

The Volatile Nature of Theory of Mind:
Does Mental State Understanding Depend on the Characteristics of the Target?

by

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Abstract

This study examined to what extent children's mental state understanding vary as a function of perceived similarity, prejudice and threat perception towards out-group and social identity. The sample included 214 Turkish children ($M_{age} = 11.66$ years, $SD = 0.84$; range = 9 years 7 months -13 years). We measured children's mental state understanding and general reasoning ability (as a control variable) by using the Strange Stories task, which consisted of intra-cultural and cross-cultural mind reading and control stories. Children were randomly assigned to one of the three groups where they heard four mind reading stories and four control stories: Children in the Turkish target group read four mind reading and four control stories about Turkish characters and objects seen in the Turkish culture, children in the Syrian target group read four mind reading and four control stories about Syrian characters and objects in Syrian culture, and children in the Dutch/Norwegian target group read four mind reading and four control stories about Dutch/Norwegian characters and objects commonly seen in Dutch/Norwegian culture. We examined children's perceived similarity with Syrian and Dutch/Norwegian culture, prejudice, discrimination, and threat perception towards Syrian and Dutch/Norwegian, and children's social identity via standardized scales and tasks. Children's second-order false belief understanding, attentional control, empathy, expressive language and receptive language ability, direct contact, and negative indirect contact with out-groups were also measured as control variables. Results showed that there was no significant difference in general reasoning accuracy (control stories) between the three groups. Children in the Turkish target group made significantly more accurate mental state inferences than children in two other groups. Furthermore, children in the Syrian group were significantly less accurate when ascribing mental states to targets compared to children in the Dutch/Norwegian target group. Findings revealed that children in the Syrian target group had significantly higher prejudice, discrimination and perceived threat than children in the Dutch/Norwegian target group.

Hierarchical regression analysis showed that prejudice and perceived realistic threat significantly predicted lower ToM performance for children who were in the Syrian group, while only perceived symbolic threat significantly predicted lower mental state understanding of children in the Dutch/Norwegian group. These findings have important implications to understand how similarity and intergroup processes (e.g., prejudice, threat perception) might have a role in children's mental state understanding.

Keywords: mental state understanding, perceived similarity, social identity, prejudice, threat perception, in-group, out-group, Turkish children, middle childhood

Özet

Bu çalışmada çocukların benzerlik algıları, dış grubun bireyelerine yönelik önyargıları, tehdit algıları ve kendi kültürel grubuyla özdeşleme (sosyal kimlik) derecelerinin, zihin anlama becerisi ile ilişkisi araştırılmıştır. Araştırmada yaş aralığı 10-12 ($Ort_{yaş} = 11.66$ yıl, $S = .84$) olan 214 çocuktan veri toplanmıştır. Çocukların zihin kuramı ve genel mantık yürütme düzeyleri 8 hikaye (4 zihin anlama, 4 genel mantık yürütme) ile ölçülmüştür. Çalışmaya katılan çocuklar rastlantısal olarak üç gruba ayrılmış, bir gruba Türk kültürüne ait isim ve nesnelere bulunduğu hikayeler (içgrup), ikinci gruba Suriyeli karakterlerin ve Suriye kültüründe yaygın olan nesnelere kullanıldığı hikâyeler (dışgrup), üçüncü gruba ise Hollanda/Norveçli karakterlerin ve o kültürlere özgü nesnelere kullanıldığı hikayeler (dışgrup) verilmiştir. Benzerlik algısı, önyargı, ayrımcı davranış, tehdit algısı ve sosyal kimlik anketler ve bireysel ölçümlerle değerlendirilmiştir. Çocukların empati, dikkati kontrol, alıcı ve ifade edici dil becerileri ve dışgruplarla olan doğrudan ve dolaylı etkileşimi kontrol değişkenleri olarak ölçülmüştür. Çalışmanın bulguları, çocukların genel mantık yürütme düzeyleri açısından üç grup arasında anlamlı bir fark olmadığını göstermiştir. Zihin durumlarını anlama açısından ise, Türk karakterlerin olduğu hikayeleri okuyan gruptaki çocuklar, diğer iki gruptaki çocuklara kıyasla anlamlı şekilde daha yüksek performans göstermiştir. Benzer şekilde, Hollandalı/Norveçli karakterler ilgili hikayeleri okuyan gruptaki çocuklar, bireyelerin zihin durumlarını Suriyeli karakterlerle ilgili hikayeleri okuyan gruptaki çocuklara kıyasla daha doğru anlamışlardır. Çalışmanın bir diğer bulgusu, Suriyeli karakterlerle ilgili hikayeleri okuyan gruptaki çocukların önyargı, ayrımcı davranış ve tehdit algısının, Hollandalı/Norveçli hikayeleri okuyan gruptaki çocuklara kıyasla daha yüksek olduğunu göstermiştir. Son olarak, hiyerarşik regresyon analizleri Suriyeli karakterlerle ilgili hikayeler okuyan çocukların dışgruba karşı olan

gerçek tehdit algısı ve önyargısı arttıkça bu kişilerin zihin durumlarını anlamalarında hataların arttığını göstermiştir. Hollandalı/Norveçli hikayeleri okuyan gruptaki çocukların ise sadece sembolik tehdit algıları arttıkça dış grubun zihin durumunu anlamaları zorlaşmıştır. Farklı kültürlerden gelen kişilerin zihin durumlarının anlaşılması, o kültürden kişiler ile olumlu ilişkiler kurmak, düşmanca tutumların önüne geçilmesi ve azaltılması için önemlidir. Bu nedenle, mevcut çalışma dışgruplara karşı olan benzerlik algısı, önyargı ve tehdit algısının çocukların sosyo-bilişsel becerilerini nasıl etkilediğine dair bulgular sunması bakımından hem kuramsal olarak hem de uygulamaya yönelik sunduğu önermeler bakımından önemlidir.

Anahtar kelimeler: zihin anlama becerisi, benzerlik algısı, sosyal kimlik, önyargı, tehdit algısı, içgrup, dışgrup, Türk çocuklar, orta çocukluk dönemi

DEDICATION

*To my grandfather, Mehmet Gönültaş
I still take your lessons with me, every day.*

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Chapter 1

Introduction

Mental state understanding, also called theory of mind (ToM), refers to the ability to infer mental states of the self and others such as intentions, beliefs, and desires (Wellman, 2014). To be aware that people can differ on what they believe, know and want help children to make sense of complex social relationship patterns, and allow higher levels of social competence (Slaughter et al., 2015). Thus, ToM is considered as a critical socio-cognitive ability in developmental psychology. Research reveals that although many ToM insights evolve by age 5 (Watson et al., 1999), mental state understanding continues to grow during middle childhood and adolescence (Hughes, 2016); and moreover, people do not use their ToM ability in an effortless and automatic fashion (Phillips et al., 2015) which determines the accuracy of their mental state understanding. This arises an important question about possible factors that play a role in usage and accuracy of mental state understanding in social relationships regardless of the potential. The current study approaches this topic by adopting some core concepts in social psychology, and investigates whether mental state understanding varies as a function of attitudes towards out-groups (i.e., perceived similarity, prejudice, and threat perception), and social identity in middle childhood.

The reason why we preferred to focus on middle childhood is that, throughout this developmental period, children's social horizon and knowledge about group dynamics widen: They reach out beyond their families and begin to explore interactions with others (Devine et al., 2016). With increased experience with people coming from different social backgrounds, children come to understand cultural similarity and dissimilarity, which paves the way for the formation of in-group and out-group biases (Levy & Klein, 2010). Self-identification with in-group increases during middle childhood, and out-group dislike starts to increase. In the following sections, we provide a review of these concepts and how they might be related with mental state understanding.

Chapter 2

Literature Review

2.1 Similarity and ToM

Literature suggests that people are more accurate in understanding mental states of those who are similar to them. Being one of the few studies that examined the ease of mental state understanding for culturally similar targets, Perez-Zapata et al. (2016) showed that both Australian and Chilean participants' mental state understanding was more accurate and faster when judging the mental states of their own cultural group members compared to someone from the out-group. The researchers argued that cultural similarity of the target may provide a shared background, which facilitates mental state understanding. Similarly, in their study with Japanese and American adults, Adams et al. (2010) found that both groups were better at reading the minds of people from their in-groups, and showed lower performance when they were asked to predict mental states of out-group members. In sum, research suggests that adults do not always use their ToM in an effortless and automatic fashion, and being capable of understanding others' mental states does not necessarily bring accuracy in mindreading.

Taken together, these studies showed that people who come from different cultures have more difficulty in understanding the mental state of each other. However, the relationship between mental state understanding and similarity/dissimilarity of the target has been investigated only in contexts where there is no prejudice or perceived threat between the two groups or in contexts where two groups have neutral attitudes towards one another (e.g., Australian and Chileans). Yet, besides perceived similarity with the targets, mental state understanding might also depend on other social processes such as prejudice and threat perception towards out-groups.

2.2 Intergroup process and ToM

One of the intergroup factors that received scant attention in research on mental state understanding is prejudice. Prejudice describes unjustified feelings of dislike and negative attitudes toward a targeted group as a whole or toward individuals due to their group membership (Jackson, 2011). Babies as young as 3 months of age demonstrate visual preference to a familiar race (Anzures et al., 2013). And later on, in preschool years, children prefer helping and playing with peers from their racial in-group (Kinzler & Spelke, 2011), and develop prejudicial attitudes towards out-groups (Spears-Brown & Bigler, 2005). These attitudes can manifest themselves in a number of ways. For example, children categorize people as ‘us’ and ‘them’, and assign positive traits to ‘us’ and negative traits to ‘them’ to boost their in-group (Van Bavel & Cunningham, 2009). This social categorization leads to discrimination, which is the behavioral manifestation of prejudice in the form of negatively biased treatment of people based on group membership (Tajfel & Turner, 2004).

Social categorization and prejudice decrease the motivation to form social connection with out-group members, which further lowers the perceived overlap between self and other, and motivation to understand other’s mental states (Epley & Waytz, 2010). Studies showed that, compared to the in-group, people seek more concrete evidence for attributing mental capabilities such as thinking and believing to out-group members (Hackel et al., 2014); and they are also more likely to attribute unique human essence to their in-group, and perceive their out-groups less human, a phenomenon called infra-humanization (Leyens et al., 2003). Accordingly, they use less mental-state verbs (e.g., believe, want) when they refer to out-group members compared to in-group members (Harris & Fiske, 2011). It is also noteworthy that people are more likely to see out-group members as homogenous by disregarding the within-group differences across individuals (for meta-analysis, see, Boldry, Gaertner, Quinn, 2007), and they process facial features of in-group members in more detailed fashion while ignoring differences in faces of out-group members (Van Bavel, Packer, & Cunningham,

2008). This body of research suggests that prejudice may influence mental state understanding, making children less attendant to minds of out-groups.

Another process that might help us to explain the prejudice-ToM link is threat perception. People perceive threat when they expect harm from out-group members towards the in-group (Stephan & Mealy, 2012). Perceived threat can either be realistic or symbolic as the Integrated Threat Theory argues (Stephan, Ybarra, & Bachman, 1999). Realistic threat refers to those posed to in-group's power, material resources, and general welfare; and symbolic threat includes those towards in-group's identity, values, norms, and way of living. Studies showed that out-groups such as immigrants pose both realistic threat and symbolic threat to in-group members (Caricati et al., 2017; Nshom & Croucher, 2017; Vedder et al., 2016); and a meta-analysis (Riek, Mania, & Gaertner, 2006) revealed that these different threat types are associated with negative attitudes towards out-groups. This suggests that particularly in inter-group contexts, both realistic and symbolic threat should be taken into account. However, research that examined threat perception in childhood has not addressed these two dimensions of threat perception separately.

Nesdale et al. (2005) investigated threat perception without making a distinction between realistic and symbolic threat, and found that when children (6- to 9-year-olds) perceived threat from their out-group members, their prejudice (e.g., feelings of dislike or hatred) increased and they were less likely to cooperate with the out-group team. Nesdale et al. argued that threat perception was one of the key factors that turned racial preference into racial prejudice.

It is widely reported that threat perception increases hostile emotions and behaviors in intergroup relationships (Bizman & Yinon, 2001; Riek, Mania, & Gaertner, 2006). But although its importance is highlighted, the role of threat perception in understanding mental states is less often explored. In one such research, Hackel et al. (2014) found that adult participants were more likely to attribute mind to faces of out-group members if they

perceived them as a more significant threat to their in-group. Hence, people devoted their cognitive resources to understanding mental states of out-groups when they perceived them as dangerous; suggesting that perceived threat can facilitate out-group mind perception.

However, it is also possible that threat perception alleviates mental state understanding. It was found that (Pereira, Vala, & Costa-Lopes, 2010) people who saw out-group members as a threat to their cultural and economic integrity had a tendency to prioritize their in-group members' well-being and experienced difficulty in understanding the out-group members' perspective and interpreting their behavior. And when people felt prejudice towards a specific out-group, they justified their prejudice by perceiving the group as threatening (Nshom & Croucher, 2017) which increased the likelihood of dehumanization of this out-group (Glick, 2005). Thus, it is noteworthy that threat perception may decrease motivation to ascribe mental states to out-group members through different means; through dehumanizing the out-group and through devoting more attention to the in-group's well-being.

2.3 Social identity and ToM

Social Identity Theory (SIT; Tajfel & Turner, 2004) states that our identities are formed through the groups to which we belong (e.g., race-ethnicity, nationality, gender, social class), and influence our social judgment and behavior. Social identity alters our perception. Hackel et al. (2014) found that people who identified themselves with their cultural in-group more strongly attributed more humanness to their in-group compared to out-group members. This was explained by people's motivation for social interaction with their in-group. Similarly, Leyens et al. (2003) reported that adults were more likely to attribute uniquely human emotions (e.g., optimism, sorrow, etc.) to their in-group members than to out-group members, independent of emotions' valence.

Although these relations have not been examined for childhood, the Social Identity Development Theory (SIDT; Nesdale, 2004) expands and applies the social identity

approach to children as well, and proposes that children's attitudes, beliefs, and behaviors are significantly shaped by their social identity which motivates them to pursue social contacts with in-group members (Nesdale et al., 2009). Thus, it is plausible that children's propensity for mental state understanding might also be bound by their social identity.

Studies (e.g., Nesdale et al., 2005) drawing on SIDT showed that as children get older, they start to face pressure to conform to group norms. This leads to emergence of negative attitudes toward out-groups and a preference for the in-group. This occurs through a four-phase developmental process: The foundation of social group relations, social group awareness, social group preferences, and out-group negativity. The transition from social group awareness to out-group negativity depends on intergroup factors such as (1) whether children have prejudice towards out-group, (2) whether in-group members believe that their in-group members are threatened by out-group members, (3) the extent to which children perceive their out-groups as similar/dissimilar to their in-group, (4) the extent to which children's in-group members perceive out-group negativity as a norm (Nesdale, 2017). It is possible that these factors influence children's motivation to form social relations with out-group members, and in turn alter their propensity to use mental state understanding.

Except the Perez-Zapata et al. (2016) research, all the studies summarized above examined 'lower-level' mental processes; for example, interpreting physical cues such as a target's facial expression or eye gaze to infer mental states (e.g., Adams et al., 2010; Van Bavel, Packer, & Cunningham, 2008). Only, Perez-Zapata et al. (2016) examined mind reading via mental-state reasoning (higher-level processing), which requires forming complex inferences about the causes of target's actions in terms of mental states.

Chapter 3

Present Study

Extant literature provides evidence that people have difficulty in understanding mental states of others who belong to a different cultural group (Adams et al., 2010; Leyens et al., 2007; Perez-Zapata et al., 2016), because similarity provides individuals with shared knowledge of what is relevant in a given situation and thus facilitates mental state understanding. However, the role of the ‘target’ in mental state understanding has not been examined in childhood. There is also a dearth of literature on the influence of social identity, group membership and intergroup related factors on mental state understanding. This gap in the literature limits our understanding of how the target characteristics may impact on children’s mental state understanding. In this research, we addressed this interface by investigating how propensity to use mental state understanding is related to social identity, perceived similarity, and prejudice and perceived threat (realistic and symbolic) towards out-group in middle childhood. With this aim, we measured children’s understanding of mental states towards in-group targets and two out-group targets. Since our sample consisted of Turkish children, we chose the target in-group as Turkish, and picked the two target out-groups in such a way that they potentially varied on a) similarity with the in-group, and b) prejudice, discrimination and perceived threat towards out-group.

We chose one target out-group as Syrians, because Turks and Syrians are similar to each other regarding religion (Syrians are also predominantly Sunni Muslim) and cultural values. And despite this similarity, Turks perceive Syrians negatively, feel threatened by them (Erdogan, 2014), and display discriminatory behavior toward them in many settings including schools (Uzun & Butun, 2016). This is because Syrians constitute the biggest migrant group in Turkey, and their numbers continue to increase since 2011 due to the civil war in Syria (UNCHR, 2016).

We selected the second out-group in such a way that it would be potentially dissimilar to Turks but would, as a country, have neutral relations with Turkey, hence would not be target of prejudice, discrimination and perceived threat in Turkey. This group constituted our control out-group. Among many groups, Dutch are dissimilar to Turks in terms of religion (Dutch are Christian) and cultural values. Moreover, Turkey and the Netherlands have neutral political and economic relations (Baehr et al., 2002). Therefore, we chose Dutch targets as our control out-group. However, an unexpected serious political conflict occurred between Turkey and the Netherlands (Kingsley & Rubin, 2017) during data collection, which changed the neutrality of this group (and found its reflections in responses of children). So, we immediately changed our Dutch target group to the Norwegian target group, which was similar to the Dutch in terms of the criteria we described above.

The children were assigned to one of these three groups (one in-group, two out-groups) and were given separate stories where they were asked to predict the mental states of Turkish (in-group), Syrian (out-group) or Dutch/Norwegian (out-group) target individuals. They were also given separate stories where they were expected to make causal inferences regarding physical events featuring animals or objects (commonly seen in Turkish, Syrian or Dutch/Norwegian cultures) to measure children's general reasoning ability as a control variable.

We also measured children's attentional control, empathy, and expressive and receptive language as control variables to account for variation in ToM not associated with the research questions we investigated. Children with better attentional control are able to focus on others' mental states better, and are also better able to recall and interpret mental state references during social interactions (Devine & Hughes, 2014; Wang, Devine, Wong, & Hughes, 2016). Similarly, ToM and empathy in childhood and adolescence are also associated abilities on both psychological and neuronal grounds (Decety & Svetlova, 2012). Conceptually, both require accurately understanding how another person thinks or feels

(Lonigro et al., 2014). We also controlled for expressive and receptive language, since these skills allow better social communication, which presents children with increased opportunities to understand others' mental states (Devine & Hughes, 2013). Accordingly, a meta-analysis conducted by Milligan, Astington, and Dack (2007) showed that children's expressive and receptive language ability and ToM ability are correlated in a wide range of language tasks including expressive narrative speech and receptive vocabulary.

Social factors such as contact with out-groups can also alter children's motivation to understand out-group members' mental states and, hence, their accuracy (Barlow et al., 2012). Therefore, we also measured children's direct and negative indirect contact with targeted out-groups as another control variable.

Hypotheses.

Similarity.

The Similarity account (e.g., Adams et al., 2010; Perez-Zapata et al., 2016) proposes that cultural similarity provides shared cultural background and facilitates mental state understanding. If the similarity account is correct, first, children in the Turkish target group would make more accurate mental state inferences than children in the Syrian and Dutch/Norwegian target groups because they inferred mental states of their in-group members. Second, children in the Syrian target group would also make more accurate mental state inferences than children in the Dutch/Norwegian group because we expected that children in the Syrian target group would perceive out-group members as more similar to their Turkish in-group compared to children in the Dutch/Norwegian target group. We also expected that, for children in the Syrian and the Dutch/Norwegian target group, higher levels of perceived similarity with out-group members would be positively associated with more accurate mental state inferences.

Intergroup processes.

The intergroup processes account, on the other hand, suggests that it is the intergroup factors such as the level of prejudice and discrimination that we display toward and the level of threat we perceive from others that influence the accuracy of our ability to understand others' mental states. We expected that children in the Syrian target group would display higher levels of prejudice, discrimination, symbolic threat and realistic threat than children in the Dutch/Norwegian group. Thus, if the intergroup processes account is correct, having higher prejudice, discrimination and perceived symbolic and realistic threat towards Syrians would make it more difficult for children in the Syrian target group to understand the mental states of these individuals. Consequently, children in the Syrian target group would be less accurate when making inferences about the mental states compared to children in the Dutch/Norwegian target group. We also hypothesized that children in the Syrian target group would be less likely to have the motivation to have social contact with out-group members compared to children in the Dutch/Norwegian target group. Children in the Syrian target group would be more likely to approve aggressive behavior towards out-group members compared to children in the Dutch/Norwegian target group.

The effect of cultural variables was expected to be observed when children were required to understand others' mental states, but not when they are required to draw causal inferences about physical events or objects. Therefore, we did not make these predictions for children's general reasoning accuracy, as it requires an understanding of logical relations between objects and situations.

We also examined whether children's mental state understanding vary by prejudice and threat perception towards out-groups. On the basis of literature (Epley & Waytz, 2010; Leyens et al., 2003) which suggests that prejudice and threat perception towards out-groups decrease the perceived overlap between self and other, and motivation to understand minds of out-groups, we would expect, for children in the Syrian and Dutch/Norwegian target group, higher prejudice, perceived realistic, and symbolic threat to predict lower mind

reading accuracy.

Social identity.

Based on the literature reviewed above, we expected that, for children in the Turkish target group, higher levels of social identity would be positively associated with more accurate mental state inferences. We hypothesized that, for children in the Syrian and the Dutch/Norwegian target group, higher levels of social identity would be negatively correlated with more accurate mental state inferences.

We expected all these differences regardless of children's age, sex, SES, second order false belief understanding, attentional control, empathy, expressive language, and receptive language.

Second-order false belief understanding and prejudice.

Some studies (e.g., Mulvey et al., 2015; Yu, Zhi, & Leslie, 2016) suggests that the reverse association between mental state understanding and prejudice is also possible. They showed that mental state understanding potentially underlies differential levels of prejudice and stereotypes observed in children and has a role on the relationship between prejudice and behavioral outcomes. Thus, we examined whether children who passed false belief understanding task would have less prejudice compared to children who did not pass.

Chapter 4

Method

Participants

The participants were 214 Turkish children whose age ranged between 9 years 7 months and 13 years ($M_{age} = 11.66$ years, $SD = 0.84$). They were 5th-grade ($M_{age} = 10.67$, $SD = 0.42$, $n = 71$), 6th-grade ($M_{age} = 11.75$, $SD = 0.28$, $n = 69$) and 7th-grade ($M_{age} = 12.54$, $SD = 0.27$, $n = 74$) middle school students. The mean age for boys ($M = 11.62$ years, $SD = 0.85$; $n = 89$) and girls ($M = 11.66$ years, $SD = 0.83$; $n = 125$) did not significantly differ ($F(1, 212) = 0.01$, $p = .96$). All children were native speakers of Turkish.

The average number of years of education for their mothers and fathers was 9.89 ($SD = 4.17$) and 10.23 ($SD = 4.00$) years, respectively. Approximately, 79.1% of mothers and 80.8% of fathers had a high school degree or lower. Mother and father education were significantly correlated ($r = .60$, $p < .001$), and these two scores were standardized and averaged to compute the SES of the family.

Children were randomly assigned to one of the three conditions: The Turkish target group, the Syrian target group, and the Dutch/Norwegian target group. These groups were similar in number, age, and sex distribution of children.

Design and Procedure

The study has a 3 (target group: Turkish, Syrian, Dutch/Norwegian) x 2 (story type: mind reading stories and control stories) mixed design. The target group was between and story type was within factor.

Initially, children were randomly assigned to one of these three groups. Children in the Syrian target group and in the Dutch/Norwegian target group were presented with the Ice-cream Man Task first. Subsequently, they were given the culturally adapted version of the Strange Stories Task (four mind reading and four control vignettes). Then, they were given the Social Identity Scale, the Multiple Racial Attitude Task, the Discriminatory

Tendency Task, the Readiness for Social Contact Scale, the Perceived Similarity Scale, the Threat Perception Scale, the Normative Beliefs about Aggression Scale, the Direct and Negative Indirect Contact Scale, the Attentional Control Scale, the Basic Empathy Scale, and TIFALDI. The measures were presented in the order listed above to children in the Syrian and Dutch/Norwegian groups. Children in the Turkish target group were presented with the Ice-cream Man Task, the Strange Stories (four mind reading and four control vignettes), the Social Identity Scale, the Attentional Control Scale and the Basic Empathy Scale, and TIFALDI. The measures were administered in this order to children in Turkish target group. As children's ToM towards in-group (Turkish in-group) was investigated in this group, they were not presented with the measures that examined out-group attitudes and behavior.

Data collection started upon receiving permission from the IRB of the University and the Ministry of Education of Turkey. Children were recruited from seven public middle schools in Istanbul and from one public middle school in Tekirdağ. These are developed cities located in northwestern part of Turkey. To begin with, the school principals were informed about the project to reach parents who their children were willing to participate in the study. Invitation letters and consent forms were sent to parents with the help of teachers. All students with parental consent were included in the study. The data were collected from children one-on-one in a quiet room at their school, between the dates of 17.01.2017 and 15.05.2017.

The Ice-cream Man Task, the Strange Stories Task, the Multiple Racial Attitude Task, the Discriminatory Tendency Task, and TIFALDI were behavioral measures while the rest were self-reports. The self-report measures and the Strange Stories Task were presented on a computer screen. It took approximately 55 minutes to complete all measures for the Syrian and Dutch/Norwegian target groups, and 35 minutes for the Turkish target group. Children were not given any presents for their participation.

Measures

Demographic form. Children were requested to complete a form to provide demographic information (see Appendix A) about themselves (e.g., date of birth, sex) and their parents (e.g., parental education, the number of siblings, household size).

Study Variables

ToM toward in-group/out-group. The Strange Stories (White, Hill, Happé, & Frith, 2009) was used to examine whether children's mental state understanding varied by characteristics of the targets (see Appendix B). This task consisted of two types of stories: a) mind reading stories (depict scenarios including double bluff, misunderstandings, deception, and white lie); and b) control stories (short stories about physical events or objects indicating children's general reasoning). Recently, Perez-Zapata et al. (2016) adapted this task in order to examine whether individuals' mental state understanding was influenced by the cultural identity of the target. Their adaptation involved creating matched cultural in-group and cultural out-group target conditions and adding a picture that matched the cultural context for both mind reading and control stories. The children presented all instructions and stories on a computer screen. After each story, participants were expected to answer a question requiring causal inference (e.g., 'Why will Jim look in the cupboard for the bat?'). The responses were scored on a 0-2 scale, indicating accuracy of the response regarding the information in the story: 0 = false answer (e.g., 'Because he looked everywhere else'), 1 = correct answer without attributing mental states of characters (e.g., 'Simon hiding it without reference to implications of lying'), 2 = correct answer with mental state attribution like believe, think (e.g., 'Jim knowing Simon lies')

In the current study, we used this culturally adapted version of Strange Stories task. All children in three groups were presented four mind reading stories and four control stories. The stories were identical except the characters' cultural identity and the objects involved. For example, children in the Turkish target group were presented stories about

Turkish characters (e.g., Murat) and objects that are seen in Turkish culture (e.g., meatball); children in the Syrian target group were presented stories about Syrian characters (e.g., Bedihi) and objects (e.g., hummus) that are unique to Syrian culture, and children in the Dutch/Norwegian target group listened to stories about Dutch/Norwegian characters (e.g., Milan) and objects common in Dutch/Norwegian culture (e.g., fried potatoes). The stories were read aloud to the children and each story was accompanied by a picture that matched the cultural context. Children responded to the test questions verbally and their responses were transcribed by the experimenter. Children's responses to the test questions were coded by the experimenter after responses were transferred to SPSS. The accuracy scores of children were summed to compute the total mind reading and general reasoning accuracy variables. So, each variable ranged between 0 and 8.

Social identity. In this research, we used a modified version of the Social Identity Scale (Leach et al., 2008) to measure children's level of identification with their Turkish in-group (see Appendix C). Originally, the scale included 14 items (e.g., 'It is pleasant to be Turkish') were rated on a 7-point Likert-type scale ranging from 1 (*entirely disagree*) to 7 (*entirely agree*). In the present study, we excluded four items that deemed overly vague for children (e.g., 'Being Turkish just feels natural to me'). The total social identity score was calculated by averaging the scores on 10 items (Cronbach's $\alpha = .85$).

Perceived similarity. The extent to which children perceived an out-group as similar or dissimilar to their in-group was measured via the Social Category Similarities subscale (three items; e.g., 'To what extent Syrians or Dutch/Norwegian group is similar to your group with respect to cultural background') of the Perceived Similarity Scale (Zellmer-Bruhn et al., 2008) (see Appendix D). The scale originally consists of two subscales. Because the Work life-working Style Similarities subscale was not appropriate for use with children, we used only the Social Category Similarities subscale. The items were rated on a 7-point Likert ranging from 1 (*totally different*) to 7 (*totally similar*). The scores for each

item were averaged to compute perceived similarity score. Cronbach's alpha for the subscale was .72 in the current study.

Prejudice. The Multiple Racial Attitude Task (Aboud, 2003; Doyle & Aboud, 1995) was used to derive separate indices of positive and negative attitudes and to examine bias towards in-group and out-group members (see Appendix E). Children were presented with two boxes: One labeled as belonging to their in-group members (Turkish) and one labeled as belonging to their out-group members (Syrian or Dutch/Norwegian). Then, children were presented with six positive (clean, happy, friendly, good, hardworking, helpful) and six negative (bad, dirty, naughty, cruel, rude, lazy) adjectives. Children were presented with two cards for the same adjective and they were asked to put two cards to box or boxes people who "are that way". They were told that they could put two cards either to one box or divide them one to one for each box. After children finished to put cards to boxes, positive attribution to in-group, negative attribution to in-group, positive attribution to out-group, and negative attribution to out-group scores, ranging from 0 to 12, were calculated. An 'in-group bias' score was then calculated by subtracting the negative score for the in-group from the positive score for in-group. Hence, the score could range from -12 (*very unfavorable*) to 12 (*very favorable*), with a higher score indicating a more positive attitude toward the Turkish in-group. Similarly, an 'out-group bias' score (Syrian or Dutch/Norwegian) was computed by subtracting the number of negative attitudes from the number of positive attitudes, falling again in the range of -12 (*very unfavorable*) to 12 (*very favorable*) with a higher score indicating a more positive attitude towards out-groups (Syrian or Dutch/Norwegian). Then, the 'prejudice' score was calculated by subtracting the out-group bias score from the in-group bias score ranging from -24 to 24; higher scores represented higher levels of prejudice.

In this research, we mainly conducted our analyses with the prejudice score but we also used positive attribution to in-group, negative attribution to in-group, positive attribution to out-group, negative attribution to out-group, in-group bias, and out-group bias

scores to explore whether they lead to differences in their associations with ToM toward in-group/out-group.

Discrimination. Children's discriminatory tendency towards targeted out-groups was measured via the Discriminatory Tendency Task developed by Berger et al. (2016) (see Appendix F). In this task, drawings of a street with seven houses set side by side were presented to children. Children were told to imagine that they lived in one of the houses (tagged as 'my house') and that a new child (from Syria or Netherlands/Norway) was going to move to their neighborhood. A photo of a child from Syria or Netherlands/Norway was shown, and the children were asked to indicate the house in which they would like this new child in the photo to live. Boys were presented with the same-age male images (e.g., Jamal, Ruben) and girls (e.g., Barika, Eva) with the same-age female images. The number of houses from 'my house' to the house chosen for the child was counted; higher scores indicated higher levels of discrimination.

Readiness for social contact. We measured children's willingness to have social contact with their out-group members via the Readiness for Social Contact Scale (Berger et al., 2016) (see Appendix G). Children were presented with a hypothetical scenario in which they imagined going to a park and meeting the Syrian or Dutch/Norwegian child who moved to their neighborhood (by referring the child in the previous measure). Children were required to rate six questions (e.g., 'How much you would like to play with Jamal/ Barika/ Ruben/ Eva?') on a 6-point Likert-type scale, ranging from 1 (*not at all to*) to 6 (*very much so*). The readiness for social contact score was calculated by averaging the scores, with higher scores indicating higher levels of readiness for social contact. In the present study, the Cronbach's alpha for the scale was .91.

Realistic and symbolic perceived threat. We modified the Threat Scale to measure the level of perceived and symbolic threat children felt toward the out-group in the present study (see Appendix H). The original scale consists of 14 items rated on a 10-point Likert

scale ranging from 1 (*strongly disagree*) to 10 (*strongly agree*). It has perceived realistic threat (e.g., ‘Because of Syrian immigrants or Dutch/Norwegian worker in Turkey, Turkish people benefit less from health care and education facilities’) and perceived symbolic threat (e.g., ‘Syrian immigrants or Dutch/Norwegian workers pose danger for Turkish culture’) subscales.

Our adaptation involved using a 7-point scale (1 = strongly disagree to 7 = strongly agree) rather than 10-point scale since beyond that number is fatiguing for children (Mellor & Moore, 2014). We also excluded four items as children do not have knowledge in a given question and as we could not modify them by maintaining a semblance of the original question (e.g., ‘Uninsured Syrian immigrants are a menace on Turkey roads’).

The Perceived Realistic Threat subscale (5 items) and Perceived Symbolic Threat subscale (5 items) scores were computed by averaging the score for each item in the subscale. The Cronbach’s alphas were .80 for Perceived Realistic Threat subscale, .81 for Perceived Symbolic Threat subscale.

Normative beliefs about aggression towards the out-group. The Normative Beliefs about Aggression Scale (NOBAGS; Huesmann, Guerra, & Zelli, 1989) examined children’s beliefs about aggressing towards the out-group (see Appendix I). In the present study, shorter version of the NOBAGS (Niwa, et al., 2016) was used. It included three items (e.g., ‘In general, is it acceptable for Turkish to curse at Syrian or Dutch/Norwegian people?’). Children were asked to indicate their approval or disapproval of aggression towards out-group members along a 4-point Likert scale ranging from 1 (*entirely disagree*) to 4 (*entirely agree*). The ‘normative beliefs about aggression towards the out-group’ score was calculated by averaging the scores on each item (Cronbach’s $\alpha = .79$). Higher scores reflected stronger support that aggression against the out-group is justified.

Control variables

Second-order false belief understanding. We measured children's second-order false belief understanding via the Ice-cream Man task (Wimmer & Perner, 1983). With this task, we measured children's general false belief understanding without manipulating the target's culture. A story was told to children by showing related pictures on cards (see Appendix J). We adapted the task for Turkish children by using well-known Turkish names (Can and Merve) for the story characters and by replacing the church picture with a school picture, so that the story was as such: One day, Merve and Can are in the park. They meet a man selling ice cream. Merve wants to buy an ice-cream but she has no money. The ice cream man says, "You can go home to get some money, and I will wait here." Therefore, she goes home to get money and thinks that the ice-cream man will be at the park. However, the ice-cream man changes his mind and tells his decision to Merve while she is on her way home. However, Can, who is Merve's friend, does not know that Merve knows where the ice-cream man is going to. Therefore, he is looking for Merve.

Two control questions, one false belief question ('Where does Can think Merve has gone to buy ice-cream to the house, park or to the school?'), and one justification question ('Why does Can think in that way?') were asked to children, and they obtained 1 point if they gave the correct answer to the false belief question and made correct justification (e.g., Can did not know that Merve knows ice man will be at school). Children who gave correct answer but did not make correct justification took '0' (e.g., Can thought that Merve wants to go the school').

Attentional control. We measured children's attentional control via the Attentional Control Scale (Derryberry & Reed, 2002) (see Appendix K). It includes 20 items rated on a 4-point Likert scale ranging from 1 (*never*) to 4 (*always*). We shortened this scale because of the length and overall time burden. To shorten the scale without losing its psychometric properties, we omitted six items with loadings less than .40 in Melendez et al. (2016) study, and we used 14 items (e.g., 'When I am doing something, I can easily stop and switch to

some other task’) in the present study. The attentional control score was composed by adding the scores for each item (Cronbach’s $\alpha = .77$).

Empathy. The Basic Empathy Scale for Children (Jolliffe & Farrington, 2006) was used to measure children’s empathy (see Appendix L). It originally has 20-items. Due to the length of the scale, we shortened this scale by omitting six items with loadings less than .40 in the previous study conducted by Bensallah et al. (2015). We used 14 items (e.g., ‘When someone feels sad, I can understand them’) in the current study. Items were rated on a 5-point Likert scale 1 (*entirely disagree*) and 5 (*entirely agree*). The empathy score was composed by adding the scores for each item (Cronbach’s $\alpha = .69$).

Expressive and receptive language. Turkish Expressive and Receptive Language Test (TIFALDI; Berument & Guven, 2010), which is the Turkish equivalent of the Peabody PVT test was used to measure children’s expressive and receptive language ability (see Appendix M). It is a reliable and valid language test developed for typically developing Turkish children (Berument & Guven, 2010). In the Expressive language task, there was one picture on each page, and children were asked to name the target picture (e.g., ‘What is this called?’). In the Receptive Language test, children were required to point to one of four drawings as a referent for the word (e.g., ‘Which one of these pictures shows a barrage?’). The scores used in the present analyses were age-standardized, with higher scores indicating better expressive and receptive language ability.

Direct and indirect contact. In order to measure real life (actual) direct and negative indirect contact with people from out-groups, the Direct Contact subscale (three items; e.g., ‘In everyday life, how frequently do you have interactions with Syrian or Dutch/Norwegian in your neighborhood’) and the Negative Indirect Scale (two items; e.g., ‘Did someone from your family or friends tell you unpleasant stories about Syrian or Dutch/Norwegian people?’) were used (see Appendix N). Responses were given on a Likert scale ranging from 1 (*never- not at all*) to 4 (*very frequently*), and summed to compute the subscale scores.

Cronbach's alphas were .61 for Direct Contact and .71 for Negative Indirect Contact in this study.

Data Analysis Plan

Data analysis was conducted in multiple steps. Before we tested our hypotheses, we made some preliminary analyses. First, we examined differences in study variables tapping intergroup relationship between Dutch and Norwegian data with ANOVA to decide to combine the Dutch and Norwegian data. Then, to determine whether children's age, SES, attentional control, empathy, expressive and receptive language, and social identity needed to be included in the subsequent analyses as covariates, we compared the Turkish, the Syrian and the Dutch/Norwegian target groups in terms of these variables by using univariate ANOVA. Children's second-order false belief understanding was also examined to investigate their ToM when the target character was same across three groups. The chi-squared test was used to determine whether children in the Turkish, the Syrian and the Dutch/Norwegian target groups differ in general false belief understanding (pass, fail) without manipulating the target's culture. To identify sex differences in all study and control variables to determine whether we eliminate it from all subsequent analyses, ANOVAs were performed.

To test our similarity hypothesis, mixed-model ANOVA utilizing target group (Turkish, Syrian and Dutch/Norwegian) as a between-factor and story type (mind reading and control) as within-factor was used. Follow-up tests were conducted with pairwise comparisons to examine where the differences lie. Following this, to test our hypotheses regarding inter-group factors, we conducted ANCOVAs to examine whether the Syrian and the Dutch/Norwegian target groups differ in perceived similarity, prejudice, discrimination, readiness for social contact, realistic and symbolic threat perception, and normative belief about behaving aggressively toward out-groups controlling for the variables which differ between the Syrian and the Dutch/Norwegian target groups. We also examined whether

similar differences in mind reading accuracy between the Syrian and the Dutch/Norwegian target groups are obtained if we rerun pairwise analyses controlling for perceived similarity, prejudice, perceived realistic, and symbolic threat perception.

In order to examine whether prejudice and threat perception statistically predict lower mind reading accuracy for out-group members, two hierarchical linear regression analyses were performed separately for children in the Syrian and the Dutch/Norwegian target groups.

Analysis for the hypotheses regarding the relationship between social identity and mental state understanding was conducted using Pearson's correlations separately for the Turkish, the Syrian and the Dutch/Norwegian target groups.

Finally, the reverse association between prejudice and ToM was also tested by using univariate ANOVAs in order to investigate differences in prejudice based on second-order false belief understanding (pass, fail) separately for the Syrian and the Dutch/ Norwegian target groups.

All analyses were conducted using the Statistical Package for Social Sciences (SPSS).

Chapter 5

Results

Preliminary analysis

As explained in the Current Study section of this paper, after collecting data from 124 children, we had to change the Dutch target group to the Norwegian target group due to a sudden and serious political conflict between Turkey and the Netherlands. To decide to combine the Dutch and Norwegian data, we examined whether these groups were similar or dissimilar in terms of the study variables tapping intergroup relationship. ANOVA results showed that the Dutch target and the Norwegian target groups were not significantly different from each other in terms of prejudice, perceived realistic threat and perceived symbolic threat, perceived similarity, readiness for social contact, discrimination, direct contact and negative indirect contact (p values ranged between .17 and .88). Based on these results, we combined the Dutch and Norwegian target groups' data and named the group 'Dutch/Norwegian target group'.

Table 1 presents the means, standard deviations, ranges, and results of group comparisons. ANOVAs were conducted to compare the Turkish, the Syrian and the Dutch/Norwegian target groups. Post-hoc analysis via Tukey criterion for significance showed that the Dutch/Norwegian target group was coming from higher SES than both the Turkish and the Syrian target groups. And the Dutch/Norwegian target group had higher attentional control than the Syrian target group (see Table 1). Hence, SES and attentional control were taken as control variables in further analyses on group comparisons. The three groups did not differ on age, empathy, expressive language, receptive language, and social identity. Significant differences were not found for the second-order false belief understanding (pass, fail) between three groups ($\chi^2(2) = 0.83, p = .66$). Approximately 76% of children in the Turkish target group, 80% of children in the Syrian target group and 82% of children in the Dutch/Norwegian target group passed the second-order false belief task.

Table 1

Descriptive Statistics and Group Comparisons

Variable	The Turkish target group (<i>N</i> = 72)				The Syrian target group (<i>N</i> = 70)				The Dutch/Norwegian target group (<i>N</i> = 72)				<i>F</i>	<i>Partial</i> η^2
	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>		
Age (months)	11.52	0.87	9.7	12.9	11.71	0.87	9.9	13	11.77	0.75	10	13	1.88	.02
SES	-0.09	0.89	-1.8	2.01	-0.18 ^{b<.01}	0.78	-1.8	1.67	0.28 ^{c<.05}	0.95	-1.17	2.74	5.56 ^{**}	.05
Mind reading accuracy (0- 8)	6.64 ^{a<.001}	0.96	4	8	4.91 ^{b<.01}	1.35	2	7	5.89 ^{c<.001}	1.24	2	8	37.143 ^{***}	.26
General reasoning accuracy (0- 8)	6.82	1.25	2	8	6.94	1.21	3	8	6.92	1.15	3	8	0.21	.01
Attentional control (14- 56)	35.38	7.61	17	55	33.02 ^{b<.05}	6.18	21	49	35.73	6.12	24	48	3.44 [*]	.03
Empathy (14- 70)	56.33	6.33	42	68	55.60	5.78	39	70	55.65	6.17	41	47	0.72	.003
Receptive language	102.46	10.85	82	126	103.21	10.89	80	131	104	9.44	88	126	0.40	.004
Expressive language	111.29	9.64	89	137	110.88	8.12	88	129	112.74	8.50	92	137	0.90	.01
Social identity (1- 7)	5.92	0.83	1	7	5.73	0.94	2	7	5.77	1.01	1	7	0.79	.01

* $p < .05$. ** $p < .01$. *** $p < .001$.

Note: *a* indicates a significant difference between the Turkish and the Syrian target group; *b* indicates a significant difference between in the Syrian and Dutch/Norwegian target groups; *c* indicates a significant difference between the Turkish and Dutch/Norwegian target group

ANOVA results showed that girls had significantly higher levels of empathy than boys in the Turkish target group ($F(1, 70) = 4.69, p < .05$). Boys in the Syrian target group reported significantly higher realistic threat ($F(1, 68) = 4.32, p < .05$) and symbolic threat ($F(1, 68) = 7.05, p < .05$) compared to girls. In the Dutch/Norwegian target group, girls had significantly higher levels of empathy ($F(1, 70) = 5.91, p < .05$), higher motivation to have social contact with out-group members ($F(1, 70) = 9.31, p < .01$), and lower discriminatory tendency ($F(1, 70) = 8.55, p < .01$) compared to boys.

Girls and boys did not significantly differ on any other demographic variable, study variable or control variable.

Analysis for similarity and intergroup processes account

Children's mind reading and general reasoning scores were analyzed with a mixed-model ANOVA. Story type (mind reading, control) was the within-subjects factor and target group (Turkish, Syrian and Dutch/Norwegian) was the between-subjects factor. This analysis revealed a significant main effect of story type ($F(1, 206) = 9.68, p < .01, \eta^2 = .05$), main effect of target group ($F(2, 206) = 12.96, p < .001, \eta^2 = .11$) controlling for SES and attentional control. There was a significant interaction effect between story type and target group ($F(2, 206) = 20.87, p < .001, \eta^2 = .17$). This indicates that children's performances in stories differed across the three groups (see Figure 1).

Pairwise comparisons with ANCOVA showed that children's mind reading accuracy was significantly lower in the Syrian target group compared to the Dutch/Norwegian target group ($F(1, 136) = 12.45, p < .01, \eta^2 = .08$); and mind reading accuracy was significantly lower in the Dutch/Norwegian target group compared to the Turkish group ($F(1, 137) = 18.59, p < .001, \eta^2 = .12$) controlling for SES, and attentional control. There was no significant difference between the Turkish, Syrian, and Dutch/Norwegian target groups in terms of children's accuracy in general reasoning scores controlling for SES, attentional control (p values ranged between .46 and .70) (see Figure 2).

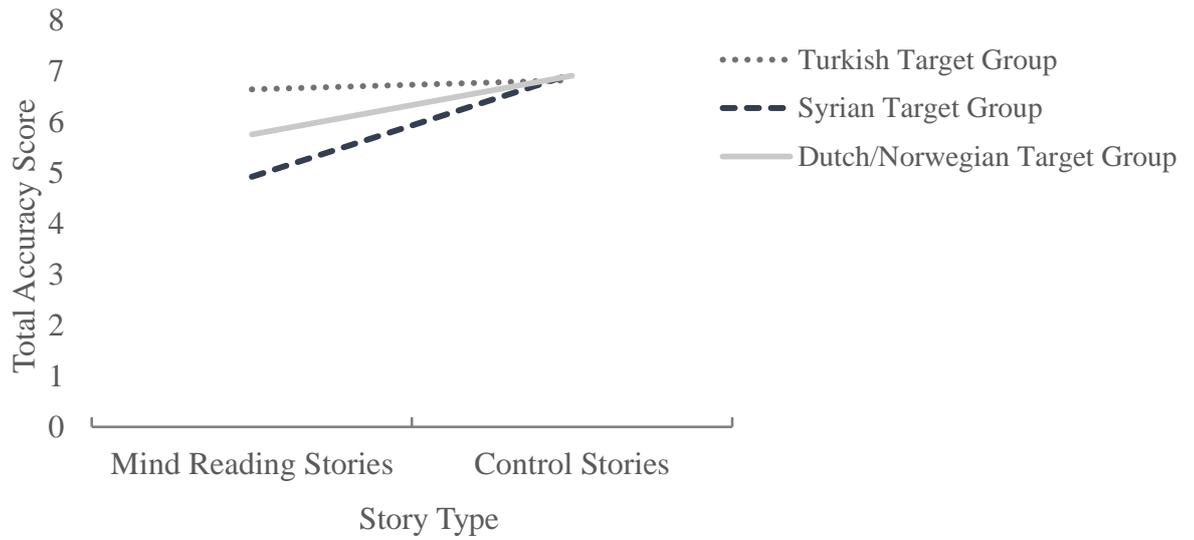


Figure 1. Interaction graph between story type (mind reading, control) and group (Turkish, Syrian, Dutch/Norwegian target) for mind reading and general reasoning accuracy scores

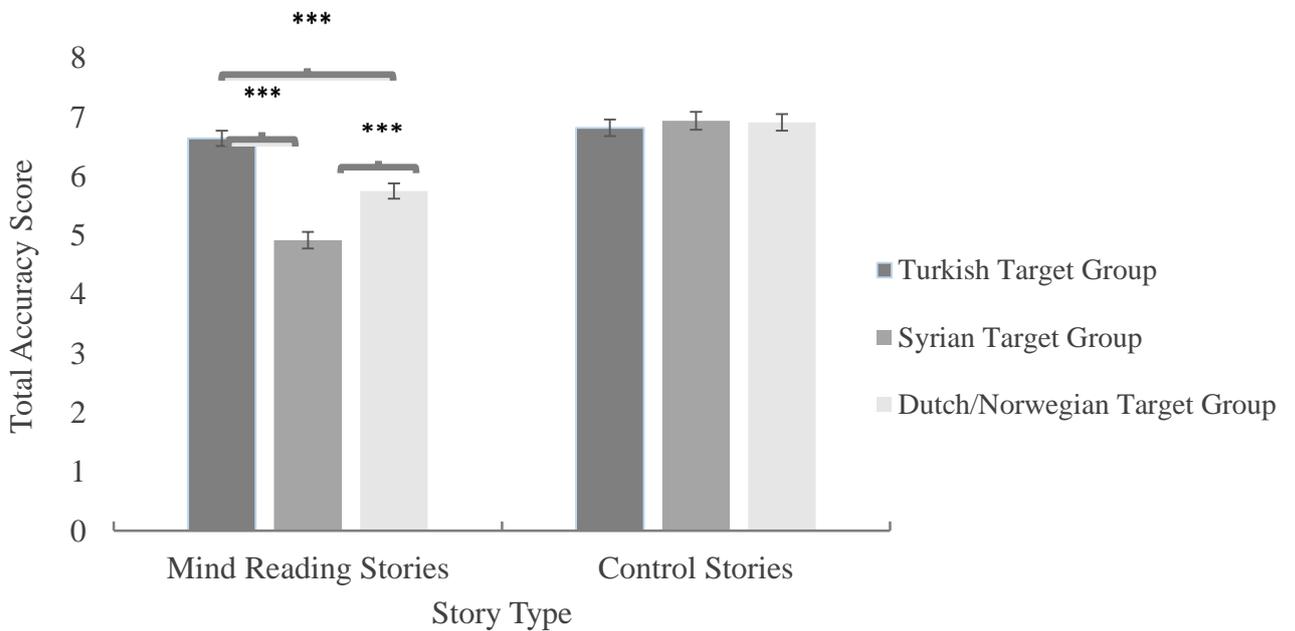


Figure 2. Mean scores (error bars represent standard errors) for mind reading and general reasoning accuracy scores

ANCOVAs were also conducted to compare the Syrian and Dutch/Norwegian target groups in terms of intergroup variables controlling for SES and attentional control (see Table 2). Results indicated that even though children in the Syrian target group perceived targeted out-group as more similar to Turkish, they also had more prejudice, threat perception, and discriminatory tendency, and normative beliefs about aggression compared to children in the Dutch target group. Additionally, children in the Syrian target group reported more direct contact and negative indirect contact, and less willingness to have social contact with out-group members compared to children in the Dutch/Norwegian target group.

ANCOVAs showed that difference in mind reading accuracy between the Syrian and the Dutch/Norwegian target group did not remain significant after controlling for prejudice. The results were the same controlling for positive attribution to in-group, negative attribution to out-group, positive attribution to out-group, negative attribution to out-group, in-group bias, and out-group bias. Similarly, a significant difference in mind reading accuracy between the two groups did not persist after controlling for the perceived realistic threat and perceived symbolic threat (p values ranged between .20 and .75). However, difference in mind reading accuracy between the Syrian and the Dutch/Norwegian target groups remained significant after controlling for perceived similarity ($F(1, 139) = 9.68, p < .01$), discrimination ($F(1, 139) = 7.85, p < .01$), readiness for social contact ($F(1, 139) = 13.27, p < .001$), and normative belief about aggression towards out-groups ($F(1, 139) = 10.68, p < .01$).

Table 2

ANCOVA controlling for SES and attentional control

Variables	The Syrian target group (<i>N</i> = 70)				The Dutch/Norwegian target group (<i>N</i> = 72)				<i>F</i>	<i>Partial</i> η^2
	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>		
Perceived similarity (1-7)	3.22	0.91	1	6	2.10	0.80	1	4	49.02***	.27
Positive attribution to in-group (0- 12)	8.77	1.77	3	12	5.12	1.66	2	11	130.55***	.49
Negative attribution to in-group (0- 12)	4.45	1.58	1	9	7.58	1.58	5	11	111.75***	.45
Positive attribution to out-group (0- 12)	3.21	1.76	0	9	6.88	1.67	1	10	131.86***	.49
Negative attribution out-group (0- 12)	7.52	1.58	3	11	4.43	1.56	1	7	112.47***	.45
In-group bias (-12- 12)	4.31	-2.41	-6	11	-2.41	2.37	-7	3	192.21***	.58
Out-group bias (-12- 12)	-4.31	2.90	-11	6	2.40	2.36	-3	7	195.20***	.59
Prejudice (-24- 24)	8.62	5.76	-12	22	-4.92	4.79	-14	6	189.52***	.58
Perceived realistic threat (1- 7)	4.20	1.00	1	7	2.10	0.84	1	5	153.61***	.53
Perceived symbolic threat (1- 7)	4.70	1.11	1	6	2.61	0.79	1	5	130.00***	.49
Readiness for social contact (1- 6)	4.00	1.22	1	6	5.20	0.80	2	6	46.59***	.25
Discrimination (1- 6)	2.82	1.25	1	6	1.36	0.63	1	4	67.36***	.33
Normative beliefs about aggression (1- 5)	1.65	0.57	1	3	1.24	0.38	1	3	19.94***	.12
Direct contact (3- 18)	5.85	2.26	3	13	3.51	0.83	3	6	54.77***	.28
Negative indirect contact (3- 12)	6.33	2.83	2	12	2.21	0.64	2	5	131.37***	.49

****p* < .001.

Analysis for correlations and predictors of ToM towards out-group targets

Zero-order correlations showed significant correlations between the study variables for each subgroup separately (see Table 3A, Table 3B, and Table 3C).

In the Turkish target group, zero-order correlations yielded significant associations between children's mind reading accuracy and receptive language ability.

In the Syrian target group, children's mind reading accuracy had significant negative correlation with prejudice, realistic threat and discrimination, and had significant positive correlation with attentional control, receptive and expressive language. Results showed that children's mind reading accuracy was significantly correlated with positive attribution to in-group ($r = -.42, p < .001$), negative attribution to in-group ($r = .47, p < .001$), positive attribution to out-group ($r = .41, p < .001$), negative attribution to out-group ($r = -.46, p < .001$), in-group bias ($r = -.51, p < .001$) and out-group bias ($r = .50, p < .001$).

For the Dutch/Norwegian target group, children's mind reading accuracy was positively correlated with attentional control and receptive language, while it was negatively correlated with symbolic threat. Mind reading accuracy was not significantly but notably correlated with positive attribution to out-group ($r = .21, p < .10$) and positive attribution to in-group ($r = -.21, p < .10$). There was no significant association between mind reading accuracy and negative attribution to in-group, negative attribution to out-group, in-group bias, and out-group bias (p values ranged between .23 and .93).

Social identity and perceived similarity were not significantly correlated with mind reading accuracy of children in three groups. Children's social identity scores were strongly skewed, with 54.3 % responding 'mostly agree' and 'entirely agree'.

Table 3A

Correlations for the Turkish Target Group (N =72)

Variables	Mind reading accuracy	1	2	3	4	5	6
1. Age	.16	-					
2. SES	.04	-.08	-				
3. Attentional control	.13	.30**	-.06	-			
4. Empathy	.03	.14	-.05	.37**	-		
5. Receptive language	.29*	-.03	.11	.25*	-.02	-	
6. Expressive language	.10	.01	.21 ⁺	.26*	.17	.40**	-
7. Social identity	.09	.27*	.01	.05	.25*	.13	.08

⁺ $p < .10$ * $p < .05$. ** $p < .01$.

Table 3B

Correlations for the Syrian Target Group (N = 70)

Variables	Mind reading accuracy	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Age	.16	-														
2. SES	.09	-.10	-													
3. Attentional control	.26*	.11	.19	-												
4. Empathy	.11	.07	-.06	.08	-											
5. Receptive language	.26*	.02	.16	.20	.07	-										
6. Expressive language	.41**	.05	.28*	.32**	.06	.53**	-									
7. Social identity	.02	-.01	.07	.33**	.28*	.03	.28*	-								
8. Perceived similarity	-.09	-.02	-.20	-.08	-.21 ⁺	-.04	-.04	.03	-							
9. Prejudice	-.51**	-.08	-.13	-.33**	-.22 ⁺	-.44**	-.38**	-.06	.02	-						
10. Perceived realistic threat	-.30*	-.19	.08	-.18	.01	-.09	.02	-.17	.03	.09	-					
11. Perceived symbolic threat	-.20	-.18	-.09	-.21 ⁺	-.02	-.24*	-.02	.04	.17	.25*	.69**	-				
12. Discrimination	-.25*	-.19	-.07	-.10	-.22 ⁺	-.15	-.09	-.75	.11	.12	.32**	.24*	-			
13. Readiness for social contact	.17	.14	-.09	.26*	.46**	.20	.19	.32**	.13	-.27*	-.30*	-.28*	-.46**	-		
14. Normative beliefs about aggression	-.22 ⁺	.03	-.03	-.14	-.28*	-.18	-.17	-.19	.00	.08	.45**	.26*	.18	-.14	-	
15. Direct contact	-.09	-.08	-.02	-.10	-.03	.06	.02	-.01	.12	-.05	-.04	-.02	.13	.21	.15	-
16. Negative indirect contact	-.10	-.19	.01	-.43**	-.07	.13	-.09	-.35*	-.10	.09	.12	-.01	-.11	-.13	.24*	.05

⁺ $p < .10$ * $p < .05$. ** $p < .01$.

Table 3C

Correlations for the Dutch/Norwegian Target Group (N = 72)

Variables	Mind reading accuracy	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Age	.02	-														
2. SES	.18	-.04	-													
3. Attentional control	.26*	.01	.22	-												
4. Empathy	.12	-.08	.08	.25*	-											
5. Receptive language	.22*	-.12	.25*	.18	.11	-										
6. Expressive language	.10	-.11	.14	.20 ⁺	.09	.39**	-									
7. Social identity	-.20 ⁺	-.17	-.16	.02	.26*	.03	-.05	-								
8. Perceived similarity	-.09	.25*	-.12	.13	.19	.08	.06	.16	-							
9. Prejudice	-.14	.14	-.19	-.02	-.19	-.32**	-.03	.13	.08	-						
10. Perceived realistic threat	-.19	.19	-.01	-.14	-.14	-.17	-.03	.02	.17	.02	-					
11. Perceived symbolic threat	-.31*	.01	-.24*	-.09	.07	-.13	-.02	.27*	.08	.15	.49**	-				
12. Discrimination	.15	.13	.07	-.07	-.35**	.12	-.00	.01	.11	.06	.29*	.13	-			
13. Readiness for social contact	-.18	-.20 ⁺	-.16	.03	.24*	-.19	.03	-.16	-.22*	.11	-.35**	-.22*	-.57**	-		
14. Normative beliefs about aggression	-.10	.11	-.19	-.08	-.19	.05	-.11	.06	.25*	.27*	.21 ⁺	.24*	.25*	.09	-	
15. Direct contact	-.20 ⁺	-.04	-.19	-.20 ⁺	-.08	-.29*	-.26*	.09	.01	.06	-.06	.03	-.09	.14	.26*	-
16. Negative indirect contact	-.19	.08	.08	-.16	.01	-.14	-.16	.08	-.04	-.07	.08	.02	-.01	-.10	.24*	.24*

⁺ $p < .10$ * $p < .05$. ** $p < .01$.

Two separate hierarchical regressions were conducted to examine if prejudice, perceived realistic and symbolic threat are predictors for the children mind reading accuracy in the Syrian and in the Dutch/Norwegian target group (see Table 4). The order of entry of variables was determined based on our research question and the theory behind the question as explained in the literature review section. Hierarchical regression analysis allowed us to control for the effects of covariates and to test the effects of certain predictors independent of the influence of others. To control for children's attentional control, receptive language, and expressive language, these variables were entered into the first block of the analysis. In the second block, perceived realistic threat and perceived symbolic threat were added because theoretically they are predictors of prejudice, and therefore, they added to the equation before prejudice. To evaluate the unique proportion of prejudice on children's mind reading accuracy above and beyond previously entered predictors, prejudice was added in the analysis in the final block.

For the Syrian target group, children's expressive language was a significant predictor of children's mind reading accuracy in the first, second and third blocks; children with higher expressive language had higher mind reading accuracy. In the second block, realistic threat perception was a significant predictor of children's mind reading accuracy; children who perceived higher realistic threat had lower mind reading accuracy. In the final block, when prejudice was added to the regression, higher prejudice and perceived realistic threat predicted lower mind reading accuracy. We found similar results when we conducted six additional hierarchical regression analyses by entering separately positive attribution to in-group ($B = -.27, \beta = -.36, p < .01$), negative attribution to in-group ($B = .29, \beta = .34, p < .01$), positive attribution to out-group ($B = .27, \beta = .36, p = .003$), negative attribution to out-group ($B = -.28, \beta = -.32, p < .01$), in-group bias ($B = -.21, \beta = -.44, p < .001$) and out-group bias ($B = .20, \beta = .43, p < .001$) instead of prejudice in the third block.

Table 4

Hierarchical Regression Analyses for Variables Predicting Children's Mind Reading Accuracy in the Syrian and Dutch/Norwegian Target Group

Variables	The Syrian target group (<i>N</i> =70)									The Dutch target group (<i>N</i> =72)								
	Step 1			Step 2			Step 3			Step 1			Step 2			Step 3		
	<i>B</i>	<i>SE</i>	β	<i>B</i>	<i>SE</i>	β	<i>B</i>	<i>SE</i>	β	<i>B</i>	<i>SE</i>	β	<i>B</i>	<i>SE</i>	β	<i>B</i>	<i>SE</i>	β
Attentional control	.03	.03	.14	.02	.03	.09	.01	.02	.01	.04	.03	.21 ⁺	.04	.03	.19	.04	.03	.20
Receptive language	.01	.02	.05	.01	.02	.02	-.02	.02	-.10	.02	.02	.15	.02	.02	.11	.01	.02	.10
Expressive language	.06	.02	.34 [*]	.06	.02	.38 ^{**}	.05	.02	.30 [*]	.01	.02	.01	.01	.02	.01	.01	.02	.01
Perceived realistic threat				-.44	.20	-.32 [*]	-.51	.18	-.38 ^{**}				-.04	.19	-.03	-.02	.19	-.01
Perceived symbolic threat				.07	.19	.06	.19	.17	.15				-.41	.20	-.26 [*]	-.41	.20	-.26 [*]
Prejudice							-.10	.03	-.44 ^{***}							-.03	.03	-.10
Adjusted <i>R</i> ²	.15			.21			.41			.05			.10			.10		
F for change in <i>R</i> ²	5.10 ^{**}			3.53 [*]			14.41 ^{***}			2.76			2.93 [*]			0.78		

⁺*p* < .10. ^{*}*p* < .05. ^{**}*p* < .01. ^{***}*p* < .001

Even though some of the predictor variables were significantly inter-correlated, the coefficients were not very high (see Table 3B), and the results did not indicate multicollinearity based on standards for the Variance Inflation Factor (VIF); all VIFs were below 2.5.

For the Dutch/Norwegian target group, in the first block attentional control was a marginally significant predictor of children's mind reading accuracy. In the second and third blocks, perceived symbolic threat was a significant predictor of children's lower mind reading accuracy; children who perceived higher symbolic threat had lower mind reading accuracy. We conducted six additional hierarchical regression analyses by entering positive attribution to in-group ($B = -.16, \beta = -.18, p = .12$), negative attribution to in-group ($B = -.07, \beta = .09, p = .44$), positive attribution to out-group ($B = .16, \beta = .18, p = .12$), negative attribution to out-group ($B = .07, \beta = .09, p = .45$), in-group bias ($B = -.05, \beta = -.10, p = .40$) and out-group bias ($B = .05, \beta = .10, p = .38$) in the third block instead of prejudice and we found similar results. Multicollinearity was not a problem in these analyses as well, since all VIFs were below 2.

Analysis for second-order false belief understanding and prejudice

In order to examine whether children's prejudice levels changed based on their false belief understanding (pass, fail), ANOVAs were conducted. Results showed that level of prejudice did not differ between children who passed second-order false belief understanding task and children who did not pass in both the Syrian and the Dutch/Norwegian target groups (p values ranged between .28 and .44). Results showed that 80% of children in the Syrian target group and 82% of children in the Dutch/Norwegian target group passed second-order false belief task.

Chapter 6

Discussion

The aim of the current research was to provide novel insight into the extent to which children's mental state understanding depends on the characteristics of the target. Thus, we investigated whether Turkish children's mental state understanding vary as a function of perceived similarity, prejudice, perceived realistic threat, perceived symbolic threat towards out-groups, and children's social identity. Findings revealed that children in the Turkish target group inferred mental states more accurately compared to children in the Syrian and the Dutch/Norwegian target groups. Moreover, children in the Syrian target group were significantly less accurate when ascribing mental states compared to children in the Dutch/Norwegian target group. Further, the current study showed that prejudice and realistic threat perception significantly negatively predicted lower mental state understanding in the Syrian target group, while only symbolic threat significantly negatively predicted lower mental state understanding in the Dutch/Norwegian target group.

Our finding that children in the Turkish target group had higher mind reading accuracy compared to children in the Syrian and the Dutch/Norwegian target groups was in line with previous research (Perez-Zapata et al., 2016). Importantly, we found differences in children's mental state understanding between Turkish-Syrian and Turkish-Dutch/Norwegian target groups even though children in all the three groups showed similar performance in a second-order false belief task in which the characteristics of the target was stable across groups. This showed that although children's capacity to infer mental states was similar in each group when the target was the same, the propensity to use this capacity was reflected more accurately for in-group members compared to out-group members. This result supports for the similarity account which proposes that similarity with in-group members provides a shared cultural background and facilitates the ability to understand their mental states.

Findings showed that children in the Syrian target group were significantly less accurate in making mental state inferences than children in the Dutch/Norwegian target group. This result contradicted with the similarity approach because children in the Syrian target group perceived out-group members as more culturally similar to themselves compared to children in the Dutch/Norwegian target groups. However, children in the Syrian target group still had more difficulty in understanding mental states of out-group members compared to children in the Dutch/Norwegian target group. This indicated that the similarity account is not a valid explanation for why mental state understanding for Syrian targets was less accurate. Examining children's perception of similarity for these specific two out-groups allowed us to see that there should be more salient factors leading to this difference between the Syrian and the Dutch/Norwegian target groups, such as prejudice and realistic and symbolic threat perception.

To investigate whether the intergroup processes account can explain the difference between the Syrian and the Dutch/Norwegian target groups in mind reading accuracy, we compared these two out-groups in terms of intergroup variables. Results revealed that children in the Syrian target group had higher prejudice as well as higher realistic and symbolic threat compared to children in the Dutch/Norwegian target group. Children in the Syrian target group chose more distant house for out-group members to live (i.e. the number of houses from children's own house to the house chosen for out-group members is indicator of discriminatory tendency), and they were more likely to approve aggressive behavior towards out-group members compared to children in the Dutch/Norwegian target group. These findings showed that the two out-groups which we chose specifically for the purpose of this study varied in terms of intergroup process. Results also revealed that difference in mental state understanding between two out-groups did not remain significant controlled for prejudice, perceived realistic and symbolic threat. This indicated that intergroup processes

account explained some variance in the difference between the Syrian and the Dutch/Norwegian target groups regarding mental state understanding.

Amongst intergroup variables, prejudice was the most powerful predictor of lower mind reading accuracy in children in the Syrian target group, over and above children's attentional control, receptive and expressive language ability, and realistic and symbolic threat perception. In contrast, prejudice was not a significant predictor for children in the Dutch/Norwegian target group. A possible explanation for the difference between the two out-groups is that they varied on prejudice. Over 2.9 million Syrian refugees who have fled the civil war in Syria since 2011 live in Turkey (UNCHR, 2016), and Syrian refugees are perceived as a source of economic threat (increase in rent prices, lower wages in the labor market) and cultural threat (causes of rising social tensions) by Turkish individuals (Erdoğan, 2014). Consequently, anti-immigrant and discriminatory discourse towards Syrian refugees has become common among Turkish people, and prejudice has been increasing in many social settings including schools (Uzun & Butun, 2016). In a similar vein, both realistic and symbolic threat towards Syrian people were higher in the present study as well. Children's willingness to have social connections with Syrians was hampered by the prejudice and threat perception they feel toward Syrians. Thus, even though children are competent in mental state understanding, lack of motivation to use this ability might shadow their competence. On the other hand, our data showed that Dutch/ Norwegian individuals are not targets of prejudice in Turkey as there are neutral relations between Turkey and the Netherlands/Norway. Thus, prejudice was not a salient factor for children when they infer mental states of Dutch/Norwegian individuals.

In the current study, realistic threat perception appeared as an important predictor of lower mental state understanding of children in the Syrian target group over and above children's attentional control, receptive language, and expressive language, but not children in the Dutch/Norwegian target group. It is also noteworthy that symbolic threat perception

was found as a significant predictor for lower mental state understanding of children in the Dutch/Norwegian group. These findings indicate that dimensions of threat perception were not associated with children's mental state understanding in the Syrian and the Dutch/Norwegian target groups in the same pattern. This may have been due to the fact that the two out-groups differ in the kind of perceived threat they activate among Turkish children. Children's perception towards Syrian individuals in Turkey might invoke realistic threat due to the social welfare and competition over scarce resources in health services, education etc. Dutch/Norwegians are less likely to be perceived as posing a real threat to their Turkish in-group, which might have reduced the likelihood of finding an association between realistic threat and mental state understanding in the Dutch/Norwegian target group. Our results showed that children in the Dutch/ Norwegian group perceived out-group as more dissimilar to their in-group regarding cultural, national and historical values compared to children in the Syrian target group. Because these differences between two cultures refer primarily to values and beliefs, they should be more closely related to symbolic than realistic threats. Therefore, symbolic threats might be more salient than realistic threats when investigating the association between threat perception and mental state understanding towards Dutch/Norwegian individuals.

The finding that realistic threat perception predicted lower mental state understanding of children in the Syrian target group, while symbolic threat predicted lower mental state understanding of children in the Dutch/Norwegian target group is inconsistent with Hackel et al.'s (2014) results. They found that threat perception facilitates mind perception. This discrepancy might be due to the two reasons. First, Hackel et al. (2014) used mind attribution (taps 'lower-level' mental processes; making attribution to physical cue such as the face, gaze) to measure mind reading ability. From an evolutionary perspective, mental-state coding provides numerous advantages to humans: Mind-reading allows an attributor to anticipate an agent's future actions, which may be cooperative, non-cooperative, or even

threatening (Gallese & Goldman, 1998). However, more complex socio-cognitive abilities such as mental state reasoning (i.e. causal mental state attribution for the target) that require advanced cognitive computations may be hampered by such threat perception. Second, Hackel et al. (2014) measured threat perception with only one question (e.g., ‘To what extent do you think Democrats pose a threat to Republicans?’). They did not specify the content of threat (realistic or symbolic). Thus, multiple item scales, tapping different aspects of threat perception (such as realistic and symbolic threat) might be ideal for measuring threat perception.

Taken together, it is plausible to say that when comparing mind reading accuracy of children for different out-groups (Syrian and Dutch/Norwegian), intergroup processes account was salient while similarity account did not work.

Contrary to our expectations, children’s mind reading accuracy was not correlated with their levels of social identity in three groups. A possible reason for the current non-significant results might be about the nature of our social identity data as children’s responses on the Social Identity Scale were strongly skewed. It is possible to see the effect of social identity on mental state understanding with different age groups such as adults who are more likely to differ in social identity levels (Falamir-Pichastor & Frederic, 2013).

Research also considers the reverse association between ToM and prejudice and suggests that ToM underlies differential levels of prejudice observed in individuals and mediates the relationship between prejudice and behavioral outcomes (Mulvey, Rizzo, & Killen, 2015; Yu, Zhi, & Leslie, 2016). For instance, Mulvey et al. (2015) showed that 3- to 6-year-olds who passed a first-order false-belief understanding task were more likely to evaluate gender stereotypic norms as unacceptable and challenged these norms compared to those who did not pass the false-belief understanding task. We also examined whether children who passed second-order false belief task had less prejudiced towards out-groups but we could not find consistent results with earlier studies. A possible reason was that

approximately 80% of the children in the Syrian and Dutch target groups passed second-order false belief task. Therefore, we did not capture variance in second-order false belief understanding to examine whether having false belief understanding ability leads to less prejudice.

Notwithstanding these promising and novel findings, some limitations and future directions for research should be considered. First, even though children were randomly assigned to the groups, children in the Dutch/Norwegian group had higher SES levels compared to children in the other two groups. This might be a limitation since SES influences intergroup attitudes (Jugert, Eckstein, Beelmann, & Noack, 2016). For example, research has shown that higher SES was related to positive intergroup attitudes among adults as well as their children (Huijnk & Liefbroer, 2012). The authors argued that highly educated parents may give importance to tolerance, and living in comfortable conditions also leads to low levels of perceived threat from out-groups. Therefore, it is possible that differences in SES levels between the Syrian and the Dutch/Norwegian target groups was a confounder and explained some variance in the differences in prejudice and perceived and symbolic threat perception between these two groups. Hence, in order to eliminate the possible confounding effects of SES, we used it as a covariate in the group comparison analyses. Second, given the methodological limitations of cross-sectional designs, longitudinal research with more than two-time points of examination is needed to further examine the causality of the detected relationships and to better capture stability of the results. Lastly, research with children has revealed that social desirability can bias the results when using self-reported measures (e.g., Klesges, 2004). In the current study, the experimenter verbalized all questions to the children and children gave their answers in the presence of experimenter which means that socially desirable responding might be involved. Additionally, it would be interesting for future research to examine whether the association

between mental state understanding and prejudice, realistic and symbolic threat perception can be replicated using implicit measures which are less sensitive to social desirability.

Despite these limitations, our study presents an important first step in understanding how prejudice and realistic and symbolic threat perception towards out-group are associated with children's mental state understanding in middle childhood. Research on children's mental state understanding and studies on the development of intergroup relations in children have typically been studied separately and the role of 'target' on mental state understanding has not been considered in early studies. Indeed, the extent to which people are motivated to read others' minds, as well as how accurately they read others' minds, might depend on the target (Carpenter et al., 2016). Relatedly, previous studies showed that motivation was found to be an important mediator between children's theory of mind ability and prosocial behaviors (Carlo, Knight, Eisenberg, & Rotenberg, 1991). In other words, although children have developed mental state understanding ability, they may not be motivated to employ that competence in the same way for all targets (Astington, 2003). Thus, it is critical to examine the role of the target which can influence one's motivation to exert effort towards understanding the mental states of others.

Children not only communicate with individuals from their in-group, but also with individuals from out-groups. Currently, Syrians constitute the biggest cultural out-group in Turkey due to the inflated numbers of Syrian immigrants and Turkish children are likely to have a contact with Syrian individuals who are in Turkey. Thus, investigating the factors involved in understanding the mental states of out-group members is important and timely for the perpetration and amelioration of intergroup relations among children in Turkey.

In sum, our findings provide novel insights into how children's mental state understanding is a dynamic process that is dependent on relevant characteristics of the target such as prejudice, and realistic and symbolic threat. To our knowledge, this is the first study to show that higher prejudice, realistic and symbolic threat perception predict lower mental

state understanding toward out-groups in children. Our results do not imply that children refrain from making mental state attribution to their out-group targets to whom they feel prejudice and perceived threat towards. Rather, our argument is that children's mental state references are sensitive to targets' characteristics and the current study provides insight into why mental state understanding is not always used in an effortless and automatic fashion. All of these findings set the stage for further investigation of how social identity, perceived similarity, and intergroup processes interact with socio-cognitive abilities.

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Appendix A

Demographic Form

Katılımcı Numaran: _____

Anketi doldurduğun tarih: Gün____ Ay____ Yıl____

1. Doğum tarihin: Gün: __Ay: __Yıl: __

2. Doğum yerin: İl: _____ İlçe: _____

3. Cinsiyetin: Kız Erkek

4. Kaçınıcı sınıfa gidiyorsun? _____

5. Şu anda yaşadığın şehir (ismini yaz): _____

5a. Lütfen belirt: Şehir merkezi Çevre ilçe/kaza Köy6. Kardeşin var mı? Evet Hayır

Cevabın evet ise,

6a. Kaç kardeşin var (Senin dışında): _____

7. Anne ve babanın eğitim seviyesi (Lütfen en son mezun olunan okulu hem annen hem baba için belirt):

	Anne	Baba
İlkokul mezunu değil	1	1
İlkokul mezunu	2	2
Ortaokul mezunu	3	3
Lise mezunu	4	4
Meslek yüksekokulu veya iki yıllık üniversite mezunu	5	5
Dört yıllık üniversite (veya Tıp Fakültesi) mezunu	6	6
Yüksek lisans derecesi	7	7
Doktora (veya tıpta uzmanlık) derecesi	8	8

8. Annenin Mesleği: _____

8a. Annen ev hanımı mı? Evet Hayır8b. Annen emekli mi? Evet Hayır

9. Babanın Mesleği: _____

9a. Annen emekli mi? Evet Hayır10. Annen, baban ve kardeşlerin dışında evde ailenizle sürekli yaşayanlar var mı (nine, dede, teyze, amca,dayı, hala, yeğen gibi) ? Evet Hayır

Cevabın Evet ise,

10a. Bunları da hesaba katarak hane halkının toplam kaç kişiden oluştuğunu belirt:

Appendix B

The Strange Stories Task

Mind-reading example:

1.1) Çifte Blöf: Yalancı hikâyesi, Türk



Murat, **Türkiye’de doğdu ve büyüdü**. O **başiboş ve doğruları söylemeyen** biri. Murat’ın kardeşi Ahmet, Murat’ın böyle olduğunu ve asla doğruyu söylemediğini biliyor. Murat bir gün Ahmet’in **futbol topunu** alıyor. Ahmet, Murat’ın futbol topunu bir yere sakladığını biliyor fakat yine de sakladığı yeri bulamıyor ve çok sinirleniyor. Ardından Murat’ı bulup “**Futbol topum** nerede? Ya dolabına ya da yatağının altına saklamış olmalısın çünkü diğer her yere baktım. Nerede, dolapta mı yoksa yatağının altında mı?” diye soruyor. Murat ona **topun** yatağın altında olduğunu söylüyor.

S: Ahmet topu bulmak için neden dolaba bakacak?

- 2 puan – Cevapta Murat’ın yalan söylediğini Ahmet’in bildiğine değiniliyorsa
- 1 puan – Cevapta gerçeklere değiniliyorsa (topun gerçekte nerede olduğu veya Murat’ın yalancı olduğu) veya yalana dair bir şey söylemeden Murat’ın topu sakladığına değiniliyorsa
- 0 puan – Cevapta genel bir bilgi veriliyorsa (çünkü diğer her yere baktı)

1.2) Çifte Blöf: Yalancı hikâyesi, Hollandalı/Norveçli.



Daen **Hollanda/Norveç’te doğdu ve büyüdü**. O **başiboş ve doğruları söylemeyen** biri. Daen’nin kardeşi Juriaan, Daen’in böyle olduğunu ve asla doğruyu söylemediğini biliyor. Daen bir gün Juriaan’ın **futbol topunu** alıyor. Juriaan, Daen’nin **futbol topunu** bir yere sakladığını biliyor fakat yine de sakladığı yeri bulamıyor ve çok sinirleniyor. Ardından Daen’i bulup, “**Futbol topum** nerede? Ya dolabına ya da yatağının altına saklamış olmalısın çünkü diğer her yere baktım. Nerede, dolapta mı yoksa yatağının altında mı?” diye

soruyor. Daen ona **topun** yatağın altında olduğunu söylüyor.

S: Juriaan raketi bulmak için neden dolaba bakacak?

- 2 puan – Cevapta Daen’in yalan söylediğini Juriaan’ın bildiğine değiniliyorsa
- 1 puan – Cevapta gerçeklere değiniliyorsa (topun gerçekte nerede olduğu veya Daen’in yalancı olduğu) veya yalana dair bir şey söylemeden Daen’in topu sakladığına değiniliyorsa
- 0 puan – Cevapta genel bir bilgi veriliyorsa (çünkü diğer her yere baktı)

1.3) Çifte Blöf: Yalancı hikâyesi, Suriyeli.



Bedihi Suriye’de doğdu ve büyüdü. O başıboş ve doğruları söylemeyen biri. Bedihi’nin kardeşi Dahhak, Bedihi’nin böyle olduğunu ve asla doğruyu söylemediğini biliyor. Bedihi bir gün Dahhak’ın **futbol topunu** alıyor. Dahhak, Bedihi’nin **futbol topunu** bir yere sakladığını biliyor fakat yine de sakladığı yeri bulamıyor ve çok sinirleniyor. Ardından Bedihi’yi bulup, “**Futbol topum** nerede? Ya dolabına ya da yatağının altına saklamış olmalısın çünkü diğer her yere baktım. Nerede, dolapta mı yoksa yatağının altında mı?” diye soruyor. Bedihi ona

topun yatağın altında olduğunu söylüyor

S: Dahhak topu bulmak için neden dolaba bakacak?

- 2 puan – Cevapta Bedihi’nin yalan söylediğini Dahhak’ın bildiğine değiniliyorsa
- 1 puan – Cevapta gerçeklere değiniliyorsa (topun gerçekte nerede olduğu veya Bedihi’nin yalancı olduğu) veya yalana dair bir şey söylemeden Bedihi’nin topu sakladığına değiniliyorsa
- 0 puan – Cevapta genel bir bilgi veriliyorsa (çünkü diğer her yere baktı)

Control Story Example:

Hız Treni, Türk.

1.1) Hız Treni, Hollandalı.



Barış ve **Murat** yakın arkadaşlar. İkisi de **İstanbul**’da yaşıyor ve ikisi de 10 yaşında. Barış’ın **saçları kahverengi, gözleri yeşil** ve **boyu 150 cm**. Murat’ın dış görünüşü ise Barış’inkinden çok farklı. Murat’ın **saçları sarı, gözleri mavi** ve boyu Barış’tan çok daha kısa. Barış ve Murat bir gün **lunaparka** gidiyor ve birçok oyuncuğa biniyorlar. Lunaparktan ayrılmadan önce en son **hız trenine** binmeye

karar veriyorlar. Fakat hız treninin yanındaki bir uyarı levhasında şöyle yazıyor: Güvenlik nedeniyle **boyu 150 cm’nin altındaki** kişilerin hız trenine binmesine izin verilmemektedir.

S: Neden sadece Barış **hız trenine** biniyor?

- 2 puan – Murat’ın binmek için çok kısa olmasına veya Barış’ın binmek için yeterince uzun olmasına değinilirse (Murat 150 cm’den kısadır)
- 1 puan – Murat’ın kısa olmasına veya Barış’ın uzun olmasına veya ikisine birden değinilirse; boylara limit ile kıyaslama yapılmadan değinilirse (Murat Barış’tan kısadır)
- 0 puan – Alakasız veya doğru olmayan cevaplar verilirse (Murat hız trenine binmeyi sevmez)

1.2) Hız Treni, Hollandalı.



Milan ve **Lucas** yakın arkadaşlar. İki de **Amsterdam**'da yaşıyor ve ikisi de 10 yaşında. Milan'ın **saçları kahverengi**, **gözleri yeşil** ve **boyu 150 cm**. Lucas'ın dış görünüşü ise Milan'inkinden çok farklı. Lucas'ın **saçları sarı**, **gözleri mavi** ve boyu Milan'dan çok daha kısa. Milan ve Lucas bir gün **lunaparka** gidiyor ve birçok oyuncağa biniyorlar. Lunaparktan ayrılmadan önce en

son **hız trenine** binmeye karar veriyorlar. Fakat hız treninin yanındaki bir uyarı levhasında şöyle yazıyor: Güvenlik nedeniyle boyu **150 cm'nin altındaki** kişilerin hız trenine binmesine izin verilmemektedir.

S: Neden sadece Milan **hız trenine** biniyor?

- 2 puan – Lucas'ın binmek için çok kısa olmasına veya Milan'ın binmek için yeterince uzun olmasına değinilirse (Lucas 150 cm'den kısadır)
- 1 puan – Lucas'ın kısa olmasına veya Milan'ın uzun olmasına veya ikisine birden değinilirse; boylara limit ile kıyaslama yapılmadan değinilirse (Lucas Milan'dan kısadır)
- 0 puan – Alakasız veya doğru olmayan cevaplar verilirse (Lucas hız trenine binmeyi sevmez)

1.3) Hız Treni, Suriyeli.



Karim ve **Majid** yakın arkadaşlar. İki de **Halep**'te yaşıyor ve ikisi de 10 yaşında. Karim'in **saçları kahverengi**, **gözleri yeşil** ve **boyu 150 cm**. Majid'in dış görünüşü ise Karim'inkinden çok farklı. Majid'in **saçları sarı**, **gözleri mavi** ve boyu Karim'den çok daha kısa. Karim ve Majid bir gün **lunaparka** gidiyor ve birçok oyuncağa biniyorlar. Lunapark'tan ayrılmadan önce en son **hız**

trenine binmeye karar veriyorlar. Fakat hız treninin yanındaki bir uyarı levhasında şöyle yazıyor: Güvenlik nedeniyle boyu **150 cm'nin altındaki** kişilerin hız trenine binmesine izin verilmemektedir.

S: Neden sadece Karim **hız trenine** biniyor?

- 2 puan – Majid'in binmek için çok kısa olmasına veya Karim'in binmek için yeterince uzun olmasına değinilirse (Majid 150 cm'den kısadır)
- 1 puan – Majid'in kısa olmasına veya Karim'in uzun olmasına veya ikisine birden değinilirse; boylara limit ile kıyaslama yapılmadan değinilirse (Majid Karim'dan kısadır)
- 0 puan – Alakasız ya da doğru olmayan cevaplar verilirse (Majid hız trenine binmeyi sevmez)
-

Appendix C
The Social Identity Scale

Lütfen aşağıdaki her bir ifadenin seni ne kadar iyi anlattığını belirt. Bu maddelerin doğru veya yanlış cevabı yoktur.

	Hiç katılmıyorum	Çoğunlukla katılmıyorum	Kısmen katılmıyorum	Ne katılıyorum ne katılmıyorum	Kısmen katılıyorum	Çoğunlukla katılıyorum	Tamamen katılıyorum
1. Türklere karşı bir bağ hissediyorum.	1	2	3	4	5	6	7
2. Türklerle bir dayanışma(yardımlaşma) hissediyorum	1	2	3	4	5	6	7
3. Türklerin gurur duyacak çok şeyi olduğunu düşünüyorum.	1	2	3	4	5	6	7
4. Türk olmak güzeldir.	1	2	3	4	5	6	7
5. Türk olmak bana iyi hissettiriyor.	1	2	3	4	5	6	7
6. Türk olduğum gerçeğini sık sık düşünüyorum.	1	2	3	4	5	6	7
7. Türk olmak kimliğimin önemli bir parçası.	1	2	3	4	5	6	7
8. Türk olmak kendimi nasıl gördüğümün önemli bir parçası.	1	2	3	4	5	6	7
9. Ortalama bir Türk ile pek çok ortak özelliğim var.	1	2	3	4	5	6	7
10. Kendimi Türk olarak görüyorum.	1	2	3	4	5	6	7

Appendix D

The Perceived Similarity Scale for the Syrian Target Group

Lütfen belirtilen kültürel grubun (Suriye) senin kendi grubunla ne kadar benzer olduğunu işaretle.

	Tamamen Benzer	Oldukça Benzer	Biraz Benzer	Ne Benzer Ne Farklı	Biraz Farklı	Oldukça Farklı	Tamamen Farklı
1. Kültürel değerler	1	2	3	4	5	6	7
2. Milli Özellikler	1	2	3	4	5	6	7
3. Etnik Köken	1	2	3	4	5	6	7

The Perceived Similarity Scale for the Dutch/Netherlands Target Group

Lütfen belirtilen kültürel grubun (Hollanda/Norveç) senin kendi grubunla ne kadar benzer olduğunu işaretle.

	Tamamen Benzer	Oldukça Benzer	Biraz Benzer	Ne Benzer Ne Farklı	Biraz Farklı	Oldukça Farklı	Tamamen Farklı
1. Kültürel değerler	1	2	3	4	5	6	7
2. Milli Özellikler	1	2	3	4	5	6	7
3. Etnik Köken	1	2	3	4	5	6	7

Appendix E**The Multiple Racial Attitude task**

Olumlu Kelimeler	Olumsuz Kelimeler
Temiz	Kötü
Mutlu	Kirli
Arkadaş Canlısı	Yaramaz
Çalışkan	Acımasız
Yardımsaver	Kaba
Neşeli	Tembel

Appendix F**The Discriminatory Tendency Task for the Syrian Target Group**

**Bu çocuğun adı Jamal Ubbeyd.
Sizin mahallenize taşınacak.
Ailesiyle beraber Suriye'den
geliyor. Mahalleniz de bazı evler
dolmuş bazı evler boş. Jamal ve ailesi
senin gösterdiğin eve taşınacak.
Jamal'ın evi hangi ev olsun?**



Burası senin evin



Bu çocuğun adı Barika. Sizin mahallenize taşınacak. Ailesiyle beraber Suriye'den geliyor. Mahalleniz de bazı evler dolu bazı evler boş. Barika ve ailesi senin gösterdiğin eve taşınacak. Barika'nın evi hangi ev olsun?



Burası senin evin

The Discriminatory Tendency Task for the Dutch/Norwegian Target Group



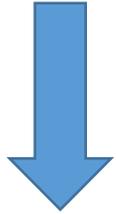
Bu çocuğun adı Ruben De Vries. Sizin mahallenize taşınacak. Ailesiyle beraber Hollanda/Norveç'ten geliyor. Mahalleniz de bazı evler dolu bazı evler boş. Ruben ve ailesi senin gösterdiğin eve taşınacak. Ruben'in evi hangi ev olsun?



Burası senin evin



Bu kızın ismi Eva. Sizin mahallenize taşınacak. Ailesiyle beraber Hollanda/Norveç'ten geliyor. Mahalleniz de bazı evler dolu bazı evler boş. Eva ve ailesi senin gösterdiğin eve taşınacak. Eva'nın evi hangi ev olsun?



Burası senin evin

Appendix G
The Readiness for Social Contact Scale

	Hiç istemem	İstemem	Ne isterim ne istemem	Biraz isterim	İsterim	Çok isterim
1- Mahallenize taşınan bu çocuk ile oyun oynamayı ne kadar istersin?	1	2	3	4	5	6
2- Mahallenize taşınan bu çocuk ile eşyalarını/oyuncaklarını paylaşmayı ne kadar istersin?	1	2	3	4	5	6
3- Mahallenize taşınan bu çocuk ile parkta tekrar karşılaşmayı/buluşmayı ne kadar istersin?	1	2	3	4	5	6
4- Mahallenize taşınan bu çocuğu yemek için evinize davet etmeyi ne kadar istersin?	1	2	3	4	5	6
5- Mahallenize taşınan bu çocuğu sinemaya davet etmeyi ne kadar istersin?	1	2	3	4	5	6
6- Mahallenize taşınan bu çocuğa çevreye alışması için yardım etmeyi ne kadar istersin?	1	2	3	4	5	6

Appendix H
The Threat Perception Scale for Syrian Target Group

Lütfen her maddeye NE ÖLÇÜDE KATILIP KATILMADIĞINI uygun kutuyu X ile işaretleyerek belirt. Bu ifadelerin doğru veya yanlış cevabı yok. Lütfen cevap verirken olabildiğince dürüst ol.

Lütfen ülkemizdeki Suriyelilere dair düşüncelerini aşağıda belirt.

	Hiç katılmıyorum	Çoğunlukla katılmıyorum	Kısmen katılmıyorum	Ne katılıyorum ne katılmıyorum	Kısmen katılıyorum	Çoğunlukla katılıyorum	Tamamen katılıyorum
1. Suriyeli göçmenler Türklerin işlerini elinden <u>almıyor</u> .	1	2	3	4	5	6	7
2. Suriyeli göçmenler bu ülkeden, yaptıkları katkıdan fazlasını alırlar.	1	2	3	4	5	6	7
3. Türk vatandaşların sahip olduğu imkanlar Suriyeli göçmenlere <u>verilmemeli</u> .	1	2	3	4	5	6	7
4. Türk vatandaşlara yönelik eğitim sağlık gibi hizmetler Suriyeli göçmenler yüzünden yetersiz kalıyor.	1	2	3	4	5	6	7
5. Suriyeli göçmenler Türk vatandaşları için herhangi bir sağlık riski oluşturmuyor.	1	2	3	4	5	6	7
6. Suriyeli göçmenler Türkiye'ye geldikten sonra, en kısa zamanda toplumun kültür ve kurallarına uymayı öğrenmeliler.	1	2	3	4	5	6	7
7. Suriyeli göçmenlerin gelmesi Türk kültürüne zarar veriyor.	1	2	3	4	5	6	7
8. Suriyeli göçmenler Türkiye'ye gelmeyi sürdürürse, Suriye kültürü Türk kültürünü zayıflatıcı bir tehdit oluşturur.	1	2	3	4	5	6	7
9. Ülkemizdeki Suriyeli göçmenler Türklerin yaşam tarzını benimsemek zorunda olmamalı.	1	2	3	4	5	6	7
10. Türklerin yaşam tarzı Suriyeli göçmenlerin gelmesiyle zayıflamaz.	1	2	3	4	5	6	7

The Threat Perception Scale for Dutch/Norwegian Target Group

Lütfen her maddeye NE ÖLÇÜDE KATILIP KATILMADIĞINI uygun kutuyu X ile işaretleyerek belirt. Soruların doğru veya yanlış cevabı yok. Lütfen cevap verirken olabildiğince dürüst ol.

Lütfen ülkemizdeki Hollandalılara/Norveçlilere dair düşüncelerini aşağıda belirt.

	Hiç katılmıyorum	Çoğunlukla katılmıyorum	Kısmen katılmıyorum	Ne katılıyorum ne katılmıyorum	Kısmen katılıyorum	Çoğunlukla katılıyorum	Tamamen katılıyorum
1. Hollandalı/ Norveçli çalışanlar Türklerin işlerini elinden <u>almıyor</u> .	1	2	3	4	5	6	7
2. Hollandalı/ Norveçli çalışanlar bu ülkeden, yaptıkları katkıdan fazlasını alırlar.	1	2	3	4	5	6	7
3. Türk vatandaşların sahip olduğu imkanlar Hollandalı/ Norveçli çalışanlara <u>verilmemeli</u> .	1	2	3	4	5	6	7
4. Türk vatandaşlara yönelik eğitim sağlık gibi hizmetler Hollandalı/ Norveçli çalışanlar yüzünden yetersiz kalıyor.	1	2	3	4	5	6	7
5. Hollandalı/ Norveçli çalışanlar Türk vatandaşları için herhangi bir sağlık riski oluşturmuyor.	1	2	3	4	5	6	7
6. Hollandalı/ Norveçli çalışanlar Türkiye'ye geldikten sonra, en kısa zamanda toplumun kültür ve kurallarına uymayı öğrenmelidirler.	1	2	3	4	5	6	7
7. Hollandalı/ Norveçli çalışanların gelmesi Türk kültürüne zarar veriyor.	1	2	3	4	5	6	7
8. Hollandalı/ Norveçli çalışanlar Türkiye'ye gelmeyi sürdürürse, Suriye kültürü Türk kültürünü zayıflatıcı bir tehdit oluşturur.	1	2	3	4	5	6	7
9. Ülkemizdeki Hollandalı/ Norveçli çalışanlar Türklerin yaşam tarzını benimsemek zorunda olmamalı.	1	2	3	4	5	6	7
10. Türklerin yaşam tarzı Hollandalı/ Norveçli çalışanların gelmesiyle zayıflamaz.	1	2	3	4	5	6	7

Appendix I

The NOBAGS Scale for the Syrian Target Group

Lütfen her maddeye NE ÖLÇÜDE KATILIP KATILMADIĞINI uygun kutuyu X ile işaretleyerek belirt. Bu ifadelerin doğru veya yanlış cevabı yok. Lütfen cevap verirken olabildiğince dürüst ol.

	Kesinlikle katılmıyorum	Katılmıyorum	Katılıyorum	Kesinlikle katılıyorum
1. Genel olarak, Türklerin Suriyelilere kötü söz söylemesi kabul edilebilir.	1	2	3	4
2. Genel olarak, Türklerin Suriyelilere kötü davranması kabul edilebilir.	1	2	3	4
3. Genel olarak, Türklerin Suriyelilere zarar vermesi kabul edilebilir.	1	2	3	4

The NOBAGS Scale for the Dutch/Norwegian Target Group

Lütfen her maddeye NE ÖLÇÜDE KATILIP KATILMADIĞINI uygun kutuyu X ile işaretleyerek belirt. Bu ifadelerin doğru veya yanlış cevabı yok. Lütfen cevap verirken olabildiğince dürüst ol.

	Kesinlikle katılmıyorum	Katılmıyorum	Katılıyorum	Kesinlikle katılıyorum
1. Genel olarak, Türklerin Hollandalılara/Norveçlilere kötü söz söylemesi kabul edilebilir.	1	2	3	4
2. Genel olarak, Türklerin Hollandalılara/Norveçlilere kötü davranması kabul edilebilir.	1	2	3	4
3. Genel olarak, Türklerin Hollandalılara/Norveçlilere zarar vermesi kabul edilebilir.	1	2	3	4

Appendix J

The Ice-man Task

Hikaye 4, Dondurmacı Amca



Merve ve Can parktalar. Merve dondurmacı amcadan dondurma almak istiyor; fakat hiç parası yok.



Dondurmacı amca Merve'ye bütün öğleden sonra orada olacağını söylüyor.



Merve dondurma için para almaya eve gidiyor.

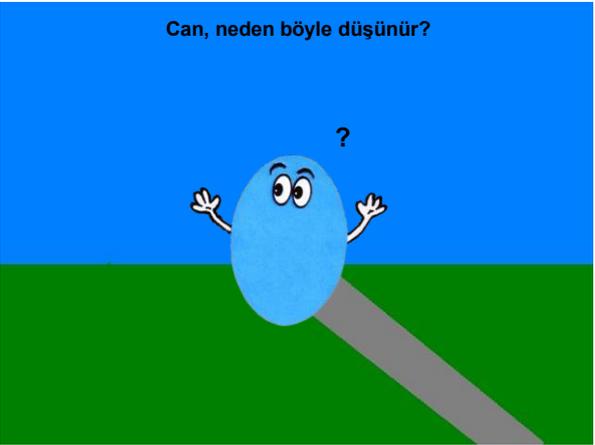
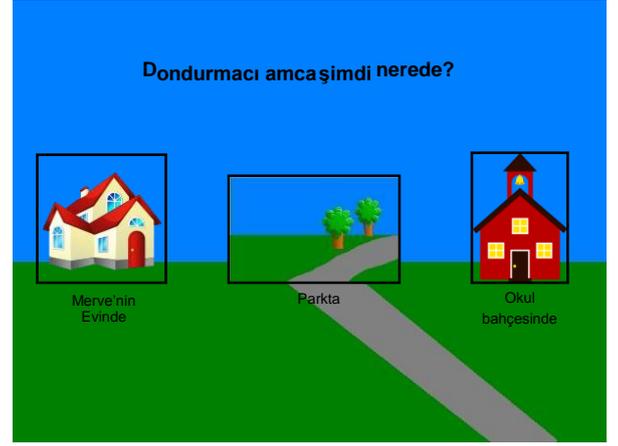


Bir süre sonra, dondurmacı amca Can'a fikrini değiştirdiğini ve okul bahçesine gidip orada dondurma satacağını söylüyor.



Dondurmacı amca okula doğru giderken Merve'yi yolda görüyor. Dondurmacı amca Merve'ye okul bahçesine gideceğini ve orada dondurma satacağını söylüyor.





Appendix K
The Attention Control Scale

Bu ifadelerin doğru veya yanlış cevabı yok. Aşağıdaki maddelerin hepsini kendini düşünerek dürüstçe cevaplandır.					
		Hiç	Bazen	Sık Sık	Her Zaman
1	Sınıfta çok fazla ses olduğunda zor olan bir derse konsantre olmak bana çok zor gelir.	1	2	3	4
2	Bir matematik problemi üzerinde yoğunlaşmam ve çözmeme gerektiği zaman, dikkatimi odaklamada güçlük yaşıyorum.	1	2	3	4
3	Bir şey üzerinde sıkı çalışırken bile etraftaki olaylar dikkatimi dağıtır.	1	2	3	4
4	Etrafımda biri müziğin sesini açsa bile konsantre olabilirim.	1	2	3	4
5	Bir şeye konsantre olduğumda, etrafımda neler olduğunun farkında olmam	1	2	3	4
6	Sınıfta ders çalıştığım ya da bir şey okuduğumda diğer çocukların konuşmaları dikkatimi kolayca dağıtabilir.	1	2	3	4
7	Dikkatimi bir şeye odaklamaya çalışırken, dikkat dağıtan düşünceleri engellemede güçlük çekerim.	1	2	3	4
8	Heyecanlandığımda, dikkatimi yoğunlaştırmakta oldukça zorlanırım.	1	2	3	4
9	Bir şey yapıyorken, hızlıca durup bir işten diğerine hızlı bir şekilde geçiş yapabilirim.	1	2	3	4
10	Yeni bir işe gerçekten kafamı vermem için biraz zaman gerekir.	1	2	3	4
11	Öğretmen ders anlatırken, aynı zamanda hem dinleyip hem yazmak benim için zordur.	1	2	3	4
12	Gerektiğinde çok hızlı bir şekilde yeni bir konu ile ilgilenebilirim.	1	2	3	4
13	Dikkatim dağıldığında ya da yaptığım iş yarıda kesildiğinde, yeniden daha önce yaptığım işe kolayca dikkatimi verebilirim.	1	2	3	4
14	İki farklı iş arasında geçiş yapmak benim için kolaydır.	1	2	3	4

Appendix L

The Basic Empathy Scale

Lütfen her maddeye NE ÖLÇÜDE KATILIP KATILMADIĞINI uygun kutuyu X ile işaretleyerek belirt. Bu ifadelerin doğru veya yanlış cevabı yok. Lütfen cevap verirken olabildiğince dürüst ol.

1= Kesinlikle katılmıyorum					
2= Katılmıyorum					
3= Ne katılıyorum ne katılmıyorum					
4= Katılıyorum					
1) Üzgün olan bir arkadaşımınla vakit geçirdikten sonra genellikle üzgün hissederim.	1	2	3	4	5
2) Arkadaşım başarılı olduğunda onun ne kadar mutlu olduğunu anlayabilirim.	1	2	3	4	5
3) Başkaları mutlu olduğunda genellikle bende mutlu hissederim etkilenirim.	1	2	3	4	5
4) Birini ağlarken gördüğümde üzülmem.					
5) Başka insanların problemleri beni hiç ilgilendirmez.	1	2	3	4	5
6) Birisi kendini kötü hissettiğinde onun neler hissettiğini genellikle anlayabilirim.	1	2	3	4	5
7) Televizyonda ya da filmlerde üzüntülü bir şeyler izlerken çoğunlukla ben de üzülürüm.	1	2	3	4	5
8) İnsanların ne hissettiğini çoğunlukla onlar bana söylemeden anlayabilirim.	1	2	3	4	5
9) Kızgın birini görmek beni korkutmaz.					
10) İnsanların ne zaman neşeli olduğunu genellikle anlarım.	1	2	3	4	5
11) Arkadaşımın kızgın olduğunu genellikle hemen fark ederim.	1	2	3	4	5
12) Arkadaşlarımın hissettiklerine çoğunlukla kendimi kaptırırım.	1	2	3	4	5
13) Arkadaşımın mutsuzluğu bana hiçbir şey hissettirmez.	1	2	3	4	5
14) Arkadaşımın endişelerinin genellikle farkında değilimdir.	1	2	3	4	5

Appendix M

Turkish Receptive Language Test (TIFALDI)-Words

TIFALDI ALICI DİL KELİME ALT TESTİ(TIFALDI-AD) PUANLAMA FORMU

Adı:
Soyadı:
Cinsiyeti:

Uygulama tarihi:
Doğum Tarihi:
Yaş:
Uygulayan:

Başlangıç Noktası	Sıra	Kelime	Hedef	Cevap	Başlangıç Noktası	Sıra	Kelime	Hedef	Cevap
DENEME 1		Kedi	4			39	Paten	4	
DENEME 2		Yatak	3			40	Vazo	3	
2 yaş başlangıç	1	Televizyon	2			41	Cetvel	2	
	2	Yılan	4			42	Fincan	3	
	3	Kapı	1			43	Çatı	3	
	4	Pasta	3			44	Ceza	4	
	5	Parmak	4		6 yaş başlangıç	45	Yunus	3	
	6	Salıncak	3			46	Bakmak	1	
	7	Mandal	1			47	Keçi	3	
	8	Çanta	2			48	Kask	2	
	9	Kurbağa	3			49	Ok	2	
	10	Simit	1			50	Zarf	4	
3 yaş başlangıç	11	Yastık	3			51	Düdük	4	
	12	Öpmek	3			52	Roket	1	
	13	Tabak	4			53	Orman	4	
	14	Soğan	1			54	Teleskop	1	
	15	Tavuk	4			55	Pervane	3	
	16	Armut	3			56	Şelale	2	
	17	Maymun	3		7 yaş başlangıç	57	Dalmak	2	
	18	Asmak	4			58	Küvet	3	
	19	Sabun	4			59	Doktor	4	
	20	Hortum	2			60	Dalgıç	2	
4 yaş başlangıç	21	Bilezik	3			61	Öğretmen	1	
	22	Yalnız	4			62	Palet	1	
	23	Lastik	2			63	Utangaçlık	3	
	24	Kravat	2			64	Sirk	3	
	25	Güç	2			65	Ceviz	3	
	26	Koyun	3			66	Elips	4	
	27	Koşmak	2			67	Fidan	1	
	28	Sinek	1			68	Vedalaşmak	4	
	29	Ayakkabı	3						
	30	Kemer	4						
	31	Mutluluk	2						
	32	Kilit	2						
5 yaş başlangıç	33	Zincir	3						
	34	Postacı	2						
	35	Yazmak	1						
	36	Papatya	2						
	37	Kafes	1						
	38	Tehlike	4						

Başlangıç Noktası	Sıra	Kelime	Hedef	Cevap
8 yaş başlangıç	69	Silindir	1	
	70	Felaket	3	
	71	Galibiyet	4	
	72	Fabrika	1	
	73	Dikdörtgen	3	
	74	Devirmek	2	
	75	Gitar	3	
	76	Halat	3	
	77	Heyecan	2	
	78	Yelken	3	
	79	Yarım	4	
	80	Verimlilik	2	
9-10 yaş başlangıç	81	Raket	4	
	82	Piramit	4	
	83	Göl	2	
	84	Tır	2	
	85	Ada	1	
	86	Fıçı	3	
	87	Sedye	4	
	88	Vagon	4	
	89	Horon	2	
	90	Şehpa	3	
11-12 yaş başlangıç	91	Baraj	2	
	92	Ekmek	2	
	93	Hamal	1	
	94	Pul	2	
	95	Onarmak	4	
	96	Mezura	2	
	97	Bere	3	
	98	Sal	3	
	99	Zıt	2	
	100	Viyadük	1	
	101	Faraş	4	
	102	Lamba	2	
	103	Pulluk	1	
	104	Radyatör	2	

Kronolojik Yaş	Ham Puan	Standart Puan	Eşdeğer Yaş

Turkish Expressive Language Test (TIFALDI)-Words

TIFALDI İFADE EDİCİ DİL KELİME ALT (TIFALDI-İD) TESTİ PUANLAMA FORMU

Adı:
Soyadı:
Cinsiyeti:

Uygulama Tarihi:
Doğum Tarihi:
Yaş:
Uygulayan:

	Sıra	Kelime	Doğru	Hedef kelime dışı söylemler
2 yaş	1	Köpek		
	2	Anahtar		
	3	Çatal		
	4	Makas		
	5	Dondurma		
	6	Sandalye		
3 yaş	7	Kelebek		
	8	Şemsiye		
	9	Ağaç		
	10	Yıldız		
	11	Bayrak		
	12	Pantolon		
	13	Üzüm		
	14	Tren		
4 yaş	15	Masa		
	16	Merdiven		
	17	Gemi		
	18	Fil		
	19	Süpürge		
	20	Havuç		
	21	Kaplumbağa		
	22	Yaprak		
	23	Yumurta		
	24	İnek		
	25	Sepet		
	26	Mısır		
5 yaş	27	Otobüs		
	28	Güneş		
	29	Uçurtma		
	30	Eldiven		
	31	Kamyon		
	32	Tavşan		
	33	Bulut		
	34	Mum		
	35	Askı		
	36	Çadır		
	37	Zürafa		
	38	Helikopter		

	Sıra	Kelime	Doğru	Hedef kelime dışı söylemler
6 yaş	39	Gül		
	40	Limon		
	41	Burun		
	42	Kulak		
	43	Atkı		
	44	Mantar		
	45	Dünya		
	46	Dağ		
7 yaş	47	Hemşire		
	48	Timsah		
	49	Çekiç		
	50	Örümcek		
	51	Düğme		
	52	Geyik		
	53	Dümbün		
	54	Köprü		
8-9 yaş	55	Traktör		
	56	Terazi		
	57	Tornavida		
	58	Fermuar		
	59	Piyano		
	60	Yarasa		
10-12 yaş	61	Olta		
	62	Testere		
	63	Paraşüt		
	64	Taç		
	65	Yelpaze		
	66	Kale		
	67	Tank		
	68	Rende		
	69	Astronot		
	70	Değirmen		
	71	Balerin		
	72	Sapan		
	73	Tünel		
	74	Petek		
	75	Makara		
	76	Hamak		
	77	Vantilatör		
	78	Merdane		
	79	Fırça		
	80	Havan		

Kronolojik Yaş	Ham Puan	Standart Puan	Eşdeğer Yaş

Appendix N

The Direct and Indirect Contact Scale for the Syrian Target Group

1. Suriye'ye hiç gittin mi?

Evet Lütfen gidiş sayınızı belirtiniz: _____

Hayır

2. Suriyeli bir arkadaşın veya yakın tanıdığın var mı?

Evet

Hayır

3. Suriyelileri ne kadar tanıdığınızı düşünüyorsunuz?

1	2	3	4	5	6
Hiç tanımiyorum			Çok tanıyorum		

4. Günlük hayatında Suriyeliler ile ne kadar sık etkileşimde bulunursun?

Mahallende

1	2	3	4	5	6
Hiç			Çok Sık		

Okulunda

1	2	3	4	5	6
Hiç			Çok Sık		

Sokakta

1	2	3	4	5	6
Hiç			Çok Sık		

5. Ailen ya da arkadaşlarından Suriyeliler hakkında hoş olmayan şeyler duydun mu?

1	2	3	4	5	6
Hiç			Çok Sık		

6. Televizyonda/ bilgisayarda Suriyeliler hakkında hoş olmayan şeyler gördün mü?

1	2	3	4	5	6
Hiç			Çok Sık		

The Direct and Indirect Contact Scale for the Dutch/Norwegians Target Group

1. Hollanda'ya/Norveç'e hiç gittin mi?

Evet Lütfen gidiş sayınızı belirtiniz: _____

Hayır

2. Hollandalı/Norveçli bir arkadaşın veya yakın tanıdığın var mı?

Evet

Hayır

3. Hollandalıları/Norveçlileri ne kadar tanıdığınızı düşünüyorsunuz?

1	2	3	4	5	6
Hiç tanımıyorum			Çok tanıyorum		

4. Günlük hayatında Hollandalılar/Norveçliler ile ne kadar sık etkileşimde bulunursun?

Mahallende

1	2	3	4	5	6
Hiç			Çok Sık		

Okulunda

1	2	3	4	5	6
Hiç			Çok Sık		

Sokakta

1	2	3	4	5	6
Hiç			Çok Sık		

5. Ailen ya da arkadaşlarından Hollandalılar/Norveçliler hakkında hoş olmayan şeyler duydun mu?

1	2	3	4	5	6
Hiç			Çok Sık		

6. Televizyonda/ bilgisayarda Hollandalılar/Norveçliler hakkında hoş olmayan şeyler gördün mü?

1	2	3	4	5	6
Hiç			Çok Sık		