(116) = -3.74, p < .001$, but not more than GCT, $t(92) = -0.84, p > .05$. The overall difference between GC and GCT reached significance, $t(80) = -2.39, p < .05$. As

1 Despite no significant correlation between SES measures and prosocial motivation and prosocial behavior, due to the large differences between the SES of GCT and GC or TC and the possibility of hidden correlation, two separated Group \times Gender ANCOVA with SES measures as covariates were calculated for the prosocial motivation and behavior question. The results revealed no significant effect for the SES covariates neither for prosocial motivation nor for prosocial behavior. The results are presented in the Appendix for the interested reader.

can be seen in Table 2, girls from the GCT group most often preferred the toys for the whole group. Therefore, planned contrasts were conducted separately for boys and girls. These contrasts showed a significant difference between girls in the GCT group and girls in the GC group, $t(37) = -2.57, p < .05$. However, boys in the GCT group did not differ significantly from boys in the GC group, $t(67) = -0.67, p > .05$. Therefore, girls in the GCT group and boys and girls in the TC group were more prosocially motivated than GC children.

Table 3: ANOVA results using prosocial motivation and prosocial behavior as the criterion

Predictor	Sum of squares	df	Mean square	F	p	Partial η^2
<i>Criterion: Prosocial motivation</i>						
(Intercept)	1023.39	1	1023.39	1747.06	.000	.918
Group	6.90	2	3.45	5.89	.003	.070
Gender	0.66	1	0.66	1.12	.291	.007
Group x Gender	1.83	2	0.91	1.56	.213	.020
Error	91.38	156	0.59			
<i>Criterion: Prosocial behavior</i>						
(Intercept)	59.09	1	59.09	108.84	.000	.413
Group	3.76	2	1.88	3.46	.034	.043
Gender	1.66	1	1.66	3.06	.082	.019
Choice Task	2.48	1	2.48	4.56	.034	.029
Group x Gender	7.18	2	3.59	6.61	.002	.079
Error	84.16	156	0.54			

Prosocial behavior question. A Group \times Gender ANCOVA (see Table 3) with the choice task as the covariate and the prosocial behavior question as a dependent variable showed significant main effects for Group, $F(2, 155) = 3.46, p < .05, \eta_p^2 = .04$, but not for Gender, $F(1, 155) = 3.06, p > .05, \eta_p^2 = .02$, and a significant Gender \times Group interaction, $F(2, 155) = 6.61, p < .01, \eta_p^2 = .08$. In addition, a significant effect for the covariate choice task was revealed, $F(1, 155) = 4.56, p < .05, \eta_p^2 = .03$. Post-hoc comparisons demonstrated that significantly fewer GC decided to wait as compared to GCT, $t(76) = -2.70, p < .01$. TC did not differ from GCT, $t(86) = 0.85, p > .05$, but significantly differed from GC, $t(116) = -2.21, p < .05$.

Regarding the interaction effect planned contrasts for gender differences were calculated separately for each group. Significantly more girls from the GCT group preferred to wait for the group to receive a toy than boys from the GCT group, $t(42) = -4.15, p < .001$. No gender differences could be found in the GC group, $t(48) = -0.21, p > .05$, or in the TC group, $t(66) = -0.94, p > .05$.

Further comparisons of group differences were conducted separately for each gender. Significantly more boys from the TC group decided to wait for the whole group to receive a toy than boys from the GCT group, $t(67) = -2.32, p < .05$; the same trend exists regarding boys from the GC group but it does not reach a signif-

Table 4: Group differences in background variables in the group preference task for children with Turkish immigrant background

	Prosocial motivation				Prosocial behavior			
	<i>M</i>	<i>SD</i>	<i>U</i>	<i>p</i>	<i>M</i>	<i>SD</i>	<i>U</i>	<i>p</i>
Language at home								
German (<i>n</i> = 10)	0.80	0.92	158.5	.72	0.60	0.84	148.0	.50
Turkish (<i>n</i> = 34)	0.68	0.81			0.82	0.90		
Parent's born in Turkey								
only one (<i>n</i> = 13)	1.00	0.82	143.0	.10	0.85	0.80	182.5	.59
both (<i>n</i> = 31)	0.58	0.80			0.74	0.93		

icant level, $t(67) = -1.97$, $p > .06$. Boys from the GC group and boys from the GCT group did not differ in their decision to wait, $t(67) = 0.11$, $p > .05$. As for girls, significantly more girls from the GCT group waited for the group to receive a toy than girls from the GC group, $t(89) = 3.96$, $p < .001$, or girls from the TC group, $t(89) = 2.94$, $p < .01$. Girls from the TC group and girls from the GC group did not differ from each other in their decision to wait, $t(89) = -1.10$, $p > .05$.

7. Discussion

To compare prosociality of GCT ($n = 44$), with GC ($n = 50$) and TC ($n = 68$), in the present study prosociality was assessed by a modified sharing task (Iannotti, 1985). First, the children were asked if they preferred to receive a toy only for themselves, or if they would prefer that each child in their preschool group would receive a toy (i.e., prosocial motivation question). Second, they were allowed to choose between receiving a toy for themselves immediately or waiting till the next day when every child in their preschool group (including themselves) would receive a toy (i.e., prosocial behavior question). To rule out baseline differences in self-regulation as a possible alternative explanation, the results of the prosocial behavior question were controlled by assessing the baseline differences in a delay of gratification task (i.e., choice delay task; Mischel & Gilligan, 1964).

One of the main findings of our study is a difference between boys and girls in the GCT group: Girls were more likely to prefer that their whole group receive toys (prosocial motivation question) and more likely to choose to wait for the following day when their group would receive the toys (prosocial behavior question) than boys.

No gender differences were found between GC and TC. Overall GC showed neither prosocial motivation nor prosocial behavior: They answered both questions in the same way (see Table 2). Interestingly, TC were prosocially motivated (i.e., pre-

ferred that every child in their group should receive a toy) but were not willing to sacrifice an immediate reward in favor of their group.

Since the ability to postpone a reward was controlled for by the measure of delay of gratification (i.e., choice delay task), baseline differences in self-regulation cannot explain the differing group results. However, three patterns emerged in our data: (a) girls from the GCT group indicated high prosocial motivation and behavior, (b) TC indicated high prosocial motivation but less prosocial behavior, and (c) GC as well as the boys from the GCT group indicated both low prosocial motivation and behavior.

These data patterns fit well with concepts from the Family Change Theory by Kagitcibasi (2007). Kagitcibasi proposes three prototypical family interaction patterns: interdependence, independence, and psychological interdependence. The model of interdependence is prevalent in societies where children contribute to the family economy (e.g., rural-agrarian society with low socio-economic status) and independence is not valued in child-rearing, because it increases the danger of the child leaving the family. In contrast the model of independence is prevalent in societies where children are not required to sustain the family (e.g., western industrialized societies in middle-upper class families). In these families, independence and self-reliance is highly valued. The model of psychological interdependence shows that the development of an agricultural society towards an industrialized society does not necessarily include a change from the interdependent toward an independent family model. The families do not depend on the children any more (in middle and upper-class), which leads to an enhancement of autonomy for the child. But at the same time, the materialistic interdependence is replaced by non-materialistic (e.g., psychological and/or emotional) interdependence. Thus, autonomy and relatedness might co-exist in child-rearing in industrialized societies.

Indeed, a shift from an interdependent to a psychologically interdependent family model is evident in Turkey. During the last three decades, Turkey has experienced an increase in industrialization, urbanization, and education, which has created fundamental changes in lifestyle and led to a different, new value system (Kagitcibasi, 2007). Certainly, these changes do not equally occur across Turkey, they are stronger in an urban, young, and high socioeconomic society (Kagitcibasi & Ataca, 2005; Kagitscibasi, 2007). For our study we recruited children in Turkey that visited private preschools in the city of Ankara. These urban children's parents were highly educated. These circumstances outline to the psychologically interdependent model. This model is described with psychological interdependence on one hand, and endorsing autonomy on the other. Thus, the children endorse the value of sharing the toy with their group, but are not willing to make personal sacrifices.

However, a majority of the Turkish immigrants who came to Germany were low-skilled workers from rural areas in Turkey during the 1960's (Crul & Schneider, 2009). Across decades, many Turkish immigrants maintain ethnic behavior like their proficiency in their ethnic language or contact with ethnic peers (Vedder, Sam, & Liebkind, 2007). Interestingly, the group of children with a Turkish immigrant background showed a mixed pattern: Boys behaved like the German children

without immigrant background and girls behaved according to the interdependent model. They did not only value sharing the toys with the group, but also preferred to make personal sacrifices for the sake of others. As can be seen in Table 2, the girls from GCT group scored even higher in prosocial behavior when related to prosocial motivation. This is due to four girls who did not want the other children to receive a toy in the prosocial motivation question, but were willing to wait for the others to receive a toy in the prosocial behavior question. Kagitcibasi argues that especially Turkish immigrants in Europe often “persist in their obedience-oriented childrearing values” (Kagitcibasi, 2002, p. 30). Across Turkish culture gender differences often come along with higher expectations on family role obligations and social conformity for girls (Catay, 2005). This might explain the higher prosocial motivation and behavior in girls from the GCT group as well as the paradox decisions of the four girls who scored higher in prosocial behavior than in motivation. For some reason they might have felt forced to share with the others. However, German culture is considered independent (Lamm & Keller, 2007) and according to the independent family model GC neither see a demand for sharing toys with their group, nor would they actually wait in favor of their group.

Limitations

Certainly, the proposed relation between family models and prosociality is an assumption that will require future testing through research by assessing family models and prosociality in one and the same sample. Furthermore, alternative explanations could be possible, like for example, information was not assessed about the relationship of the children to their peers although the integration into the overall group might vary within the groups. More precisely, boys from the GCT group could be less integrated in their preschool group than girls from the GCT group and this might explain the gender differences within the group of GCT.

Due to our selective sample (e.g., recruitment only in preschools, no representative distribution of parents’ education, relatively small sample size) and different recruitment strategies in the two countries (i.e., private schools in Turkey, public schools in Germany) the trends shown between GCT or GC and TC in general should be carefully interpreted. Therefore, considering larger and more diverse samples in future studies is highly recommended to ensure a representative distribution of the immigrant and non-immigrant population. Furthermore, our sample was limited to two cities in both countries, which is not representative of children growing up in other parts of those countries. For instance, there might be cultural differences between urban and rural areas within one country (e.g., different parents’ expectations and family relationships or obligations) that may influence the prosociality of children, particularly, as it has been shown that the level of interdependency is higher in rural areas than urban regions (e.g., Kashima et al., 2004). Especially in Turkey the value system in rural and urban areas differs from each other (Kagitcibasi & Ataca, 2005; Kagitscibasi, 2007). Future research

could consider this limitation by comparing prosociality of children living in rural and urban regions within one country. Moreover, despite the significant difference between the SES of GCT and GC or TC, our results cannot be explained by differences in SES since no significant association was found between SES and prosocial motivation or prosocial behavior (Appendix). However, as significant associations between SES and prosocial behavior have been revealed in previous research (e.g., Kosse et al., 2020), careful sample selection considering SES is necessary to avoid a sample selection bias in future studies. In addition, measurement of SES in the present study could be a limitation as our way of assessing SES might be too unspecific. For instance, employment status did not include occupational status or occupations without salaries such as homemakers. Thus, precise measures of SES should be considered in future research to control for the possible moderation effects of SES on the association between cultural contexts and prosociality of children. There are also important variables (e.g., duration of preschool attendance, number of siblings, information on parent-child relationship, parenting style, and characteristics of preschool institutions) which were not measured in this study but might add depths to the interpretation of future results. Furthermore, in the present study, the birth country was used as a proxy for cultural background. This approach, however, is unsatisfactory as it ignores within group differences in prosociality and only emphasizes between group differences based on an inaccurate categorization. Therefore, further studies should use more precise measures to assess cultural backgrounds (e.g., measures of culture-related value systems) and acculturation processes information. Last but not least, our suggestion for future studies is to use the group preference tasks in addition to other measurements of prosocial motivation and behavior such as the sharing task in one single study to clarify their possible associations and compare their validity.

8. Conclusion

We aimed at comparing prosocial motivation and prosocial behavior in GCT and GC. We developed a new method to assess prosocial motivation and prosocial behavior separately. Furthermore, by comparing prosocial motivation and behavior in GCT, GC and TC, three patterns of prosocial motivation and behavior emerged: (a) High prosocial motivation and behavior in girls from the GCT group, (b) high prosocial motivation with less prosocial behavior in the TC group, and (c) low prosocial motivation and behavior in the GC group and boys from the GCT group. Future research might want to investigate underlying mechanisms of prosociality in children with and without immigrant background in Germany.

Acknowledgments

This paper was prepared in the context of the Center for Individual Development and Adaptive Education of Children at Risk (IDeA) in Frankfurt/Main, and funded by the federal state government of Hessen (LOEWE initiative).

References

- Baert, S., & Vujić, S. (2016). Does it pay to care? Prosocial engagement and employment opportunities. *IZA Discussion Paper Series*, 9649. Bonn, Germany: Institute for the Study of Labor (IZA).
- Baier, D., & Pfeiffer, C. (2008). Disintegration and violence among migrants in Germany: Turkish and Russian youths versus German youths. *New Directions for Student Leadership*, 119, 151–168.
- Bierman, K. L., Coie, J. D., Dodge, K. A., Greenberg, M. T., Lochman, J. E., McMahon, R. J., & Pinderhughes, E. (2010). The effects of a multiyear universal social-emotional learning program: The role of student and school characteristics. *Journal of Consulting and Clinical Psychology*, 78(2), 156–168.
- Blair, C., & Ursache, A. (2011). A bidirectional model of executive functions and self-regulation. In R. F. Baumeister & K. D. Vohs (Eds.), *Handbook of self-regulation: Research, theory and applications*. New York, NY: Guilford Press.
- Bortz, J. (2005). *Statistik für Human- und Sozialwissenschaftler*. Heidelberg, Germany: VS.
- Brody, L. R. (1993). On understanding gender differences in the expression of emotion: Gender roles, socialization and language. In S. L. Ablon, D. Brown, E. J. Khantzian, & J. E. Mack (Eds.), *Human feelings: Explorations in affect development and meaning*. Hillsdale, NJ: Analytic.
- Camilleri, A. F., Griga, D., Mühleck, K., Miklavic, K., Nascimbeni, F., Proli, D., & Schneller, C. (2013). *Evolving Diversity II: Participation of students with an immigrant background in European Higher Education*. Brussels, Belgium: MENON Network.
- Carlo, G. (2006). Care-based and altruistically-based morality. In M. Killen & J. G. Smetana (Eds.), *Handbook of moral development*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Carlo, G., Crockett, L. J., Wolff, J. M., & Beal, S. J. (2012). The role of emotional reactivity, self-regulation, and puberty in adolescents' prosocial behaviors. *Social Development*, 21, 667–685.
- Carlo, G., Mestre, M. V., Samper, P., Tur, A., & Armenta, B. E. (2011). The longitudinal relations among dimensions of parenting styles, sympathy, prosocial moral reasoning, and prosocial behaviors. *International Journal of Behavioral Development*, 35(2), 116–124.
- Catay, Z. (2005). *Cultural Models of the self-reflected in maternal regulation strategies and socialisation goals in the United States and Turkey* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses database (AAT 3195354).
- Crul, M., & Schneider, J. (2009). Children of Turkish immigrants in Germany and the Netherlands: The impact of differences in vocational and academic tracking systems. *Teachers College Record*, 111, 1–15.
- Daglar, M., Melhuish, E., & Barnes, J. (2011). Parenting and preschool child behaviour among Turkish immigrant, migrant and non-migrant families. *European Journal of Developmental Psychology*, 8(3), 261–279.

- Deckers, T., Falk, A., Kosse, F., Pinger, P. & Schildberg-Hörisch, H. (2017). *Socio-Economic Status and Inequalities in Children's IQ and Economic Preferences*. Bonn: IZA, Institute of Labor Economics.
- Demetriou, A., & Kazi, S. (2006). Self-awareness in g (with processing efficiency and reasoning). *Intelligence*, 34(3), 297–317.
- Eisenberg, N., Fabes, R. A., & Spinrad, T. L. (2006). Prosocial development. In N. Eisenberg, W. Damon, & R. Lerner (Eds.), *Handbook of Child Psychology: Social, Emotional, and Personality Development* (p. 648–718). Hoboken, NJ: John Wiley & Sons.
- Eisenberg, N., Guthrie, I. K., Murphy, B. C., Shepard, S. A., Cumberland, A., & Carlo, G. (2011). Consistency and development of prosocial dispositions: A longitudinal study. In M. Killen & R. J. Coplan (Eds.), *Social development in childhood and adolescence*. Oxford, UK: Wiley-Blackwell.
- Eisenberg, N., Lennon, R., & Roth, K. (1983). Prosocial development: A longitudinal study. *Developmental Psychology*, 19, 846–855.
- Entwisle, D. R., & Astone, N. M. (1994). Some practical guidelines for measuring youth's race/ethnicity and socioeconomic status. *Child Development*, 65, 1521–1540.
- Federal Statistical Office of Germany. (2011). *Bevölkerung und Erwerbstätigkeit Bevölkerung mit Migrationshintergrund – Ergebnisse des Mikrozensus 2009*. Retrieved from https://www.destatis.de/GPStatistik/servlets/MCRFileNodeServlet/DEHeft_derivate_00014911/2010220097004.pdf;jsessionid=F84028CFCD0F3D27B15B7DB46F5330D8
- Federal Statistical Office of Germany. (2019). *Daten aus dem Gemeindeverzeichnis – Städte nach Fläche, Bevölkerung und Bevölkerungsdichte – Gebietsstand: 31.12.2018*. Retrieved from <https://www.destatis.de/DE/Themen/Laender-Regionen/Regionales/Gemeindeverzeichnis/Administrativ/05-staedte.html>
- Heckman, J. J., & Kautz, T. (2012). Hard evidence on soft skills. *Labour Economics*, 19, 451–464.
- Heine, S. J., Lehman, D. R., Peng, K., & Greenholtz, J. (2002). What's wrong with cross-cultural comparisons of subjective Likert scales? The reference-group effect. *Journal of Personality and Social Psychology*, 82, 903–918.
- Hofsteds, G. (1980). *Culture's consequences*. Beverly Hills, CA: Sage.
- Houser, D., Montinari, N., & Piovesan, M. (2012). Private and public decisions in social dilemmas: Evidence from children's behavior. *PLoS One*, 7:e41578.
- Iannotti, R. J. (1985). Naturalistic and structured assessments of prosocial behavior in preschool children: The influence of empathy and perspective taking. *Developmental Psychology*, 21, 46–55.
- Jussim, L., Eccles, J., & Madon, S. (1996). Social perception, social stereotypes, and teacher expectations: Accuracy and the quest for the powerful self-fulfilling prophecy. *Advances in experimental social psychology*, 28, 281–388.
- Kagitcibasi, C. (2002). Cross-cultural perspective on family change. In R. Liljeström & E. Özdalga (Eds.), *Autonomy and dependence in the family* (pp. 19–38). Istanbul, Turkey: Swedish Research Institute.
- Kagitcibasi, C. (2007). *Family, self, and human development across cultures* (2nd ed.). New Jersey: Lawrence Erlbaum.
- Kagitcibasi, C., & Ataca, B. (2005). Value of children and family change: A three-decade portrait from Turkey. *Applied Psychology*, 54, 317–337.
- Kao, G., & Tienda, M. (1995). Optimism and achievement: The educational performance of immigrant youth. *Social Science Quarterly*, 76, 1–19.
- Kashima, Y., Kokubo, T., Kashima, E. S., Boxall, D., Yamaguchi, S., & Macrae, K. (2004). Culture and self: Are there within-culture differences in self between metropolitan areas and regional cities? *Personality and Social Psychology Bulletin*, 30(7), 816–823.

- Keller, H. (2007). *Cultures of infancy*. Mahwah, NJ: Lawrence Erlbaum.
- Kosse, F., Deckers, T., Pinger, P., Schildberg-Hörisch, H., & Falk, A. (2020). The formation of prosociality: Causal evidence on the role of social environment. *Journal of Political Economy*, 128(1), 1–65.
- Köster, M., Cavalcante, L., Vera Cruz de Carvalho, R., Dôgo Resende, B., & Kärtner, J. (2016). Cultural influences on toddlers' prosocial behavior: How maternal task assignment relates to helping others. *Child development*, 87(6), 1727–1738.
- Köster, M., Schuhmacher, N., & Kärtner, J. (2015). A cultural perspective on prosocial development. *Human Ethology Bulletin*, 30(1), 71–82.
- Kumru, A., Carlo, G., Mestre, M. V., Samper, P. (2012). Prosocial moral reasoning and prosocial behavior among Turkish and Spanish adolescents. *Social Behavior and Personality: an International Journal*, 40, 205–214.
- Ladd, G. W., & Profilet, S. M. (1996). Child behavior scale: A teacher-report measure of young children's aggressive, withdrawn and prosocial behaviors. *Developmental Psychology*, 32, 1008–1024.
- Lamm, B., & Keller, H. (2007). Understanding cultural models of parenting: The role of intracultural variation and response style. *Journal of Cross-Cultural Psychology*, 38, 50–57.
- Leavey, G., Hollins, K., King, M., Barnes, J., Papadopoulos, C., & Grayson, K. (2004). Psychological disorder among refugee and migrant schoolchildren in London. *Social Psychiatry and Psychiatric Epidemiology*, 39, 191–195.
- Lorenz, G., Gentrup, S., Kristen, C., Stanat, P., & Kogan, I. (2016). Stereotype bei Lehrkräften? Eine Untersuchung systematisch verzerrter Lehrererwartungen. *Kölner Zeitschrift für Soziologie und Sozialpsychologie*, 68(1), 89–111.
- Maccoby, E. E., & Jacklin, C. N. (1974). *The psychology of sex differences*. Stanford, CA: Stanford University Press.
- Markus, H., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion and motivation. *Psychological Review*, 98, 224–253.
- Michalczyk, K., Krajewski, K., & Hasselhorn, M. (2010). Working memory, phonological awareness and early quantity-number competencies in 5-year-olds. Paper presented at the meeting of Junior Researchers of EARLI, Frankfurt, Germany.
- Mischel, W., & Gilligan, C. (1964). Delay of gratification, motivation for the prohibited gratification, and responses to temptation. *Journal of Abnormal Psychology*, 69, 411–417.
- Paulus, W., & Blossfeld, H. P. (2007). Schichtspezifische Präferenzen oder sozioökonomisches Entscheidungskalkül? Zur Rolle elterlicher Bildungsaspirationen im Entscheidungsprozess beim Übergang von der Grundschule in die Sekundarstufe. *Zeitschrift für Pädagogik*, 53(4), 491–508.
- Quintana, S. M., Aboud, F. E., Chao, R. K., Contreras-Grau, J., Cross, W. E., Jr., Hudley, C., & Vitze, D. L. (2006). Race, ethnicity, and culture in child development: Contemporary research and future directions. *Child Development*, 77, 1129–1141.
- Relikowski, I., Yilmaz, E., & Blossfeld, H. P. (2012). Wie lassen sich die hohen Bildungsaspirationen von Migranten erklären? Eine Mixed-Methods-Studie zur Rolle von strukturellen Aufstiegschancen und individueller Bildungserfahrung. *Soziologische Bildungsforschung*, 111–136.
- Reykowski, J. (1982). Development of prosocial motivation: A dialectic process. In N. Eisenberg (Ed.), *The Development of Prosocial Behavior*. New York, NY: Academic Press.
- Rotenberg, K. J., & Mayer, E. V. (1990). Delay of gratification in native and white children: A cross-cultural comparison. *International Journal of Behavioral Development*, 13, 23–30.

- Salikutluk, Z. (2016). Why do immigrant students aim high? Explaining the aspiration–Achievement paradox of immigrants in Germany. *European Sociological Review*, 32(5), 581–592.
- Schöler, H., Dutz, I., Roos, J., Schäfer, P., Grün-Nolz, P., & Engler-Thümmel, H. (2004). *Einschulungsuntersuchung 2003 in Mannheim*. Heidelberg: Arbeitsberichte aus dem Forschungsprojekt „Differenzialdiagnostik“ Nr. 16.
- Sheldon, O. J., & Fishbach, A. (2011). Resisting the temptation to compete: Self-control promotes cooperation in mixed-motive interactions. *Journal of Experimental Social Psychology*, 47, 403–410.
- Sonuga-Barke, E. J., Minocha, K., Taylor, E. A., & Sandberg, S. (1993). Inter-ethnic bias in teachers' ratings of childhood hyperactivity. *British Journal of Developmental Psychology*, 11(2), 187–200.
- Stanat, P., Rauch, D., & Segeritz, M. (2010). Schülerinnen und Schüler mit Migrationshintergrund. In E. Klieme, C. Artelt, J. Hartig, N. Jude, O. Köller, M. Prenzel, W. Schneider & P. Stanat (Eds.), *PISA 2009: Bilanz nach einem Jahrzehnt* (pp. 200–230). Münster, Germany: Waxmann.
- Staub, E. (1974). Social, Personality, and Stimulus. *Advances in experimental social psychology*, 7, 293.
- Staub E. (1978). *Positive social behavior and morality*. London, New York, NY, San Francisco, CA: Academic Press.
- Staub, E. (1990). Moral exclusion, personal goal theory, and extreme destructiveness. *Journal of Social Issues*, 46(1), 47–64.
- Stevens, G. W., & Vollebergh, W. A. (2008). Mental health in migrant children. *Journal of child psychology and psychiatry*, 49(3), 276–294.
- Trommsdorff, G., Friedlmeier, W., & Mayer, B. (2007). Sympathy, distress, and pro-social behavior of preschool children in four cultures. *International Journal of Behavioral Development*, 31(3), 284–293.
- Turkish Statistical Institute. (2019). Retrieved from <http://www.turkstat.gov.tr/UstMenu.do?metod=temelist>
- Vedder, P., Sam, D. L., & Liebkind, K. (2007). The acculturation and adaptation of Turkish adolescents in North-Western Europe. *Applied Development Science*, 11, 126–136.
- Weisz, J. R., Chaiyasit, W., Weiss, B., Eastman, K. L., & Jackson, E. W. (1995). A multimethod study of problem behavior among Thai and American children in school: Teacher reports versus direct observations. *Child Development*, 66(2), 402–415.
- Wentzel, K. R. (2013). School adjustment. In W. Reynolds & G. Miller (Eds.), *Handbook of psychology*, Vol. 7, *Educational psychology*. New York, NY: Wiley
- Yeager, D. S., Henderson, M. D., Paunesku, D., Walton, G. M., D'Mello, S., Spitzer, B. J., & Duckworth, A. L. (2014). Boring but important: A self-transcendent purpose for learning fosters academic self-regulation. *Journal of personality and social psychology*, 107(4), 559–580.

Appendix

Group × Gender ANCOVA with SES measures as covariates

Prosocial motivation question. A Group × Gender ANCOVA was calculated with the cultural background of the experimenter, parents' education, and parents' employment as covariates and the prosocial motivation question as dependent variable. The results showed a significant main effect for Group, $F(2, 153) = 3.75$, $p = .026$, $\eta_p^2 = .05$, but not for Gender, $F(1, 153) = 1.60$, $p = .208$, or Gender × Group, $F(2, 153) = 2.41$, $p = .093$. In addition, no significant effect was found for the covariates cultural background of the experimenter $F(1, 153) = 0.716$, $p = .399$, parents' education $F(1, 153) = 2.11$, $p = .149$, and parents' employment $F(1, 153) = 0.531$, $p = .467$.

Prosocial behavior question. A Group × Gender ANCOVA was calculated with the choice task, parents' education, and parents' employment as covariates and the prosocial behavior question as dependent variable. The results showed significant main effects for Group, $F(2, 152) = 3.13$, $p = .047$, $\eta_p^2 = .04$, but not for Gender, $F(1, 152) = 2.49$, $p = .117$, and a significant Gender × Group interaction, $F(2, 152) = 5.80$, $p = .004$, $\eta_p^2 = .07$. In addition, the results revealed a significant effect for the covariate choice task, $F(1, 152) = 4.72$, $p = .031$, $\eta_p^2 = .03$ but no significant effect for the covariates parents' education $F(1, 152) = 0.50$, $p = .486$ and parents' employment $F(1, 152) = 0.42$, $p = .515$.