

THE ROLE OF GROUP'S SOCIAL STATUS
IN CHILDREN'S FAIRNESS JUDGMENTS

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DECLARATION OF ORIGINALITY

I, Özdeş Çetin, certify that

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ABSTRACT

The Role of Group's Social Status in Children's Fairness Judgments

Children consider various cues when making social decisions. As they socialize, children's knowledge of social dynamics improves. Combining this knowledge with the inferences about social status, they form their social decisions and judgments. The current study focused on the effects of the group size (majority, minority) and social status on their endorsement of group decisions and the fairness judgments of these decisions. In the current study, the social status depended on the groups' wealth status. 6-7 and 10-11 year-olds were introduced two novel groups differing in terms of their wealth status and group size. After being presented with different decisions by the groups, children were asked which group's decision should be applied. Furthermore, they were also expected to judge the fairness level of applying each group's decisions separately. While young children generally endorsed the decision of the rich group, older children endorsed the decision of the poor group, regardless of the groups' majority and minority status. The potential underlying mechanisms for these choices, as well as the developmental changes, are discussed.

ÖZET

Grup Kararlarında Çocukların Grubun Sosyal Konumuna Bağlı Adalet

Değerlendirmeleri

Çocuklar sosyal kararlar alırken çeşitli ipuçlarını dikkate alırlar. Sosyalleştikçe, çocukların sosyal dinamikler hakkındaki bilgileri gelişir. Çocuklar bu bilgiyi sosyal statü ile ilgili çıkarımlarıyla birleştirerek sosyal kararlarını ve yargılarını oluştururlar. Mevcut çalışma, grup büyüklüğünün (çoğunluk, azınlık) ve sosyal statünün, çocukların grup kararlarına yönelik tercihleri ve bu kararların adalet yargıları üzerindeki etkilerine odaklanmıştır. Çalışma içerisinde sosyal statü, grupların zenginlik durumuna bağlı olarak sunuldu. 6-7 ve 10-11 yaşındakiler, varlıklı olma durumu ve grup büyüklüğü açısından farklılık gösteren iki yeni grupla tanıştırıldı. Grupların farklı fikirler sunduğu senaryolar gösterildikten sonra çocuklara hangi grubun kararının uygulanması gerektiği soruldu. Ayrıca, çocuklardan her bir grubun kararını uygulamanın ne kadar adil olacağına dair ayrı ayrı değerlendirmelerde bulunmaları istendi. Küçük çocuklar genellikle zengin grubun kararını desteklerken, daha büyük çocuklar, grupların çoğunluk ve azınlık statüsüne bakılmaksızın fakir grubun kararını desteklediler. Bu seçimlerin altında yatan potansiyel mekanizmalar ve gelişimsel farklılıklar tartışılmaktadır.

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CHAPTER 1

INTRODUCTION

In human history, conflicts between various groups have been quite prevalent (Harari, 2011/2017), given that different groups tend to have different ideas and aims. To solve these conflicts, adopting democracy has been found to be the fairest solution (Vinx, 2020). Today, democracy has become critically important for most people worldwide. In a recent comprehensive survey conducted with a large sample of citizens in 53 countries, 84% of the respondents agreed that it was important to have democracy in their country (Alliance of Democracies, 2022). However, even though much of the world attributes importance to democracy, on average, people see their countries as less democratic than they expect these countries to be (Alliance of Democracies, 2022), and less than half of the world population lives in democracies (Boese et al., 2022; Economic Intelligence Unit, 2021). To solve the discrepancy between people's expectations and the observed situation of democracy, investigating people's understanding of and attitudes toward democracy and how this understanding develops is essential.

Although understanding of democracy varies largely among people, there are commonly emphasized elements of democracy, such as majority rule, minority rights, and freedom of speech (Flanagan et al., 2005; Munck, 2016; Nieuwelink et al., 2016). Yet, applying one democratic principle might hinder the application of another principle in certain cases (Helwig & Turiel, 2002). Reaching the most effective and fair conclusion in these cases would require complex thinking, such as weighing conflicting factors according to situations. Therefore, surveys and studies in the area of democracy mostly focus on adolescents and adults (Alliance of

Democracies, 2022; Nieuwelink et al., 2016). Based on the belief that they have immature cognitive skills, children are largely ignored in the area of democracy (to a broader extent, in politics) research (Reifen-Tagar & Cimpian, 2022; van Deth et al., 2011). Although studies show the relation between early life experiences and the political orientation of adolescents or adults (Fraley et al., 2012; Reifen-Tagar et al., 2014), the underpinnings of democratic attitudes in children have not been the main considerations of most studies (Reifen-Tagar & Cimpian, 2022). However, since awareness of societal problems and ability to reason about the factors underlying these problems appear in childhood (Killen et al., 2022), children might also show an understanding of basic elements of democracy. Therefore, considering the crucial role of decision-making procedures in politics (Ellenbroek et al., 2014), investigating children's approach toward group decisions as one of the essential structures of democracy could give profound hints on the foundations of their democratic attitudes. For instance, children's positivity toward individuals and groups who leave others opportunities to make different selections (Zhao et al., 2021) or suggestions (Thomas et al., 2022) can signal their sensitivity toward having the freedom to choose. Similarly, preference for the majority's offer on group decisions (Kinoshita, 2006; Mann et al., 1984) might be an underlying mechanism of children's later support for the majoritarian approach of democracy. Besides, the progress in their understanding of the appropriateness of the majority choice in various conditions continues in the developmental process, such as acquiring certain limits of the majority rule (Kinoshita, 2006; Mann et al., 1984).

Understanding the limits of majoritarian decisions is essential for evaluating democracy from a broad viewpoint. While preferences of the majority come in as the most basic definition of democracy (Munck, 2016), making free decisions and acting

in a way that satisfies the majority do not always bring fair results for everyone, such as minority groups (Hehman et al., 2012; Vinx, 2020). In most real-life cases, the majority has high social status (e.g., an ethnic majority; Brown et al., 2003). Hence, their self-favoring decisions might easily lead to the status quo. In other words, while applying majority decisions protects the majority's status, the minority could stay disadvantaged. Thus, acting according to the majority opinion in all situations is not enough to provide democracy. From this perspective, children's development of social status and fairness concepts are also crucial to comprehensively evaluate their conceptual development of democracy (Reifen-Tagar & Cimpian, 2022).

Children infer social status from more diverse signs, and their fairness understanding becomes more complex with age. In line with this, their attitudes toward individuals at different levels of social hierarchy also continue changing (Killen & Dahl, 2021; Pun et al., 2017; Thomsen, 2020). To understand whether these changes affect children's early democratic attitudes, focusing on age groups that differ regarding their development of social status and fairness can be helpful. In that sense, the point where children start judging inequalities (especially structural ones) as unfair is essential (Elenbaas et al., 2020; Peretz-Lange et al., 2021). In most cases, as children grow older, their preference for a high-status decreases, and sharing resources with a low status increases (Zhang et al., 2021). Furthermore, children's acceptance of resource inequality challenging behaviors, such as allocating more resources to a socially disadvantaged or poor character, develops with age (Essler & Paulus, 2021). As children become able to consider various factors (such as the needs and merits of the recipients; Schmidt et al., 2016) to make a fair resource allocation decision, their chance of considering minority rights in addition to the majority opinion in group decisions can also increase.

In conclusion, evaluating children's development regarding collective decision-making processes, status concepts, and fairness altogether provides an opportunity to understand their proto-political attitudes. Depending on children's proto-political attitude development, the essential mechanisms affecting adults' different attitudes toward democratic problems can be revealed. As a result, the principles to be focused on intervention programs that aim to develop democratic attitudes can be determined. To achieve these goals, this thesis aims to investigate whether children consider the social status of groups in their decisions to support the majority's decision. Furthermore, to understand if they base their preference for a group's idea on the fairness principle, their fairness attributions to the application of different groups' choices will also be in the scope of this thesis.

1.1 Development of children's ideas about group decisions

Research shows the importance of childhood in the establishment of political attitudes. Various factors, such as children's temperament (Fraley et al., 2012) and how children are raised by their parents, are related to their later political tendencies (Reifen-Tagar et al., 2014). However, children's decision-making is not examined regarding its relation to their future orientations toward democracy. Therefore, it is crucial to understand how children approach decision-making processes in a group to grasp how early forms of political decisions develop and how to construct a democratic society (Reifen-Tagar & Cimpian, 2022).

So far, most of the literature about political development has concentrated on adolescents (Flanagan et al., 2005; Helwig et al., 2003; Nieuwelink et al., 2016). Adolescents' understanding of democracy and their preference for countrywide decision-making procedures are widely investigated (Helwig et al., 2011; Ng

Tseung-Wong & Verkuyten, 2013). According to these studies, in addition to supporting democracy (Helwig & Turiel, 2002, Nieuwelink et al., 2016), like adults, adolescents also define it with its different features (Ng Tseung-Wong & Verkuyten, 2013; Šerek & Lomičová, 2020). For instance, the rights of individuals and equality of citizens are some of the critical values of a democracy (Miklikowska & Hurme, 2011) and are among the main themes of adolescents' democracy definition (Flanagan et al., 2005). However, although the focus on it can change with age and social context (Šerek & Lomičová, 2020) the majority rule is the most outstanding element mentioned in adolescents' democracy definitions (Flanagan et al., 2005; Nieuwelink et al., 2016).

While there are studies showing adolescents' emphasis on majority rule at different ages (Nieuwelink et al., 2016; Šerek & Lomičová, 2020), the literature is not very informative regarding the importance of the majority decision or general political understanding at the earlier stages of development. Although examples of research on politics and democracy understanding in childhood exist (e.g., Helwig & Jasiobedzka, 2001; Helwig & Turiel, 2002; van Deth et al., 2011), they are less common than adolescent studies in this area (Barrett, 2005). In an exploratory study investigating children's political conceptualizations and attitudes, first graders knew the basics of politics in their country to a substantial extent (van Deth et al., 2011). In addition to their basic knowledge of politics, as adolescents and adults do (Besirevic & Turiel, 2020), children can lean on their moral principles to evaluate various political decisions. For instance, when asked about the fairness of different governmental systems or decisions, children can consider principles of equality and individual freedoms (Helwig, 1998; Helwig & Jasiobedzka, 2001; Helwig & Turiel, 2002). In one of the related studies (Helwig & Jasiobedzka, 2001), children were told

about an imaginary country governed like their own (Canada) and mentioned two kinds of made-up laws. While three of these laws discriminated against certain groups in that country (e.g., forbidding teachers from teaching math to blue-eyed children), the other three were mandatory laws in favor of the country's citizens (e.g., requiring all individuals to obtain a chicken pox vaccination). Children were asked about the fairness of the government implementation and the acceptability of the citizens violating these laws. The results showed that even at 6 years of age, children differentiated two kinds of laws in their evaluations. While they judged discriminatory laws as less fair than the mandatory laws providing social benefit, they found violating the former type of laws more acceptable than the latter kind of norms. In other words, although children attributed negativity to mandatory laws providing social benefits due to these laws' restrictive natures, their opposition to unjust laws was more vigorous. Moreover, the older age group in the study (10-year-olds) expressed their reasoning about unfair rules referring more to abstract concepts (such as fairness) compared to the youngest group (6-year-olds; Helwig & Jasiobedzka, 2001).

In addition to these studies, children's evaluations of decision-making procedures can also shed light on their understanding of fairness in governing styles. By the age of 6, children care about others' rights to choose; thus, they think positively about the individuals who give others options they can choose from (Zhao et al., 2021). When it comes to making a group decision, starting from 6 years old, children prefer acting according to the majority (Hok et al., 2019). In a similar vein, rather than being in a group whose decisions are made by an authority figure, 7-8 year-olds prefer to be a member of a group in which every individual's word is taken into consideration (Thomas et al., 2022). While children at these ages do not like

characters who force their decisions to be implemented, they accept a group leader's decision on behalf of the group only if the group members have chosen the leader (Cheng et al., 2021).

Except when the majority consists of the same individuals in successive decision-making scenarios or decision topics (e.g., individual preferences) leading to unjust conclusions, children in late childhood approve the majority to make the decisions (Kinoshita, 1989; Kinoshita, 2006; Mann et al., 1984). For instance, Mann et al. (1984) presented children between the ages of 8 and 14 with several decision-making scenarios in a friend group. In these successive scenarios, the majority of the group made different choices than the minority. In the first scenario, most children (92%) thought the group should have followed the majority's preference. The critical point is that if the same individuals constituted the majority of the group who chose the destination to go, contrary to younger ages, older children suggested following the majority's choice less than they did when the individuals constituting the majority changed in each scenario (Mann et al., 1984). The study is quite impressive, considering its results pointing at children's increasing understanding of the two aspects of democracy: minority rights and preference for the majority rule, especially when it does not create inequality.

Nonetheless, although children attribute importance to individual rights, when a restriction comes from a democratic government, with increasing age (from 6 to 11 years old), they become less judgmental about these restrictions (Helwig, 1998). This attitude of children might originate from similar cognitive mechanisms that lead them to accept disadvantageous outcomes when procedural justice exists. In procedures that provide an equal chance for each participant to be the advantaged party in resource distributions, 8-year-olds accept the consequences even if the

procedure results will not reward them (Dunham et al., 2018; Qiu et al., 2017). In a similar vein, finding democratic regimes as just procedures for governance (Helwig, 1998), children might consider that the citizens governed by democracy should follow the laws in general. Alternatively, as suggested for young adults (Besirevic & Turiel, 2020), children might think more comprehensively about exceptional political situations as they age. In fact, even when children know that a procedure is impartial, unequal distributions and sadness of receivers decrease children's perceived fairness about the process (Stowe et al., 2022). Thus, children's acceptance of freedom-restricting laws in democracies may depend on their aim of preventing possible negative outcomes, considering various political conditions that make the restriction acceptable in some instances (i.e., hate speech; Helwig, 1998).

1.2 Development of the social status understanding and judgments

One aspect of democracy is the equality of the citizens (Munck, 2016). However, societies consist of groups that are unequal in social status (Sidanius & Pratto, 1999). The problem of an existing social structure might not be comprehended at the early stages of development. Therefore, examining the change in people's social status understanding and attitudes toward others from different levels of social hierarchy by age is necessary to understand the development of a comprehensive democracy concept.

The literature shows that starting in infancy, humans are sensitive to certain cues of social status, such as yielding to an opponent (Enright et al., 2017), the relative size of the individuals (Thomsen et al., 2011), and the relative number of members in the groups (Lourenco et al., 2016; Pun et al., 2017). In addition to detecting the cues of social hierarchy, people's status-based expectations about and

preferences for others are also observed at young ages (Enright et al., 2017; Thomas et al., 2018). Infants not only expect the prevailing agent's status to persist in the same interaction but also expect this agent to have more resources than the subordinate agent (Enright et al., 2017; Mascaro & Csibra, 2012). Furthermore, toddlers prefer high-status characters, except when the character achieves its status by using force on another one (Thomas et al., 2018). Toddlers' particular avoidance of oppressive characters might be one of the early tendencies that prepare humans not to favor social hierarchy in specific cases (Cheng, 2019; Thomsen, 2020).

While infants can associate certain cues with social status (Enright et al., 2017), with age, their conceptualization of social hierarchy improves (Charafeddine et al., 2015; Enright et al., 2020). When judging the status of a group, children weigh co-existing but contradictory cues of dominance conditionally around 3-year-olds (Lourenco et al., 2016). They infer a group's dominance over the other, either considering the number or the physical size of the group members, depending on the ratio of groups' crowdedness. Around the ages of 3 and 4, children start forming an association between an individual's position in the social hierarchy and different aspects of personality, such as ability (Charafeddine et al., 2015), knowledge (Bernard et al., 2016), race, and gender (Mandalaywala et al., 2020). Along with a halo effect, 4 to 6-year-olds match positive characteristics and advantageous identities with the high-status groups (Shutts et al., 2016). In line with their positive attributions toward high-status individuals, until age 5, children make resource distributions in favor of individuals who have high status regarding their decision-making power and owning a larger amount of resources (Charafeddine et al., 2016; Enright et al., 2020). Before 5 years of age, the indifference of young children to subordinates can even come from taking a resource from them and giving it to a

high-status individual (Charafeddine et al., 2016). Thus, children need time to make grounded fairness judgments.

Compared to their younger counterparts, children between the ages of 5 and 6 behave more just to others differing in their social status (Cheng et al., 2021; Zhang et al., 2021). Still having a positivity bias for the advantaged, unlike 3 and 4-year-olds, 5-year-olds do not favor the high-ranked person in their distributions (Charafeddine et al., 2016; Li et al., 2014) or in their fairness evaluations about distributions when the ranking difference is saliently a result of unequal opportunities (Elenbaas, 2019b). In a specific case (e.g., in the distribution of health supplies), being aware of the historical background of societal inequalities between the groups (Blacks and Whites), 5- and 6-year-olds can disregard their ingroup favoritism and give more goods to disadvantaged outgroups than ingroups (Elenbaas & Killen, 2016). Nevertheless, when children of the same ages need to distribute other kinds of resources (e.g., education materials) between the same groups, they favor their ingroup, regardless of the group's historical advantage (Elenbaas et al., 2016). In addition to their focus on group loyalty, children's respect for ownership at these ages can also play a greater role than their concern for equality in some of their resource distribution judgments (Elenbaas, 2019b). Although 5- and 6-year-olds know about the unequal opportunities two characters have, children who focus on the ownership principle disapprove when another agent takes some of the rewards allocated to the advantaged character and gives it to the disadvantaged character. Therefore, although in some cases, children's main consideration can be fairness around ages 5 and 6 (Killen et al., 2018), they might make evaluations in accordance with other concerns too (such as ownership or merit; Elenbaas, 2019b).

Children around 5 years old might prioritize other principles than equality due to having difficulty in evaluating existing situations as unfair (Hussak & Cimpian, 2015; Yang & Dunham, 2022). In a study, based on the experimental condition they are in, children are presented with inherent or extrinsic reasons for status differences between two novel groups (Hussak & Cimpian, 2015). Five-year-olds but not 8-year-olds show higher support for the status quo and not evaluating the system as unfair even when they learn about structural reasons affecting the status disparities. Therefore, clear rejections of inequality might require further improvement in children's fairness understanding.

With the development of their cognitive and emotional skills, from age 6 to 8, children become more sensitive to others' needs and make increasingly detailed judgments about fairness (Dunham et al., 2018; Rizzo & Killen, 2016; Stowe et al., 2022). When the receivers' conditions (effort, need, status, etc.) or the type of resources (luxury, need, value, etc.) are mentioned to them beforehand, children approaching 8 years old become against or try to rectify inequalities accordingly (Choshen-Hillel et al., 2020; Rizzo et al., 2016; Zhang et al., 2021). At the age of 7 and 8, children's acceptance of inequality decreases (Yang & Dunham, 2022.), especially when presented with groups whose unjust history contributes to the current status disparity (Hussak & Cimpian, 2015; Olson et al., 2012). In a study focusing on wealth discrepancies between two agents who put equal effort into their work, children between 3 and 8 years old judged redistributing resources less negatively with age when the resources were taken from the wealthy and given to the poor (Essler & Paulus, 2021). Consequently, with their increasing disapproval of unfairness, especially around ages 7 and 8, children might prefer regulations that

compensate disadvantaged groups' conditions, even when they conflict with their different principles (e.g., ownership).

In addition to their improving ability to balance various factors that create difficulty in making fair decisions (Schmidt et al., 2016; Shaw & Olson, 2013), from age 6 to 8, children's conceptualization of an individual's social rank also develops (Yang & Dunham, 2022; Zhang et al., 2021). Therefore, their judgments and actions toward individuals with different social statuses become more compatible with each other (Rizzo & Killen, 2020). When they know about previously established wealth differences between groups and individuals, children's disapproval of decisions that favor disadvantageous ones can decrease at the age of 8 (Elenbaas, 2019a; Essler & Paulus, 2021). In some cases, although their behaviors would not change a character's status, around ages 7 and 8, children support low-status individuals with their actions (Charafeddine et al., 2016; Cheng et al., 2021). The critical point here is children's selectivity in their behaviors toward others based on the source of their position in the social hierarchy. While 6 to 8-year-olds do not endorse hierarchy based on dominance or wealth, they respect socially acquired status (e.g., through prestige), which reflects in their resource distribution decisions (Cheng et al., 2021; Zhang et al., 2021). In a study conducted by Cheng et al. (2021), the hierarchy between three characters is either derived from physical strength (oppression indicator) or drawing ability (prestige indicator). In the resource distribution task, while children between 5 and 7 year-olds do not favor anyone according to their physical strength, 8-year-olds favor the subordinate. However, 7- and 8-year-olds do not show a distribution tendency for a character, depending on the character's drawing ability (Cheng et al., 2021). The results of the study shed light on children's developing and differentiating perspectives for people in different positions of

different hierarchies. Children at the age of 8 not only adjust their resource allocations according to resource inequalities between two parties but also regarding other status disparities that cannot be directly resolved by having more resources. Furthermore, 8-year-olds' compensatory resource distribution to the dominated character but not to the low-prestigious character may point to their tendency to act against the equality principle when they perceive inequality between the characters' status is unfair.

On the other hand, although 8-year-old children account for the status of others and the dimension of status (e.g., dominance or prestige) to make fair decisions (Cheng et al., 2021; Zhang et al., 2021), the reasons for social status differences might need to be shown to them explicitly (Hussak & Cimpian, 2015). When informed about the structural reasons for social rank in a community, children at the age of 8 years evaluate inequality as unfair. However, unless they are told about structural obstacles in front of the low-status group, they tend to attribute inequality to inherent characteristics of the groups, which leads them to adopt status-quo-supporting attitudes. Thus, judgments requiring established democracy understanding (a broader understanding than the electoral process) can be difficult at this age.

As children socialize more, they learn more about social relations. As a result, children's reasoning of the status differences between groups broadens with age (around the ages of 9-10; Peretz-Lange et al., 2021). However, due to the variances of their experiences, children's perceptions of groups' social status and their reactions to the differential treatment toward these groups vary in cultural contexts (Heck et al., 2022). In a study conducted in Denmark, children's disapproval was stronger for ethnicity-based exclusion than gender-based exclusion (Møller &

Tenenbaum, 2011). In contrast, because of the different disparities children frequently encounter in America, their sensitivities toward racial inequalities between Blacks and Whites stand out. Ten and 11 years old children in America display awareness of race-based hierarchy in society and do not show a tendency to favor Whites, especially when the White character is rich, and the Black character is poor (Elenbaas et al., 2022). This societal understanding also reflects itself in children's reasoning about racial disparities. When an African-American institution is more disadvantageous than a European-American institution, children between 10 and 11 years are more likely to explain this situation with the differences in treatment compared to the opposite circumstances in these institutions (Elenbaas & Killen, 2017).

Children's awareness and disapproval of the discriminatory attitudes toward these groups rise commonly around ages 10 and 11, with the main ethnic or racial groups who are exposed to disadvantages differing from culture to culture. Yet, a status indicator is evaluated similarly across different cultures, especially at these ages: wealth (e.g., Olson et al., 2012; Zhang et al., 2021).

1.3 Wealth as a status indicator

Because wealth is considered possible to be acquired through fair and unfair ways, it is a special social status indicator (McLoyd, 2019). Thus, although changes take place in the developmental patterns of children's attributions, such as ability and prosociality to the wealthy (Yang & Dunham, 2022), children would not make direct inferences about wealth as much as they do about prestige and dominance.

In the scenarios of resource distribution, while children's attitudes toward the dominant (Charafeddine et al., 2016) and the wealthy (Elenbaas et al., 2022) look

alike, their attitudes toward the prestigious characters differ. Children favor a highly prestigious agent over a highly dominant one (Cheng et al., 2021). However, the similarity in children's resource distribution to the wealthy and dominant might not be due to the perception that gaining both kinds of status is unfair, considering children's explanations of becoming wealthy (Hussak & Cimpian, 2015). Instead, children might think that sharing with an individual who has a lot of might not make sense at the ages children start regarding fairness principles from various aspects (between 6 and 8 years old; Choshen-Hillel et al., 2020; Qiu et al., 2017). Therefore, having wealth-based status neither conveys negative information about that person nor positive qualities, as in the case of a prestigious person directly. In other words, their support for a rich or a poor group's decision could be more related to their attitudes toward people's status and less connected to how it is obtained.

1.4 Status differences in the majority and minority groups

Social psychologists use majority and minority concepts to express group differences regarding status, conventionalism, and their literal meanings (number of members constituting the group; Seyranian et al., 2008). In some of the studies regarding majority and minority concepts based on the group sizes, children and adults are found to expect numerically larger groups to control the resources more than they expect the small groups (Heck et al., 2021; Lourenco et al., 2016). In addition to explicitly suggesting group size and resource control association, adults taking Implicit Association Test (IAT) in a study about the same topic matched larger groups with higher status (Cao & Banaji, 2017). Although large groups' ability to control resources could be attributed to the physical superiority of the crowd, Cao and Banaji's study (2017) points to adults' tendency to attribute high social status to

the majority in broader terms, such as competence and smartness. Furthermore, it is easy to notice various examples of the majority being a high-status group in the same context (Simon et al., 2003), and the risk of injustice arises at that point. Constituting the majority, a high-status group can easily protect its place on the hierarchy through institutional power and oppress a minority group systematically (Sidanius & Pratto, 1999).

While the electoral process and, thus, the decision of the majority is suggested as a common and very basic definition of democracy, equality, and political freedom are also among the main components of it (Munck, 2016). However, not all countries where elections take place provide democracy to their citizens with all its features. According to Democracy Report 2022, the most common governmental model in 2021 is the electoral autocracy. According to the writers' definition, in electoral autocracies, citizens vote for their leaders; however, particular restrictions prevent them from being evaluated as a democracy. Therefore, while majoritarian democracy seems to provide desired outcomes for most of society, without limits, it can become a so-called legal oppression tool for the minority, which is already disadvantaged (Vinx, 2020). Studies draw attention to this risk, too. As an example, even though a group is a minority in their country, when they are told to be the majority in a hypothetical scenario, they favor assimilationist policies for the minority (Hehman et al., 2012).

Majority choice can be problematic in certain cases; however, minorities in society are not always in a low-rank position. In wealth distribution worldwide and in many countries, a small proportion of the population has more extensive wealth than the rest (Shorrocks et al., 2022). Referencing these real-life situations, when they are explicitly asked, adults supposed a minority group to have higher social

status than a majority group (Cao & Banaji, 2017). Children also show a similar pattern; from age 3 to 10, when the proportional difference between group sizes in numbers is evident, they increasingly predict the smaller group to be in charge and leader (Heck et al., 2021). Furthermore, there are also examples of the racial minority group being the high-status group in a country. In the case of South Africa, because of the colonial history, White people have higher status than Black or Multiracial people. Even though young children tend to show in-group bias in their preferences or trait attributions (Dunham et al., 2011; Lee et al., 2018), there are exceptions. Based on their status and observations, this bias might fade away (Horwitz, Shutts, & Olson, 2014; Mandalaywala et al., 2020). Black and Multicultural children showing no preference for their race in South Africa is an example of it (Olson et al., 2012; Shutts et al., 2011).

CHAPTER 2

THE CURRENT STUDY

The current study has several aims. The main purpose is to understand whether children's developing fairness understanding affects their support for the majority decision when the wealth status of the majority and minority is different. When previous research is considered, as early as 6 years old, children show majoritarian approaches to reach a solution in group discussions (Helwig, 1998; Hok et al., 2019). Furthermore, while children supported the majority in most cases in the past studies (Kinoshita, 2006; Mann et al., 1984), a recent study indicates that starting from 6 years of age, children selectively accept the appropriateness of majority rule (not approving group to decide on individual decisions; Hok et al., 2019). Considering the profound societal changes in the last decade, the recent study might represent today's children better than the studies conducted almost two decades earlier (e.g., Kinoshita, 2006; Mann et al., 1984). The current study is investigating whether children support majority decisions conditionally in a context where this decision will not bring the fairest results, in other words, when it could lead to the status quo. For this purpose, a methodology similar to Mann et al. (1984) is used. In the current study, only stable groups (whose members do not transfer to another group) are introduced as the majority and minority. The difference in the numerical size of the groups is shown through the different number of individuals that appears in each group.

Around 8 years old, children consider fairness in their decisions, such as when they distribute resources (Schmidt et al., 2016; Yang & Dunham, 2022). In these kinds of decisions, children regard factors such as merits and previous disadvantages of the groups or individuals and favor them to minimize inequalities.

However, whether children decide based on similar compensatory strategies (prioritizing the preference of the low-status) for the low-status groups or individuals in decision-making, is unknown. Hence, the social status of the majority and minority is varied between the conditions in the current study. Depending on the difference between children's preference for the majority decision in different conditions (when the social status of the majority differs), children's tendency to rectify inequality by giving decision-making power to the low social status is examined.

The current study also aims to extend previous political development research findings by studying a sample from a different political climate. In the previous studies about children's political development, the data come from the countries such as Canada (e.g., Helwig, 1998), Germany (e.g., Goetzmann, 2017), and the United States (e.g., Mann et al., 1984), which are under the category of democratic governments in different indexes (Boese et al., 2022; Economic Intelligence Unit, 2021). However, in the same indexes, Turkey falls within electoral autocracies or hybrid regimes, which means that even if elections take place in the country, there are several problems in the functioning of democracy. Accordingly, this political framework also reflects itself in the education system. In the social studies books of primary school children, rather than rights (except voting), the responsibilities of citizens are stressed (İnce, 2012). Thus, because the study is conducted with children living in Turkey and speaking Turkish, it will also contribute to the political development literature with a sample from a different political atmosphere than the previous studies (e.g., Goetzman, 2017; Helwig, 1998).

Considering differences in their social evaluations found in various studies, the present study is conducted with two age groups, 6-7 year-olds and 10-11 year-

olds. Children around the ages of 6-7 start differing from youngsters regarding their ideas and attitudes toward people who are in different places in the social hierarchy. Furthermore, they care about raising their voices in decision-making processes, and because of these developments, these might be the youngest ages children could evaluate the fairness of the situation. On the other hand, 10 and 11-year-olds' explanations about the wealth gap and decision-making processes are more complex (Yang & Dunham, 2022). Thus, their understanding of democracy might be more clarified than 6-7-year-olds.

In addition to these factors, the literature shows similarities between parents and their children regarding political attitudes such as right-wing authoritarianism, social dominance orientation (Ruffman et al., 2020), and essentialism (Rhodes et al., 2012). In the current study, the level of children's endorsement of the high social status group's decision could reflect their parents' social dominance orientation patterns. Therefore, by measuring parents' social dominance orientation, we also aimed to assess this relationship.

2.1 Hypotheses

We expected children to consider both the minority-majority status and the wealth status when making decisions on whose preference should be applied, but we expected this to be particularly pronounced among older children. Specifically, the older group (10-11-year-olds) was expected to prefer the majority group's decision to be applied, but less so when the majority had high status.

The older group was also expected to find applying the majority decision less fair than applying the minority decision when the majority consists of high-wealth individuals than low-wealth individuals.

We also expected children to find the wealth gap between the groups more unfair as they get older.

Children's preferences for the groups and the individuals as well as their perceived similarity with the individuals from different groups were measured for exploratory reasons, we did not have specific predictions in terms of their role in children's decisions.

Finally, our prediction regarding parents' social dominance orientation was that the higher levels of a parent's Social Dominance Orientation, the higher the children would endorse the rich and minority group's decisions.

2.2 Method

2.2.1 Participants

Ethical permission for the study was taken from Boğaziçi University Ethics Committee for Masters and Ph.D. Theses in Social Sciences and Humanities (see Appendix A). The study was conducted with two age groups. The younger group was 6-7-year-olds, and the older group was 10-11 year-olds. The participants were reached through Boğaziçi University Baby and Child Development Laboratory's database and social media accounts as well as schools.

The sample size was determined based on the effect size of a study that investigates whom children favor considering the wealth and decision-making power of two individuals (Zhang et al., 2021). According to the power analysis using 4 clusters (2 age groups and 2 conditions, see analysis), 20 participants for each cluster, and 80 participants in total were planned to be recruited for the current study.

The final sample consisted of 41 6-7 year-olds (23 females; $M_{young} = 7.00$; $SD_{young} = .48$; ranged from 6.05 to 8.00) and 46 10-11 year-olds (21 females; $M_{old} =$

10.6; $SD_{old} = .55$; ranged from 10.00 to 11.8). Additional 17 children were tested but not included in the analysis. Eight 6-7 year-olds and 7 10-11 year-olds could not pass at least one of the two manipulation check questions about the groups' wealth status, and one child was outside the pre-determined age range. Data was collected from the schools ($N = 50$) and through online Zoom meetings ($N = 37$).

The socioeconomic status information of the families was measured with a questionnaire filled out by parents. The subjective socioeconomic status of one of the parents, the education levels of both parents and the yearly household income of the family were asked in this questionnaire. Furthermore, to control the possible effects of parents on children's political understanding development, the Turkish version (adapted by Kaynak et al., 2021; see Appendix B) of the Social Dominance Orientation Scale (developed by Ho et al., 2015; see Appendix C) was also sent out to parents. However, not all parents filled out these forms. While the parental demographic information form was filled out by the parents of 73 participants, the Social Dominance Orientation Scale was completed by 57 of the parents of 87 participants included in the analysis.

2.2.2 Materials

2.2.2.1 Stimuli

Visual stimuli were created using Vyond (app.vyond.com). An island image with two groups of people was used to introduce children to the groups. The groups were novel, with made-up names, and they differed in their social status (high/low wealth) and group size (majority/minority). The majority group consisted of 8 children drawings (4 females), and the minority group consisted of 4 children drawings (2

females). All children's skin and hair colors were the same, but their hairstyles, clothing colors, and details varied.

Each group's wealth was introduced by showing images of their houses, toys, and clothes. A large and new house was used to represent the rich group's houses, while an old and small house image was used to represent the poor group's houses. Similarly, drawings of new and old toys were used to show each group's toys. The rich group's members wore new clothes, and the poor group had patched clothes. Because patched clothes could potentially be perceived differently by children and not cue wealth status, inspired by a previous study using large and small coins to indicate the wealth condition of the individuals (Zhang et al., 2021), drawings of one empty wallet and one wallet with money in it was shown along with the groups, each appearing under the relevant group.

Additional visuals were used to represent the scenarios created about the decisions to be made on the island and to depict the groups' demands. For this, we used visuals depicting two alternative places for building a playground, two alternative bus routes for school trips, two alternative seeds of a tree to plant, and two alternative fruits for making a dish). Before presenting the groups' decisions about the scenarios, each scenario was told, along with a related visual (i.e., an image of a park, an image of a road, an image of planting seeds, and an image of kitchen supplies). Visuals also supported both groups' demands about each scenario. The visual for the playground scenario included an image of an island and a park image on the island, with the upper side and the lower side of the island being marked as the potential place to build the park. The visual of the bus scenario included a green and a yellow version of the same bus. The visual of the tree scenario included two similar trees, one had light-colored leaves, and the other with dark-colored leaves.

The visual of the fruit scenario included two rare fruits (mangosteen and maracuja), one with purple and the other with yellow peel.

Finally, to aid children's use of a 3-point Likert scale, they were shown three circles that were created in Paint. One of the circles was full, the other one was half full, and the last one was empty. They meant “very okay”, “partially okay” and “not okay at all”, respectively.

Microsoft PowerPoint was used to present the visuals to the children.

2.2.2.2 Design and Procedure

Firstly, all participants took a training session about the use of a 3-point Likert scale. They were shown three circles representing the scale and told about their meanings. The full circle meant “completely okay”, the half-empty circle meant “partially okay”, and the empty circle meant “not okay at all”. While describing a circle, a frame appeared around that circle. After that, children were presented with all three circles in differently colored squares at the same time. Children were asked what the circle in “x” colored (green, yellow, or red) square meant in random order. The circles were always presented side by side and ordered as follows, the full circle on the left side, the half-empty circle in the middle, and the empty circle on the right.

There were two age groups (6-7 year-olds and 10-11 year-olds) and two conditions (social status of the majority: high wealth and low wealth) in the study. Children in each condition were introduced to two made-up groups called Numis and Pitas living on an island. In one of the conditions, participants saw a majority group with high-wealth status and a minority group with low-wealth status. In the other condition, children saw a majority group with low wealth status and a minority group with high wealth status. The groups were presented side by side on an island. As the

experimenter informed the child about the groups, a square appeared around the group that was mentioned. Firstly, children were told about the size of the groups, mentioning one group constituted the majority and the other group constituted the minority of islanders. The majority and minority status of the groups were shown through the number of members in each group (the minority consisting of four individuals and the majority consisting of 8 individuals). In each condition, children were told about the groups' wealth status, not directly labeling but implying them with cues to be more realistic, as indicated in many studies (Mandalaywala et al., 2020; Zhang et al., 2021). The cues were an example of a house and a toy, representing each group. The experimenter said, "Pitas live in these kinds of houses and these kinds of toys", showing for instance, a large, well-kept house and new toys. She then said, "Numis live in these kinds of houses, showing a small and rundown house and old, broken toys. Each cue was presented next to the group they belonged to and disappeared when the experimenter talked about the other group.

After being informed about the groups, children were asked two questions to check whether they understood the groups' wealth status correctly. Children were shown two rooms side by side, one with new furniture and one with old furniture. Then, each room was presented one under the other in the middle of the two groups, and children were expected to match two rooms with the related group. The same procedure was applied for the following manipulation check about two wallets (with and without money in it). The order of presentation of the items associated with the rich and the poor groups was counterbalanced across children. Across all children, questions about the rooms were asked first and the wallets second. Only children who could match the groups with items correctly were included in the analyses.

Following this, children were presented with four disagreement scenarios between the two groups in all conditions (see Table 1). In each scenario, the two groups had different suggestions about the changes to be made on the island, favoring their own group (e.g., “A playground will be built on this island. Pitas want the playground to be built on the island’s upper side, which is close to their houses. However, Numis want the playground to be built on the island’s lower side, which is close to their houses”). The groups appeared on the two sides of the slides in these questions, with the wallets related to each group also appearing next to them, marking their social status. While a group’s suggestion was being told, a visual representing this decision appeared in a speech bubble above the group image. At the end of each scenario, children were asked which group’s decision should be executed (e.g., “Do you think the playground should be built on the island’s upper side, as Pitas suggested, or on the island’s lower side, as Numis suggested?”). While mentioning a group’s idea in the question, a red frame appeared around the speech bubble suggested by that group. Following this question, regardless of which group’s decision the children supported, children were shown the scale and were asked about the fairness of applying each group’s decision separately (e.g., If the playground was built on the island’s upper side, as Pitas suggested, how okay would it be? Would it be very okay, a little okay, or not okay at all?). When the experimenter asked the fairness question, children saw one of the groups presented on the slide along with the Likert scale image below the group picture.

At the end of the testing session, children’s preferences regarding the groups was assessed. Children’s social preference was measured by presenting the groups side by side and asking, “Which group did you like the most? Pitas or Numis?”. Following this, children were reminded of wealth status cues about the groups (the

house and the toy matched with the rich group above, and with the poor group below) and asked how okay these differences were using the 3-point Likert scale with the visual of circles at the bottom of the slide. Next, children were shown two characters from each group that were similar to each other. These characters matched with the participants' gender. Firstly, children were asked "Which character did you like the most? The character from Pitas or the character from Numis?". Then, using the same visuals, children were asked "Which character is similar to you? The character from Pitas or the character from Numis?". While mentioning the group names, a frame appeared around the child belonging to that group. Finally, child adapted version of the MacArthur Scale was used to measure children's subjective socioeconomic status on a continuous scale, using a ladder visual. The script of the study is included in Appendix D (English Version) and Appendix E (Turkish Version).

Table 1. Scenarios Used In the Experiment

Scenario	Reason for the group demand	The demand of the group
Playground	To be close to their houses	The upper/lower part of the island to be chosen for the playground construction
Bus	To be close to their houses	The yellow/green bus to be chosen for school trips
Tree	Growing around their houses	The light/dark colored tree seeds to be chosen to give children
Fruit	Growing around their houses	The purple/yellow vegetable recipe to be chosen to be taught in the course

The order of introducing the majority and the minority groups in each condition was counterbalanced. The side of the groups (left vs right) was also counterbalanced in different orders of the experiment presentations. Control questions were asked in the same order across children. Eight counterbalancing orders were created for each condition, totaling 16 different PowerPoint presentations. In 8 counterbalanced orders, park, bus, seed and fruit scenarios were arrayed in 8 different ways.

2.3 Results

2.3.1 Descriptive Analysis

There was no statistically significant difference between age groups ($t(71) = -.07$, $p = .94$, $d = -.02$) in terms of subjective SES provided by the parents of 73 participants included in the analyses ($M_{young} = 5.62$, $SD_{young} = 1.65$, $M_{old} = 5.59$, $SD_{old} = 1.50$). Children's subjective SES also did not differ based on the age group both regarding the continuous ($U = 826$, $p = .31$) and categorical ($\chi^2 = 2.97$, $df = 1$, $p = .085$) measurements (Since assumptions of equal variances and normality was violated, Mann Whitney U test was used to analyze continuous measurement of subjective SES of children). The distribution of the children's subjective SES is in table 2.

In terms of the education of the mother ($\chi^2 = 7.89$, $df = 7$, $p = .342$), education of the father ($\chi^2 = 8.57$, $df = 10$, $p = .574$), and yearly income ($\chi^2 = 3.23$, $df = 8$, $p = .919$), there was no statistically significant difference between the young and old children. The details can be found in the Appendix F and Appendix G.

Table 2. Subjective SES of the Children

		Subjective SES (McArthur Scale)									
		1	2	3	4	5	6	7	8	9	10
Young	%	2.4	-	2.4	-	7.3	26.8	12.2	4.9	14.6	29.3
		%		%		%	%	%	%	%	%
	N	1	-	1	-	3	11	5	2	6	12
Old	%	-	-	-	-	6.5	37%	8.7	19.6	21.7	6.5
						%			%	%	%
	N	-	-	-	-	3	17	4	9	10	3

2.3.2 General Results

To understand children's general tendencies in each cluster (each age group in each condition), children's endorsement of a group's decision, difference between their fairness judgments for rich and poor group's decisions to be applied, their group preference, individual preference and acceptance of the wealth gap between the groups were compared with chance.

Because there were four trials to measure children's endorsement of a group's decision and fairness evaluations of a group's decision to be applied, participant-based and item-based variances could exist in the data. Therefore, children's decision endorsements and fairness judgments about the decisions were analyzed using the *lme4* package to account for individual variability (Bates, et al., 2014). GLMM (Generalized Linear Mixed-effects Model) and LMM (Linear Mixed-effects Model) analyses were conducted on R (R Core Team, 2013). Random intercepts of the participants and items were used in these analyses to control participant-based and

item-based variances. The forward selection method was used for these analyses. Before testing the hypotheses, each control variable was added to the null model and was compared with the null model separately. However, it should be noted that because of the low return of the Social Dominance Orientation Scale ($N = 57$), it was not included in the analyses.

In the hypotheses testing procedure, each predictor's contribution to the model was tested by adding them to the model one by one. In case the main effect of a factor was found, interactions of this factor were also tested, adding them to the model consecutively. The contribution of each factor and interaction was determined based on the chi-square tests comparing a model with the next model. In other words, after each predictor was added to a new model, this model was compared with the previous one, which did not include this factor.

2.3.1. Preference for a group's decision

Children's endorsement of a group's decision scores were derived from the answers they gave to the questions asking which group's choice should be applied.

Accordingly, one sample t-tests were conducted for each group (e.g., the young age group in the majority rich condition) to understand whether children preferred a particular group's choice differently from chance level. While children's endorsement of the poor group's choice was coded as 0, their endorsement of the rich group's choice was coded as 1, so each participant could get a decision endorsement score between 0 and 4, and this was compared to chance (2). When the majority was rich and the minority was poor, the young age group did not prefer one group over the other group ($t(20) = 1.13$, $p = .27$, $d = .25$). However, when the minority was rich, and the majority was poor, the young age group preferred the rich minority

group's choice above the chance level ($t(19) = 3.04$, $p = .007$, $d = .68$). On the other hand, when the poor group was the majority ($t(20) = -3.34$, $p = .003$, $d = -.73$) or the minority ($t(24) = -3.08$, $p = .005$, $d = -.62$), older age group showed a preference for the poor group's choice compared to chance (see Figure 1).

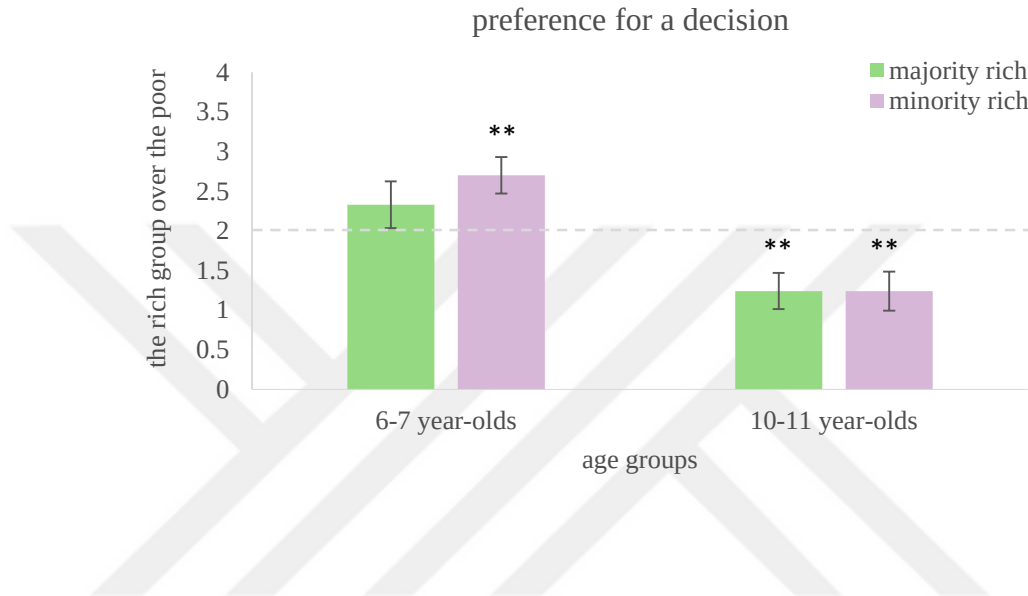


Figure 1. The choice of the rich group's decision over the poor group's decision. Error bars represent standard error. $p^* < .05$, $p^{**} < .01$, $p^{***} < .001$

Children could choose one of the two groups' suggestions (the poor group's or the rich group's suggestion) across 4 trials, which resulted in a binomial distribution. Hence, to conduct GLMM analyses, as the first step, a null model was created, including the intercept of participants and different scenarios as the predictors and children's preference for a group's choice as the outcome. Before testing the hypothesis about children's support for a group's decision, the control variables were compared separately with the null model. Participation type (at school or online; $\chi^2 = 2.43$, $df = 1$, $p = .12$), gender ($\chi^2 = .09$, $df = 1$, $p = .77$), order ($\chi^2 = 2.30$, $df = 7$, $p = .94$), trial ($\chi^2 = 1.11$, $df = 3$, $p = .78$), and subjective SES

(MacArthur Scale; $\chi^2 = .54$, $df = 1$, $p = .46$) of children did not improve the null model. Therefore, they were not added to the hypothesis testing models.

The following GLMM analysis investigated the effects of hypothesized factors on children's preferences to support a group's suggestion. Firstly, adding the age group into the model as a fixed effect factor, the new model is compared with the previous model. The results showed that the age group significantly contributed to the previous model ($\chi^2 = 23.35$, $df = 1$, $p < .001$). After that, the condition was added to the model, and this model was compared with the previous model. The model was not improved by condition ($\chi^2 = .54$, $df = 1$, $p = .46$). However, since it was one of the main effects, it was kept in the following model. Then, the interaction between the age group and the condition was analyzed. The interaction also did not improve the model ($\chi^2 = 2.11$, $df = 1$, $p = .15$). Therefore, the final model included random effects of participants and items with the fixed effects of age group and condition. The model showed that compared to the older age group, the younger children endorsed the rich group's decision to be applied more than the poor group's decision to be applied ($Estimate = 1.59$, $SE = .33$, $p < .001$; see Figure 2).

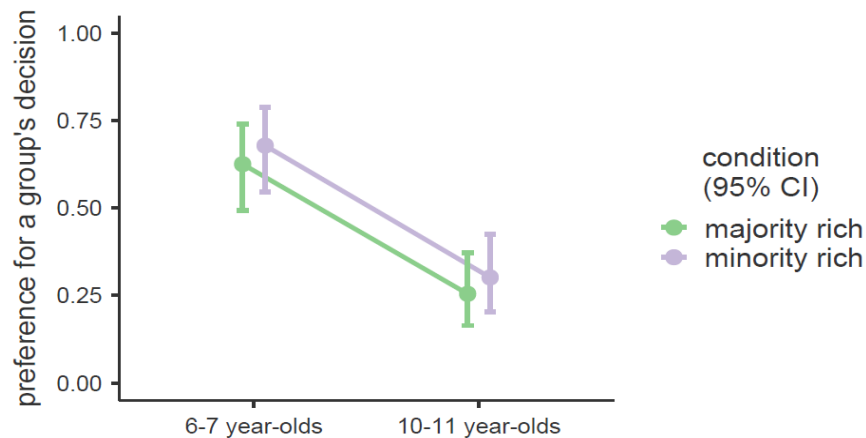


Figure 2. The effects of age group and condition on children's preference for the rich group's decision over the poor group's decision

Note: The line graphs were formed via Jamovi statistical tool.

2.3.2 Fairness judgments for the groups' decisions

After the decision endorsement questions, children were asked how okay it would be to apply Numis'/Pitas' decision separately for each scenario. Accordingly, children's fairness judgment differences between the rich and the poor group were calculated by subtracting the fairness score they gave for implementing the poor group's decision from the rich group's decision for each scenario. Therefore, children's fairness judgment differences also came from 4 scores for each child. Following these analyses, children's fairness difference scores between the rich and the poor group's demands to be applied were compared with chance (0) for each cluster. Regardless of the condition, older age group's fairness judgments for the poor and rich group's decisions being applied were not different from chance (for the majority rich condition; $t(20) = .09$, $p = .93$, $d = .02$; for the minority rich condition; $t(24) = -.47$, $p = .641$, $d = -.09$). However, while young age group found applying the poor group's decision as fairer than applying the rich group's decision in the condition where majority was rich ($t(20) = -2.16$, $p = .043$, $d = -.47$), this pattern was not seen in the condition where the minority was rich ($t(19) = .68$, $p = .51$, $d = .15$; see Figure 3).

An LMM model was formed to understand whether children's preferences for a group's decision aligned with their understanding of fairness about the options provided by the groups. Since children evaluated the fairness of meeting both groups' demands separately for each scenario, they could find applying both groups' decisions right, partially right, or wrong. As a result, children could find implementing a group's decision partially okay but find the other group's decision not okay at all. In this case, children would not find applying a specific group's decision totally fair, but they would approve one group's suggestion more than the

suggestion of the other group. To prevent missing the relation between children's preference for implementing a group decision and relatively higher acceptance of that group's decision being implemented, the fairness scores they gave for each group's decision for the same item were decided to be evaluated in relation to each other. Accordingly, a new variable was created, subtracting the fairness score children gave when asked whether it was fair to apply the poor group's decision from the score they gave when asked whether it was fair to apply the rich group's decision. This new variable was called the "fairness difference score". Because this was a continuous outcome variable, LMM was used for the following analyses.

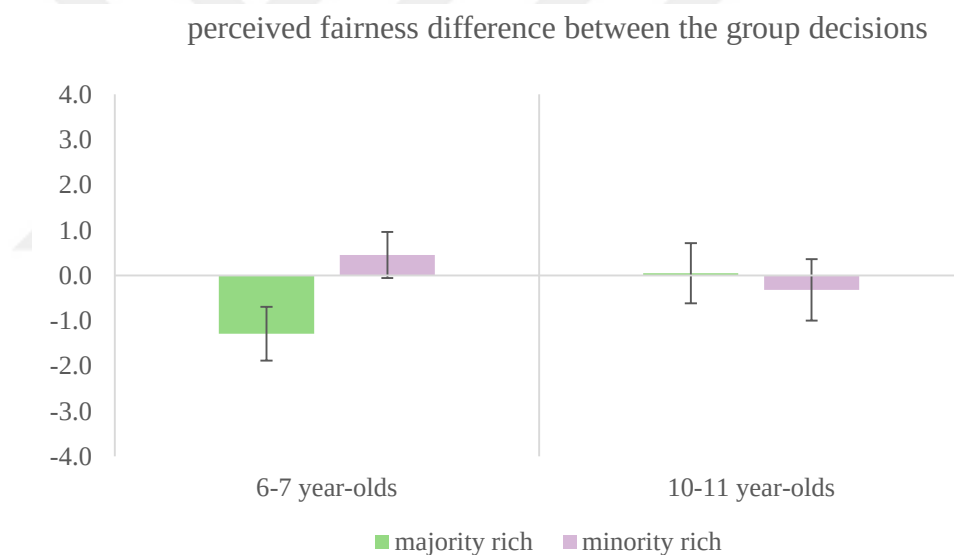


Figure 3. Perceived fairness difference between the rich and the poor groups' decisions. Error bars represent standard error. $p^* < .05$, $p^{**} < .01$, $p^{***} < .001$
 Note: The scores were calculated by subtracting fairness score given to implementing the rich group's decision from the poor group's decision. Chance comparisons and cluster comparisons for the measurements depended on one question.

Before testing the hypothesized effects on children's fairness evaluation about the groups' choices, control variables were compared with the null model, including participant and item intercepts similar to the previous hypothesis testing.

The outcome variable was the fairness difference score. The results showed that there was no contribution of participation type (at school or online; $\chi^2 = .6$, $df = 1$, $p = .44$), gender ($\chi^2 = 2.07$, $df = 1$, $p = .15$), order ($\chi^2 = 3.81$, $df = 7$, $p = .8$), trial ($\chi^2 = 1.75$, $df = 3$, $p = .63$), perceived wealth condition (similarity with the poor or the rich child; $\chi^2 = .22$, $df = 1$, $p = .9$), and subjective SES (MacArthur Scale; $\chi^2 = .74$, $df = 1$, $p = .39$) of children to the null model.

To test the hypothesis about children's fairness judgments for the possible suggestions made by the groups, the age group was first added to the null model. When this model was compared with the null model, the age group's contribution to the model was found ($\chi^2 = 16.75$, $df = 1$, $p < .001$). However, when the condition was included in the new model and compared with the age group model, it did not increase the fit of this model ($\chi^2 = 1.39$, $df = 1$, $p = .24$). Nevertheless, the condition was kept in the subsequent analysis as it was hypothesized to affect children's fairness decisions. Next, the interaction between the age group and condition was added to the model, including the condition as a fixed effect. Adding interaction to the model did not improve the previous model and hence, was not included in the following models ($\chi^2 = 2.85$, $df = 1$, $p = .09$). Next, to investigate children's consistency of group decision endorsement and their fairness judgments, children's decision endorsement was added to the model without the interaction. Therefore, the new model was compared with condition model. According to the results, children's decision endorsement improved the model fit ($\chi^2 = 154.68$, $df = 1$, $p < .001$). Therefore, keeping this variable in the new model, its interactions with other fixed effects in that model were investigated. The only interaction contributing to the model was age group and decision endorsement interaction ($\chi^2 = 5.12$, $df = 1$, $p = .024$). As a result, the final model for fairness difference scores constituted age

group, condition, preference for a group's decision, and age group's interaction with preference for a group's decision as fixed effects. The results showed that the age group factor did not maintain its effect in the final model ($Estimate = .01$, $SE = .15$, $p = .93$). However, decision endorsement, and the interaction between the age groups and decision endorsement contributed to the final model significantly. While children who endorsed the rich group's decision, found implementing that group's decision fairer than the children who endorsed the poor group's decision ($Estimate = 1.06$, $SE = .13$, $p < .001$), this effect was qualified by age group interaction ($Estimate = .42$, $SE = .18$, $p = .023$). The post-hoc analysis indicated that no differences existed between the age groups when children chose the poor group's decision to be implemented ($Estimate = .01$, $SE = .15$, $p = .99$). Both 6-7 and 10-11 year-olds who endorsed the poor group's decision found applying the poor group's decision more okay than they found applying the rich group's decision. However, 6-7 year-olds who endorsed the rich group's decision considered applying this decision compared to the poor group's decision fairer than 10-11 year-olds who endorsed the same group's decision ($Estimate = .43$, $SE = .15$, $p = .028$; see Figure 4).

To further investigate where the fairness judgment differences of children came from, children's fairness judgments of applying the rich and the poor group's decisions were separately analyzed. Similar to the procedure used in the previous analyses, control variables were compared with the null model, which only differs from the previous null models regarding the outcome variable.

2.3.3 Fairness judgments of children about the poor group's decisions

Firstly, children's fairness judgments were examined for the poor group's decisions. The null model was not improved by the participation type (at school or online; χ^2

=.83, $df = 1$, $p = .36$), gender ($\chi^2 = .21$, $df = 1$, $p = .65$), order ($\chi^2 = 6.38$, $df = 7$, $p = .5$), trial ($\chi^2 = 3.94$, $df = 3$, $p = .27$), and subjective SES (MacArthur Scale; $\chi^2 = 2.63$, $df = 1$, $p = .11$). Therefore, controls were not included in the following models.

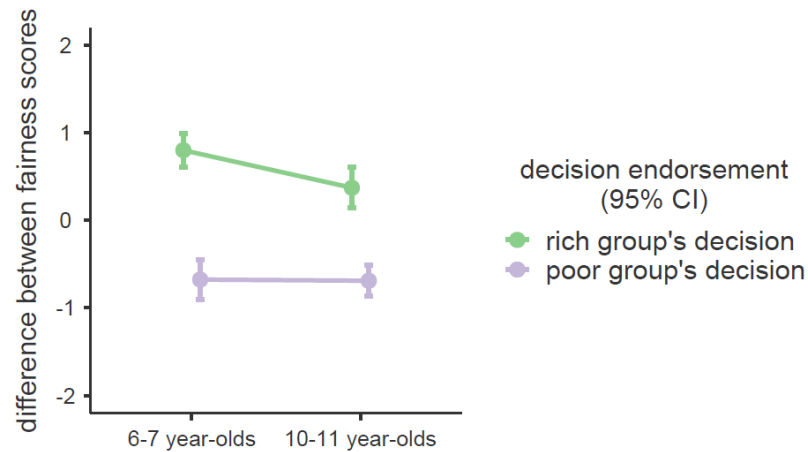


Figure 4. Differences between the scores children gave for the fairness of applying the rich and poor groups' decisions for each item

Note: Scores higher than 0 indicate that children found the rich group's decision more okay than the poor group's decision. In contrast, scores lower than 0 indicate that children found the poor group's decision more okay than the rich group's decision. The green line shows children who endorsed the rich group's decision, and the purple line shows children who endorsed the poor group's decision. The line graphs were formed via Jamovi statistical tool.

The age group factor was added to the null model of children's fairness judgments for the poor group's decision, and the new model was compared with it. Results showed that age group did not contribute to the model ($\chi^2 = 1.50$, $df = 1$, $p = .22$). Next, the condition was added to the model, but it did not improve the model either ($\chi^2 = 3.57$, $df = 1$, $p = .21$). Following this, the interaction between the age group and the condition was tested. However, it also did not improve the fit of the previous model ($\chi^2 = .62$, $df = 1$, $p = .80$). Hence, the interaction was not added to the succeeding models. Then, preference was added to the condition model, but it did not contribute to the model ($\chi^2 = .62$, $df = 1$, $p = .43$). However, as one of the main

factors, it was kept in the following analyses. The interactions of the preference with other fixed effects did not contribute to the model (all p values $> .05$), and thus were not retained in the final model. Therefore, the final model consisted of age group, condition, and preference as fixed effects. Neither of these factors had an effect on the final model, meaning children's fairness judgments about applying the poor group's decision was not affected by the age group ($Estimate = .1$, $SE = .1$, $p = .33$), condition ($Estimate = -.12$, $SE = .1$, $p = .21$), and preference ($Estimate = .06$, $SE = .07$, $p = .44$).

2.3.4 Fairness judgments of children about the rich group's decisions

Next, children's fairness judgments for applying the rich group's decision were examined. The null model was created similarly to the one used in children's fairness judgments for applying the poor group's decision. The only difference was the outcome variable, which was children's fairness judgments for applying the rich group's decision. The control variables were compared with the null model, similar to the former analyses. The results showed that participation type (at school or online; $\chi^2 = .75$, $df = 1$, $p = .39$), order ($\chi^2 = 2.74$, $df = 7$, $p = .91$), trial ($\chi^2 = 7.7$, $df = 3$, $p = .069$), and subjective SES (MacArthur Scale; $\chi^2 = .01$, $df = 1$, $p = .91$) did not contribute to the model. However, gender ($\chi^2 = 4.52$, $df = 1$, $p = .033$) improved the null model. Since gender contributed to the null model, it was controlled in the following analyses.

Firstly, the age group's effect was tested. Adding the age group to the null model did not improve the model fit ($\chi^2 = .26$, $df = 1$, $p = .61$). Adding the condition in the next model also did not contribute to the previous model ($\chi^2 = .23$, $df = 1$, $p = .63$). However, the interaction between the age group and the condition improved the

model fit ($\chi^2 = 4.92$, $df = 1$, $p = .026$). Therefore, it was retained in the following analyses. When the preference for a group's choice was added to the model, it did not contribute to the interaction model significantly ($\chi^2 = 2.06$, $df = 1$, $p = .15$). However, because it was one of the main fixed effects on children's fairness judgments, it was retained in the model. Next, gender's contribution to the preference model was investigated. It improved the preference model significantly ($\chi^2 = 4.59$, $df = 1$, $p = .032$). Therefore, the final model consisted of age group, condition, the interaction between age group and condition, preference, and gender as fixed effects. Age group, condition, and preference did not have significant effects in the final model. However, gender and the interaction between the age group and the condition ($Estimate = .41$, $SE = .18$, $p = .029$) were significant in the final model. Girls found applying the rich group's decision less fair than the boys found ($Estimate = .19$, $SE = .09$, $p = .039$). Furthermore, the interaction between the age group and condition showed a tendency for 6-7 year-olds to find implementing the rich group's suggestion fairer when the rich constituted the minority rather than the majority. Nevertheless, the older age group showed the opposite pattern. When the rich were the majority, 10-11 year-olds tended to find the rich group's decision more okay than when the rich were the minority. However, none of the pairwise comparisons were significant in the post-hoc analysis (all p values $> .05$). The results were discussed in the discussion part in detail.

2.3.5 Children's group preference

Binary answers to the question of which of the two groups children liked more were analyzed through a binomial test. Children's choices for the poor group or the poor character were coded as 0, and for the rich group or the rich character were coded as

1. When they were asked which group they liked the most, 6-7 year-olds did not like the rich group that constitutes the majority more than chance (group preference = 67%, 95% CI = .43 - .85, $p = .19$), but, they liked the rich group above the chance level when the group was the minority (Group preference = 80%, 95% CI = .56 - .94, $p = .012$). On the contrary, 10-11 year-olds liked the poor group above chance when this group is the minority (Group preference = 76%, 95% CI = .53 - .92, $p = .027$), and they liked the poor group at the chance level when the group is majority (Group preference = 68%; 95% CI = .47 - .85, $p = .108$).

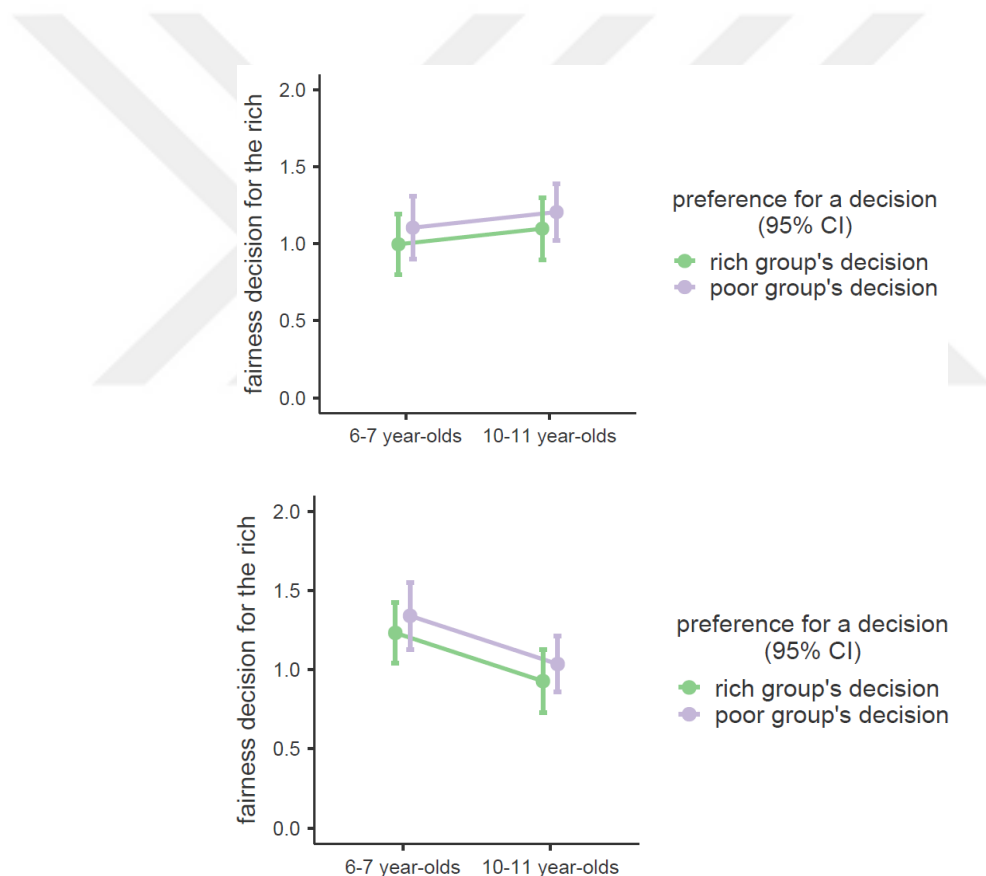


Figure 5. Fairness decision of children in the majority rich condition (at the top) and minority rich condition (at the bottom)

Note: Higher scores on the graphs represent higher levels of fairness judgment.

Since the outcome was categorical and thus, there was no normal distribution, a GLMM analysis was conducted to compare clusters with each other. There was only one question to measure children's group preference; hence, as the random intercept, only participant number was used. The null model included children's group preference as the outcome and participant number as the intercept. The null model was improved by adding age to the model ($\chi^2 = 94.35$, $df = 1$, $p < .001$). However, age model was not improved adding condition to this model ($\chi^2 = .06$, $df = 1$, $p = .806$), and condition model was not improved by the interaction ($\chi^2 = .001$, $df = 1$, $p = .97$). According to the final model including age group and condition as fixed effects, age differences were found between the groups younger and older children liked. 6-7 year olds liked rich group more than 10-11 year olds liked ($Estimate = 26.1$, $SE = 2.85$, $p < .001$).

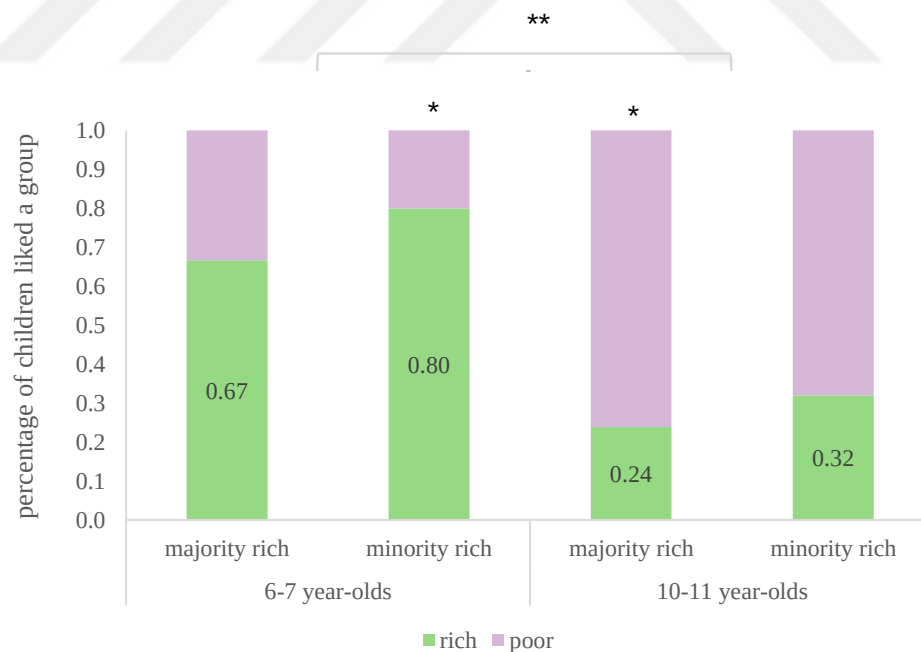


Figure 6. Children's group preference. $p^* < .05$, $p^{**} < .01$, $p^{***} < .001$

Note: The bars represent the percentage of participants that liked the rich or the poor group the most, regarding age group and condition.

2.3.6 Character similarity

When children were asked which of the two children (one rich and one poor) was more similar to themselves and when the rich consisted the majority, 6-7 year-olds did not consider one of the characters specifically resembles to themselves (Child Similarity = 70%; 95% CI = .46 - .88, $p = .115$). Nevertheless, in the condition where the rich were the minority, 6-7 year-olds found the rich character similar to themselves more than chance level (Child Similarity = 80%; 95% CI = .56 - .94, $p = .012$). Unlike 6-7 year-olds, 10-11 year-olds found the rich character similar to themselves more than chance in both conditions (majority-rich/minority-poor; Child similarity = 81%; 95% CI = .58 - .95, $p = .007$; minority-rich/majority-poor; Child similarity = 96%; 95% CI = .80 - 1.00, $p < .001$).

To compare cluster differences, only participant number was used as the random intercept in GLMM analysis. The null model included children's character liking as the outcome and participant number as the intercept. The null model was neither improved by age or condition factor. Children tended to perceive themselves more similar to the rich character than the poor character.

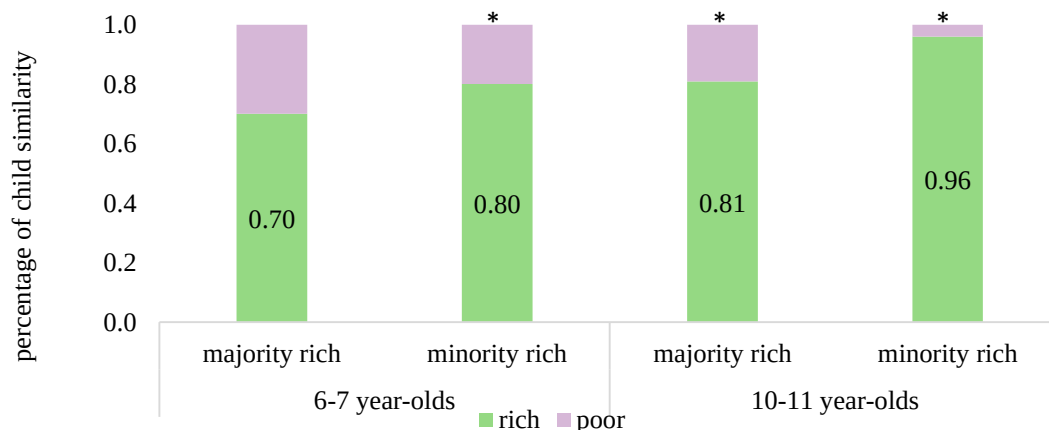


Figure 7. Percentage of children perceived a character similar to them
Note: The bars represent the percentage of participants that perceived the rich or the poor character similar to them, regarding age group and condition.

2.3.7 Children's perception of wealth gap fairness

As children's ideas about the wealth gap were measured based on a 3-point Likert scale, perceived fairness of the wealth gap was a continuous variable. Children's answers to the perceived fairness of the wealth gap question (how okay do you think these differences between the groups are?) were coded as follows: "very okay" = 2, "a little bit okay" = 1, and "not okay at all" = 0. To compare each group's perceived wealth gap fairness to the chance level (1), one sample t-tests were conducted. Six-7 year-olds did not find the wealth gap okay in the majority-rich/minority-poor condition ($t(20) = -2.09$, $p = .049$, $d = -.46$). However, their fairness judgments of the wealth gap were at chance level in the minority-rich/majority-poor condition ($t(19) = -0.30$, $p = .772$, $d = -.07$). On the other hand, 10-11 year-olds found wealth gap inequality as not okay in both conditions (majority-rich/minority-poor; $t(20) = -2.95$, $p = .008$, $d = -.64$; minority-rich/majority-poor; $t(24) = -7.27$, $p < .001$, $d = -1.45$).

Since children's perceived wealth gap fairness were independent from each other, ANOVA was conducted. The results of the 2 (age group) x 2 (wealth status) factorial ANOVA showed that there was a significant main effect of age group ($F(1,83) = 8.77$, $p = .004$, $\eta^2 = .1$) on children's perceived wealth gap fairness. The younger age group found wealth inequality between the groups more acceptable than older age group.

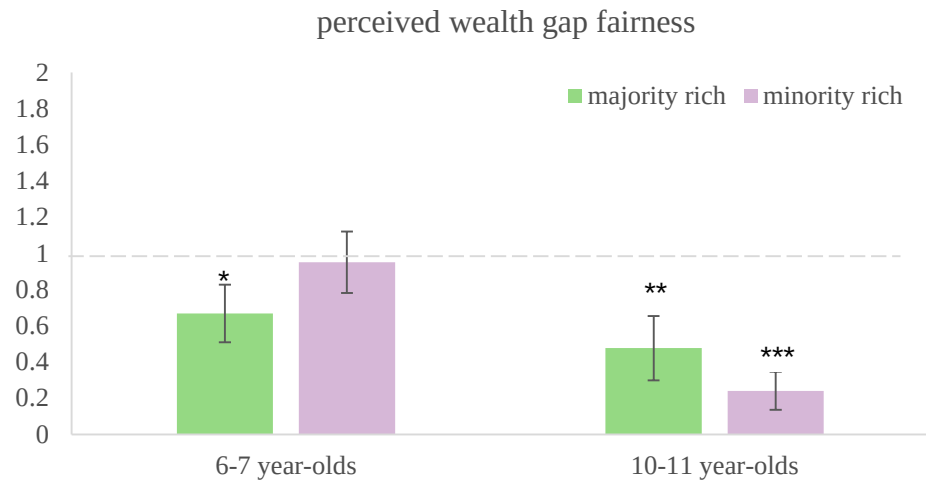


Figure 8. Perceived wealth gap fairness by children

Note: The higher scores mean higher acceptance of the wealth gap by children, between the introduced groups, regarding age group and condition.

CHAPTER 3

DISCUSSION

Majoritarian rule is considered a critical element in the description of democracy (Flanagan et al., 2005). However, this element also involves the risk of creating a status quo, which is undesirable in democracies (Munck, 2016). To reveal when children start to grasp the risk of status-quo arising from the majority rule, the current study investigated the effects of the groups' size (majority or minority) and social status (high or low wealth) on children's decisions and judgments about group decisions. More specifically, children were asked which group's decision they supported when two groups with conflicting preferences also differed from each other regarding their group size and wealth status. The results showed that the younger age group endorsed the rich group's decision when they constituted the minority. However, when the rich were the majority, 6-7 year-olds did not significantly endorse any group's decision. On the other hand, 10-11 year-olds chose the poor group's decision to be implemented regardless of the group size (majority or minority). Further, overall, older children endorsed the poor group's decision more than the younger group.

Interestingly, according to chance analyses, younger children found applying the poor group's decision rather than the rich group's decision more okay if the poor were the minority, but not when they were the majority. Older children did not consider applying one group's decision to be fairer than the other group's decision in any condition. Children's decision endorsement was found to be consistent with their fairness judgments. In other words, children who endorsed the rich group's decision attributed more fairness to the rich group's decision than they attributed to the poor

group's decision and vice versa. Moreover, 6-7 year-olds who endorsed the rich group's decision indicated higher support for their decision than 10-11 year-olds making a similar decision.

When children's age-related attitudes toward the groups were investigated, 6-7 year-olds were found to like rich groups and characters more than 10-11 year-olds. Furthermore, in line with our prediction, the younger age group was more accepting of the inequalities between the groups than the older age group.

3.1 The role of wealth status on children's preferences and judgments of group decisions

The current study showed that the wealth status of the groups is a significant predictor in children's endorsement of a group's decision. In general terms, the younger age group in the study favored the rich group's decision and they also indicated that they liked the rich group more than the poor group. The results about 6-7 year-olds' prioritization of the rich groups' decisions seem to contradict several studies from the resource-distribution literature, which indicate children's increasing support for rectifying resource inequalities or acting in favor of structurally and materially disadvantaged agents (e.g., Elenbaas, 2019b; Essler & Paulus, 2021). However, in these studies, the gain of the receiver as a result of the rectification strategy or earning fewer prizes than an advantaged individual is directly related to these individuals' lack of resources. In other words, children can easily visualize in their minds what changes after resource distribution for the receiver with inadequate materials. In this case, distributions that contribute to inequality become evidently related to unfair practices for children around the ages of 6 and 7 (Rizzo et al., 2016; Rizzo et al., 2020). However, in the current study, although the groups' decisions

were in favor of themselves, applying a group's decision would not directly provide a material advantage for either of the groups. Accordingly, accounting for additional disadvantages due to the lack of opportunities for a group with low wealth status might require a higher cognitive capacity to reason about fairness, which is achieved at older ages (e.g., mentioning unfairness of exclusion rather than only indicating it is wrong; Gönül et al., 2023). A recent study supports this argument. When the results of a procedure would change to provide education materials to low-income children, the participants evaluated this change as fairer than the change made for education opportunities (Acar & Sivilis, 2023). Therefore, 6-7 year-olds possibly did not consider giving decision-making privileges to a disadvantaged group as a necessity of acting fairly. Nevertheless, rather than showing no preference for either group's decisions, 6-7 year-olds preferred the rich group's decision over the poor group's decision overall. At this point, factors other than fairness, such as social preferences and stereotypes of children about social classes, can provide explanations for this situation.

Previous studies show that young children (including 6-year-olds) attribute certain positive features to rich people, such as being talented or popular (Shutts et al., 2016; Yang & Dunham, 2022). In the same studies, children also indicate that they like these individuals more than poor individuals. However, while children allocate more resources to individuals with low wealth in a number of studies (Shutts et al., 2016), there are also studies showing children's group liking and resource distribution are associated (Elenbaas et al., 2022). The findings of the current study seem to be in line with the latter. Similarities stand out when children's group liking and preference for a group's decision are considered together. Although the younger age group supported the rich group's decision in general, this effect stayed at the

chance level as well as their liking of the group when the rich group was the majority.

Furthermore, 6 and 7 year-olds' group liking and decision endorsement of a group seemed to align with their fairness judgments of the wealth gap. In general, they did not find wealth inequalities either totally fair or unfair. However, when the conditions were separately investigated, the young age group was found to evaluate wealth-based differences between the rich group constituting the majority and the poor group constituting the minority significantly unfair, but they found these inequalities partially acceptable in the condition where the minority is rich, and the majority is poor.

Unlike the younger age group and different than chance level, the older group supported the poor group's decision to be applied and liked the poor group more than the rich group. Furthermore, as it is found in the previous studies, in both conditions, 10 and 11-year-olds regarded the inequality between groups as unfair (Elenbaas & Mistry, 2021; Yang & Dunham, 2022). These results also support the literature showing a qualitative change in children's fairness judgments and decisions around the age of 10 (Elenbaas et al., 2016; Peretz-Lange et al., 2022). Around ten years old, children can make detailed judgments about social inequalities (Elenbaas & Killen, 2017), and for different types of resources (education or health supplies), they focus on rectifying the disadvantaged group's condition rather than acting with the concern of favoring their in-group (Elenbaas et al., 2016; Elenbaas & Killen, 2016). Furthermore, children are primarily concerned about the wealth status of the groups before other social cues (e.g., race; Burkholder et al., 2021). In line with these studies, 10-11 year-olds who participated in the current study made their decisions in favor of the poor and considered the wealth status of the groups more than the size of

the groups. An important factor in the older age group's pro-poor decisions and judgments can be their attribution of similar importance to giving opportunities (in the current study, the result of applying a group's decisions) and resources to individuals with low wealth status. Being aware that the rich can reach opportunities more easily than the poor, they oppose favoring the rich when a service will be provided to a number of individuals that could be from the rich and poor groups (Elenbaas, 2019a), and this opposition increases in children who evaluate larger inequalities between the groups. In the current study also, the older age group found inequalities between the groups more problematic than younger children. In addition to this, although the scenarios were created with the aim of preventing children from thinking that applying these decisions would provide an economic advantage for a group, compared to the younger age group, the older age group in the current study possibly considered applying the poor group's decision would be by some means beneficial for them.

Alternatively, considering the ongoing relationship between the children's group liking and decisions in favor of this group (Elenbaas et al., 2022), 10-11 year-olds' decisions and especially more positive attitudes towards the poor than the rich can also result from their changing stereotypes and attributions at these ages for the rich and the poor. Children at these ages expect positive characteristics such as prosociality and devoting effort from the poor rather than the rich (Yang & Dunham, 2022). In line with this, children's attributions for the rich and the poor, both favoring their own group, also differ around these ages. While children attribute the rich group's choice to selfishness, they explain the poor group's choice to the poor group's consideration of others' needs (Elenbaas & Killen, 2018).

On the other hand, both age groups in the current study made decisions that aligned with their fairness judgments. They made decisions reflecting which group's decision they found fairer than the other group's decision. The only difference between the age groups was younger children's higher levels of fairness attribution for the rich group when they chose this group more than older children who made similar preferences. This difference might be a result of amplified pro-rich stereotypes at these ages. For instance, if young children perceived the rich as smarter (Yang & Dunham, 2022), they might have thought applying this group's decision could be more logical.

In contrast to the effect of preference on children's fairness judgment differences between the groups, when children's fairness judgments for the rich and the poor groups' decisions were separately investigated, the group whose decision children endorsed did not predict how fair they found applying this group's decision. When children's suggestions during the testing, such as building the park in the middle of the island or teaching the recipes of both vegetables, are considered, these results become meaningful. In other words, children might not find applying one of the groups' decisions completely fair due to reasons such as meeting the demands of only one group. However, when they were required to choose one of the group's decisions, they preferred the decision they found fairer than the other. These results seem valuable, as they support previous studies about children's decision-making procedures depending on their consideration of the relatively fairest judgments among the options (Stowe et al., 2022).

3.2 The role of group size on children's preferences and judgments of group decisions

There was no main effect of the group size (majority or minority) on children's preference for a group's decision. One factor that might have affected failing to find an effect of the group size is the lack of salience of disadvantage the unsupported group would experience. Nevertheless, there were nuanced differences when condition effects were examined separately for both age groups. Although there are no significant condition-based differences in children's endorsement of a group's decision, their group preference, and acceptance of the wealth gap, similar trends in all these variables seem interesting. As mentioned in the previous section, not in the older but in the younger age group, children showed positivity toward the rich group when the group was the minority. Nevertheless, these effects did not reach significance when the rich constituted the minority. The reason for these trends could be the effect of normativity, which is a concept also Paulus and Essler (2020) suggested to explain young children's perpetuation of inequalities. To clarify, around the world, rich people constitute a very small part of society (Credit Suisse, 2022). During the socialization process, children learn about the social structure of the world from their parents or media (Dickinson et al., 2023). Around age 7, children expect more social power from the rich than the poor regarding various aspects (such as policy making; Yang & Dunham, 2022). Accordingly, similar to adults (Cao & Banaji, 2017), children also evaluate small groups as leaders or as in charge, especially when the ratio of a group to another is large (Heck et al., 2021). Therefore, perceiving the structure of society and adopting it as a norm can affect children's decisions about social issues. In line with this argument and the positivity bias regarding smartness at these ages (Yang & Dunham, 2022), young children's higher

levels of fairness attribution for the rich group's decision compared to the old group was also found when the rich group was the minority. However, there were no significant effects in the post-hoc analysis. Therefore, to understand the young age group's positivity toward the rich minority, their attributions toward the high-status group as the minority and the majority should be further investigated.

3.3 Limitations and further studies

The current study has several limitations. Firstly, because the group size is a clear cue and could be easily reminded through using groups including different numbers of individuals, it was expected to be understood by children of all ages. Since the groups were presented on each slide, they could remember which group was the majority and which was the minority. However, although wealth is also a salient cue in daily life, patched clothes designed on the Paint would not represent poverty but fashion. Therefore, an additional wealth cue was decided to be added to the slides. Furthermore, before the testing phase, children also answered manipulation check questions about wealth status. Thus, the current study may have overemphasized wealth cues, leading children to base their decisions primarily on this cue.

Besides, based on the literature, children were expected to show support for the majority decision (Hok et al., 2019), especially when they were disadvantaged. However, the results did not support this hypothesis. According to the results, children's main concern was the wealth status of the groups. The socioeconomic context in Turkey could be one of the potential reasons for this. In 2021, Turkey was one of the countries that lost the most wealth per adult, with a large depreciation of the Turkish lira against the US dollar (Credit Suisse, 2022). According to more recent research (April, 2023), Turkey's annual inflation rate was 105.19%

(ENAGroup, 2023). In addition to the impoverishment by the country, with a high level of GINI index (a measurement used to represent income inequality; The World Bank, 20), Turkey comes at the beginning of the countries that were considered reducing income inequality should be the priority (Boose et al., 2022). As a result, both the effects of income inequality and impoverishment might become significantly more visible, even for young children. This could be one of the reasons why children living in Turkey put emphasis on wealth status rather the group size.

To understand whether children do not pay attention to the majority decision in Turkey or whether wealth is a particularly strong status cue that overrides the effect of the majority decision, a baseline condition could be implemented where children are presented with two groups that are equal in social status but differ regarding their group size.

Furthermore, while SES was aimed to be measured through various questions asked to parents and children, a number of factors prevented examining the effect of children's intergroup attitudes on their support and fairness judgments about applying a group's decision. One of the problems is the measurement of children's subjective socioeconomic status. To measure this, we asked children two questions. In one of these questions, two characters who matched the participant's gender were shown, and participants were asked which character was more similar to them. In that question, most children found the rich character similar to themselves (72 of the participants included in the analysis), and there was not enough variability in children's answers to this question. In addition to this, a large proportion of children (nearly 80%) considered themselves above the fifth ladder in the Child version of the MacArthur scale, and several children did not make an explanation about or gave irrelevant answers to the same question. For instance, some children mentioned,

“they chose a certain rung on the ladder because they live on that floor of their apartment”.

Another problem was the lack of data regarding the subjective socioeconomic status of one of the parents, the education levels of both parents and the yearly household income of the family. Although participants were given demographic information questionnaires asking these socioeconomic status indicators, the return rate of the forms was inadequate to analyze the role of these factors. Therefore, we can only speculate about the results in light of previous studies on children’s intergroup attitudes regarding their socioeconomic status. The research shows that while children with higher wealth status develop more negative beliefs about people in poverty as they age, children with lower wealth status show a similar pattern until age 7.5, but then they show less negativity after that age (Heberle & Carter, 2020). Furthermore, as the previous studies showed, if the younger age group believed they had a higher wealth status than they really did and if the older age group’s subjective status was more in line with their objective status (Amir et al., 2019; Peretz-Lange et al., 2022), intergroup attitudes may also have contributed to the age differences found in this study. To clarify, if the younger age group in this study assumed they have high status, they might have more negative beliefs for the poor group in the study. On the other hand, if the older age group had more realistic views of their status, they could see themselves as less advantaged compared to younger children, and their negativity toward the poor group in the study might have decreased. However, we should bear in mind that there were no significant differences between the age groups regarding their subjective socioeconomic status according to their answers. Thus, these speculations are made based on children’s irrelevant or

inadequate answers and focus on previous research rather than the answers they gave for their subjective socioeconomic status.

To understand the effects of intergroup attitudes on children's status-based decisions between majority and minority groups, the aim of further studies should be reaching out to enough parental data regarding the participants' socioeconomic status.

Finally, proto-political attitudes could be strongly connected with each country's political atmosphere. Therefore, to understand how the macro system affects the development of democracy's basic foundations in childhood, children of different cultures should also be tested.

3.4 Conclusion

Children start understanding social status cues at very young ages, and their group decisions are also formed based on their inferences about these cues. Depending on age-related differences in children's attitudes and judgments regarding the social status of people, their decision-making processes as a group also change. The current study showed that while young children generally endorse a rich group's decision, older children endorse a poor group's decision, regardless of whether the group is majority or minority. This might represent children's greater concerns for a group's wealth status, especially for children who live in a country where the economic income inequality is large. Furthermore, as the findings showed, children consider the decision they endorsed fairer than the decisions of the other group. While young children do not regard wealth inequality as completely unfair, they also show a similar approach, attributing more fairness to the rich group's decision when they endorse this group. In contrast, the old age group considers that the wealth gap between the groups is unfair. They also endorse the poor group's decision more and

judge applying this group's decisions fairer. This shows that children find the decisions they preferred as fairer than the other options, and as children age, with the increasing complexity in their fairness judgments, they make decisions in favor of the disadvantaged groups.

These findings are notable in terms of the development of political attitudes. By understanding what kind of proto-political thoughts children have and how these thoughts change as they grow, we can also make more sense of adult political behavior as well as the role of socialization processes that play a role in the acquisition of these beliefs. Furthermore, based on the knowledge of developmental patterns children show regarding their ideas on how a society should function, education programs can be developed to improve democratic understanding at young ages. Supporting children to acquire the values of democracy as they become capable of grasping them is essential to living in a democratic society.

APPENDIX A

ETHICAL PERMISSION FORM

Evrak Tarih ve Sayısı: 24.01.2023-109766

T.C.
BOĞAZİÇİ ÜNİVERSİTESİ
SOSYAL VE BEŞERİ BİLİMLER YÜKSEK LİSANS VE DOKTORA TEZLERİ ETİK İNCELEME
KOMİSYONU
TOPLANTI KARAR TUTANAĞI

Toplantı Sayısı : 39
Toplantı Tarihi : 18.01.2023
Toplantı Saati : 16:00
Toplantı Yeri : Zoom Sanal Toplantı
Bulunanlar : Prof. Dr. Feyza Çorapçı, Dr. Öğr. Üyesi Yasemin Sohtorik İlkmen, Dr. Öğr. Üyesi Ayşegül Metindoğan
Bulunmayanlar : Dr. Öğr. Üyesi Harun Muratoğulları, Doç. Dr. Arhan S. Ertan, Doç. Dr. Senem Yıldız

Özdeş Çetin

Psikoloji

Sayın Araştırmacı,

"Grup Kararlarında Çocukların Grubun Sosyal Konumuna Bağlı Adalet Değerlendirmeleri" başlıklı projeniz ile ilgili olarak yaptığımız SBB-EAK 2023/06 sayılı başvuru komisyonumuz tarafından 18 Ocak 2023 tarihli toplantıda incelenmiş ve uygun bulunmuştur.

Bu karar üyelerin toplantıya çevrimiçi olarak katılımı ve oy birliği ile alınmıştır. Onay mektubu üye ve raportör olarak Yasemin Sohtorik İlkmen tarafından toplantıya katılan bütün üyeler adına e-imzalanmıştır.

Saygılarımızla, bilgilerinizi rica ederiz.

Dr. Öğr. Üyesi Yasemin
SOHTORİK İLKMEN
Öğretim Üyesi

e-imzalıdır
Dr. Öğr. Üyesi Yasemin Sohtorik
İlkmen
Öğretim Üyesi
Raportör

SOBETİK 39 18.01.2023

Bu belge, güvenli elektronik imza ile imzalanmıştır.

APPENDIX B

SOCIAL DOMINANCE ORIENTATION SCALE

Social Dominance Orientation							
Please indicate how much you agree with each statement below by marking between 1 and 7 on the rating you indicated.	Strongly disagree	Disagree	Somewhat disagree	Neither disagree nor agree	Somewhat agree	Agree	Strongly agree
	1	2	3	4	5	6	7
1. No matter how much effort it takes, we ought to strive to ensure that all groups have the same chance in life.							
2. Group equality should not be our primary goal.							
3. Some groups of people are simply inferior to other groups.							
4. Groups at the bottom should not have to stay in their place.							
5. Having some groups on top really benefits everybody.							
6. No one group should dominate in society.							
7. We shouldn't try to guarantee that every group has the same quality of life.							
8. An ideal society requires some groups to be on top and others to be on the bottom.							
9. Group equality should be our ideal.							

10. We should work to give all groups an equal chance to succeed.							
11. We should do what we can to equalize conditions for different groups.							
12. It is unjust to try to make groups equal.							
13. Group dominance is a poor principle.							
14. Groups at the bottom are just as deserving as groups at the top.							
15. We should not push for group equality.							
16. It's probably a good thing that certain groups are at the top and other groups are at the bottom.							

APPENDIX C

YENİ SOSYAL BASKINLIK ÖLÇEĞİ

Yeni Sosyal Baskınlık Ölçeği							
Lütfen aşağıdaki her bir ifadeye ne kadar katıldığınızı, gösterilen dereceleme üzerinde 1 ile 7 arasında işaretleyerek belirtiniz.	Kesinlikle katılmıyorum	Oldukça katılmıyorum	Biraz katılmıyorum	Ne katılıyorum ne de katılmıyorum	Biraz katılıyorum	Oldukça katılıyorum	Kesinlikle katılıyorum
	1	2	3	4	5	6	7
1. Ne kadar çaba gerektirirse gerektirsin, tüm grupların hayatta eşit şansa sahip olmasını sağlamak için mücadele etmeliyiz.							
2. Grupların eşitliği öncelikli hedefimiz olmamalıdır.							
3. Bazı insan grupları elbette diğer gruplardan daha aşağı konumdadır.							
4. En alttaki gruplar bulundukları yerde kalmak zorunda olmamalıdır.							
5. Bazı insan grupları bulundukları yerde tutulmalıdır.							
6. Toplumda hiçbir grup baskın olmamalıdır.							
7. Bütün grupların eşit yaşam koşullarına sahip olmasını güvence altına almaya çabalamamalıyız.							
8. İdeal bir toplum, bazı grupların en üstte diğer grupların ise en altta olmasını gerektirir.							
9. Grupların eşitliği idealimiz olmalıdır.							

10. Tüm gruplara başarılı olmaları konusunda eşit şans vermek için çalışmalıyız.							
11. Farklı grupların koşullarını eşitlemek için elimizden ne geliyorsa yapmalıyız.							
12. Grupları eşit hale getirmeye çalışmak adaletli bir şey değildir.							
13. Grup baskınlığı kötü bir şeydir.							
14. En alttaki gruplar da tıpkı en üsttekiler kadar değerlidir.							
15. Grupların eşit olması için uğraşmamalıyız.							
16. Belirli grupların en üstte diğerlerinin en altta olması belki iyi bir şeydir.							

APPENDIX D

SCRIPT (ENGLISH VERSION)

Now, I will show you an island. On this island, Pitas and Numis live. Look, *(a frame appears around Pitas)* these are Pitas. Most of the inhabitants on this island are Pitas. Look, *(a frame appears around Numis)* these are Numis. Few of the inhabitants of this island are Numis. Now, I will give you some information about Pitas and Numis. Pitas *(a frame appears around Pitas)* live in houses like this *(image of one of the houses appears near Pitas)* and play with toys like these *(image of one of the toys appears near Pitas)*. Numis *(a frame appears around Numis)* live in houses like this *(image of the other house appears near Numis)* and play with toys like these *(image of the other toy appears near Numis)*.

Manipulation Check Questions:

1. The rooms of children living on this island are also different. Some children's rooms are like this *(one of the room images appears)*. On the other hand, some children's rooms are like this *(the other room image appears)*.
 - a. *(one of the room images appears in the middle of the page and the groups appear at the two sides of the image)* Whose rooms do you think are like this, the rooms of Pitas or Numis?
 - b. *(the other room image appears in the middle of the page and the groups appear at the two sides of the image)* Whose rooms do you think are like this, the rooms of Pitas or Numis?

Testing Phase:

Okay, thank you. On this island, some changes and events will take place. Let's have a look at the ideas of Pitas and Numis about these changes and events.

1. A playground will be built on this island. Pitas want the playground to be built on the island's upper side, which is close to their houses. However, Numis want the playground to be built on the island's lower side, which is close to their houses.
 - a. Do you think the playground should be built on the island's upper side, as Pitas suggested, or on the island's lower side, as Numis suggested?
 - b. If the park was built on the island's upper side, as Pitas suggested, how okay would it be? Would it be very okay, a little okay, or not okay at all?
 - c. If the park was built on the island's lower side, as Numis suggested, how okay would it be? Would it be very okay, a little okay, or not okay at all?
2. A bus will be chosen for the school trips on this island. Numis want the green bus to be chosen, which follows the route close to their houses. However, Pitas want the yellow bus to be chosen, which follows the route close to their houses.
 - a. Do you think the green bus should be chosen, as Numis suggested or, the yellow bus should be chosen, as Pitas suggested?
 - b. If the green bus was chosen for the school trips, as Numis suggested, how okay would it be? Would it be very okay, a little okay, or not okay at all?
 - c. If the yellow bus was chosen for the school trips, as Pitas suggested, how okay would it be? Would it be very okay, a little okay, or not okay at all?
3. Seeds of a tree will be given to children on this island. Numis want the light colored tree seeds to be given which grows well in their area. However, Pitas want the dark colored tree seeds to be given which grows well in their area.

- a. Do you think the light colored tree seeds should be given to children, as Numis suggested, or the dark colored tree seeds should be given to children, as Pitas suggested?
 - b. If the light colored tree seeds were given to children, as Numis suggested, how okay would it be? Would it be very okay, a little okay, or not okay at all?
 - c. If the dark colored tree seeds were given to children, as Pitas suggested, how okay would it be? Would it be very okay, a little okay, or not okay at all?
4. A cooking class will be given in the schools on this island. Pitas want the dishes of yellow colored vegetable, which grows in their area, to be toughed in this class. However, Numis want the dishes of purple colored vegetable, which grows in their area, to be toughed in this class.
- a. Do you think the yellow colored vegetable dishes should be thought, as Pitas suggested, or the purple colored vegetable dishes should be thought, as Numis suggested?
 - b. If the yellow colored vegetable dishes were thought, as Pitas suggested, how okay would it be? Would it be very okay, a little okay, or not okay at all?
 - c. If the purple colored vegetable dishes were thought, as Numis suggested, how okay would it be? Would it be very okay, a little okay, or not okay at all?

Group preference question:

Which group did you like the most? Pitas or Numis?

Wealth gap question:

Do you remember that Pitas live in houses like this and have toys like this? Do you remember that Numis live in houses like this and have toys like this? How okay do you think these kinds of differences between Pitas and Numis?

Child preference question:

Which child did you like the most? The child from Numis, or the child from Pitas?

Child similarity question:

Which child do you think looks like you? The child from Numis, or the child from Pitas?

Subjective socioeconomic status question:

“Imagine that this ladder is like your neighborhood. There are some families in your neighborhood that have the most money and food, the biggest houses, and whose parents have the best jobs. Imagine that those families are here (*pointing to rung 10*). There are other families who have the least money and food, the smallest house or no house, and whose parents have the worst jobs or no jobs. Imagine that those families are here (*points to rung 1*). Now think about your own family. Where would you put your family on this ladder? Why do you think your family is there?” (Peretz-Lange et al., 2022)

APPENDIX E

SENARYO (TURKISH VERSION)

Şimdi sana bir ada göstereceğim. Bu adada, Pitalar ve Numiler yaşıyor. Bak, bunlar Pitalar. Pitalar, bu adada yaşayanların büyük bir kısmını oluşturuyor. Bak, bunlar da Numiler. Numiler, bu adada yaşayanların küçük bir kısmını oluşturuyor. Şimdi sana, Pitalar ve Numilerle ilgili bazı bilgiler vereceğim. Pitalar, bunun gibi evlerde yaşıyor ve bunun gibi oyuncaklara sahipler. Numiler ise bunun gibi evlerde yaşıyor ve bunun gibi oyuncaklara sahipler.

Manipülasyon Kontrolü Soruları:

1. Bu adadaki çocukların odaları da birbirinden farklı. Bazı çocukların odaları (*oda görsellerinden biri belirir*) bunun gibi, bazı çocukların odaları ise (*oda görsellerinden diğeri belirir*) bunun gibi.
 - a. (*Ortada oda görsellerinden biri ve bu görselin iki tarafında da gruplar belirir*) Peki sence, kimlerin odaları bunun gibidir? (*grubun etrafında çerçeve belirir*) Pitalar'ın mı yoksa (*grubun etrafında çerçeve belirir*) Numiler'in mi?
 - b. (*Ortada oda görsellerinden diğeri ve bu görselin iki tarafında da gruplar belirir*) Peki sence, kimlerin odaları bunun gibidir? (*grubun etrafında çerçeve belirir*) Pitalar'ın mı yoksa (*grubun etrafında çerçeve belirir*) Numiler'in mi?
2. Bu adadaki çocuklar paralarını cüzdanında taşıyor. Bazı çocukların (*cüzdan görsellerinden biri belirir*) pek parası yok, bazı çocukların ise (*cüzdan görsellerinden diğeri belirir*) çok parası var.

- a. (*Ortada cüzdan görsellerinden biri ve bu görselin iki tarafında da gruplar belirir*) Peki, sence bunun gibi cüzdanlar kimindir? (*grubun etrafında çerçeve belirir*) Pitalar'ın mı yoksa (*grubun etrafında çerçeve belirir*) Numiler'in mi?

Tamam, teşekkürler. Bu adada bazı yenilikler ve bazı etkinlikler yapılacak. Pitalar ve Numiler'in bu adada yapılacaklarla ilgili fikirlerine birlikte bakalım mı?

Test aşaması:

1. Bu adaya bir park yapılacak. Pitalar, kendi evlerine yakın olması için parkın adanın yukarı kısmına yapılmasını istiyor. Numiler ise kendi evlerine yakın olması için parkın adanın aşağı kısmına yapılmasını istiyor.
 - a. Sence park Pitalar'ın istediği gibi adanın yukarı kısmına mı yapılmalı yoksa Numiler'in istediği gibi aşağı kısmına mı yapılmalı?
 - b. Peki, sence parkın Pitalar'ın istediği gibi adanın yukarı kısmına yapılması ne kadar doğru olur? Çok mu doğru olur, biraz mı doğru olur, yoksa hiç doğru olmaz mı?
 - c. Peki, sence parkın Numiler'in istediği gibi adanın aşağı kısmına yapılması ne kadar doğru olur? Çok mu doğru olur, biraz mı doğru olur, yoksa hiç doğru olmaz mı?
2. Bu adada okul gezilerine hangi otobüsle gidileceği seçilecek. Numiler okul gezileri için kendi evlerine yakın yoldan geçen yeşil otobüsün seçilmesini istiyor. Pitalar ise okul gezileri için kendi evlerine yakın yoldan geçen sarı otobüsün seçilmesini istiyor.
 - a. Peki sence, okul gezileri için Numiler'in istediği gibi yeşil otobüs mü seçilmeli yoksa Pitalar'ın istediği gibi sarı otobüs mü seçilmeli?

- b. Peki, sence okul gezileri için Numiler'in istediği gibi yeşil otobüsün seçilmesi ne kadar doğru olur? Çok mu doğru olur, biraz mı doğru olur, yoksa hiç doğru olmaz mı?
 - c. Peki, sence okul gezileri için Pitalar'ın istediği gibi sarı otobüsün seçilmesi ne kadar doğru olur? Çok mu doğru olur, biraz mı doğru olur, yoksa hiç doğru olmaz mı?
3. Bu adadaki çocuklara belirli bir ağaç türünün tohumu verilecek. Numiler, çocuklara kendi yaşadıkları yerde iyi büyüyen açık renkli ağaç tohumundan verilmesini istiyor. Pitalar ise çocuklara kendi yaşadıkları yerde iyi büyüyen koyu renkli ağaç tohumundan verilmesini istiyor.
- a. Sence çocuklara Numiler'in istediği gibi açık renkli ağaç tohumu mu verilmeli yoksa Pitalar'ın istediği gibi koyu renkli ağaç tohumu mu verilmeli?
 - b. Peki, sence çocuklara Numiler'in istediği gibi açık renkli ağaç tohumunun verilmesi ne kadar doğru olur? Çok mu doğru olur, biraz mı doğru olur, yoksa hiç doğru olmaz mı?
 - c. Peki, sence çocuklara Pitalar'ın istediği gibi koyu renkli ağaç tohumunun verilmesi ne kadar doğru olur? Çok mu doğru olur, biraz mı doğru olur, yoksa hiç doğru olmaz mı?
4. Bu adadaki okullarda bir yemek kursu verilecek. Pitalar, kursta kendi yaşadıkları yerde yetişen sarı sebze yemeklerinin öğretilmesini istiyor. Numiler ise kursta kendi yaşadıkları yerde yetişen mor sebze yemeklerinin öğretilmesini istiyor.
- a. Sence kursta Pitalar'ın istediği gibi sarı sebze yemekleri mi öğretilmeli yoksa Numiler'in istediği gibi mor sebze yemekleri mi öğretilmeli?

- b. Peki, sence kursta Pitalar'ın istediği gibi sarı sebze yemeklerinin öğretilmesi ne kadar doğru olur? Çok mu doğru olur, biraz mı doğru olur, yoksa hiç doğru olmaz mı?
- c. Peki, sence kursta Numiler'in istediği gibi mor sebze yemeklerinin öğretilmesi ne kadar doğru olur? Çok mu doğru olur, biraz mı doğru olur, yoksa hiç doğru olmaz mı?

Grup tercihi sorusu:

Peki, sen bu çocuklardan hangilerini daha çok sevdin (*İki grup yan yana gösterilir*)? (*grubun etrafında çerçeve belirir*) Numileri mi yoksa (*grubun etrafında çerçeve belirir*) Pitaları mı?

Gelir farkı sorusu:

Peki, Pitalar'ın böyle evlerde yaşadığını ve böyle oyuncakları olduğunu hatırlıyor musun (*Tanıtım kısmında Pitalar ile eşleştirilen ev ve oyuncaklar gösterilir*)? Peki, Numiler'in böyle evlerde yaşadığını ve böyle oyuncakları olduğunu hatırlıyor musun (*Tanıtım kısmında Numiler ile eşleştirilen ev ve oyuncaklar gösterilir*)? Peki, sence Pitalar ve Numiler'in evleriyle oyuncakları arasında böyle farklılıkların olması ne kadar doğru? Çok mu doğru, biraz mı doğru, yoksa hiç doğru değil mi?

Grup üyesi tercihi sorusu:

Peki sen bu çocuklardan hangisini daha çok sevdin (*iki gruptan birbirine benzer iki çocuk görseli belirir*)? Pitalardan olan bu çocuğu mu yoksa Numilerden olan bu çocuğu mu?

Grup üyesi benzerliği sorusu:

Peki sence bu çocuklardan hangisi senin gibi (*iki gruptan birbirine benzer iki çocuk görseli belirir*)? Pitalardan olan bu çocuk mu yoksa Numilerden olan bu çocuk mu?

Sübjektif sosyal konum sorusu:

“(10 basamaktan oluşan bir merdiven görseli belirir) Şimdi, bu merdivenin senin yaşadığın çevre gibi olduğunu düşün. Çevrendeki bazı aileler en çok paraya ve yiyeceğe sahiptir. Bu aileler çevrendeki en büyük eve sahiptir. Bu ailelerdeki anne ve babalar en iyi işlere sahiptir. Bunun gibi ailelerin burada olduğunu düşün (10. Basamak gösterilir). Çevrendeki bazı aileler de en az paraya ve yiyeceğe sahiptir. Bu aileler çevrendeki en küçük eve sahiptir ya da bir evleri yoktur. Bu ailelerdeki anne ve babalar ya pek iyi işlere sahip değildir ya da bir işleri yoktur. Bu ailelerin de burada olduğunu düşün (1. Basamak gösterilir). Şimdi kendi aileni düşün. Kendi aileni bu merdivende nereye koyardın? Peki, neden senin ailen burada? Başka bir sebebi var mı?” (translated from Peretz-Lange et al., 2022)

APPENDIX F

PARENTAL EDUCATION

Table 3. Parental education

Education	Education			
	Mother		Father	
	%	<i>n</i>	%	<i>N</i>
Primary school graduate	1.1%	1	2.3%	2
Middle school graduate	2.3%	2	2.3%	2
High school dropout	2.3%	2	2.3%	2
High school graduate	9.2%	8	16.1%	14
Collage	2.3%	2	1.1%	1
University dropout	4.1%	3	3.4%	3
Bachelor's degree	50.5%	44	35.6%	31
Master's degree	12.6%	11	18.4%	16
Not provided	16.1%	14	18.3%	16

APPENDIX G

YEARLY INCOME

yearly income

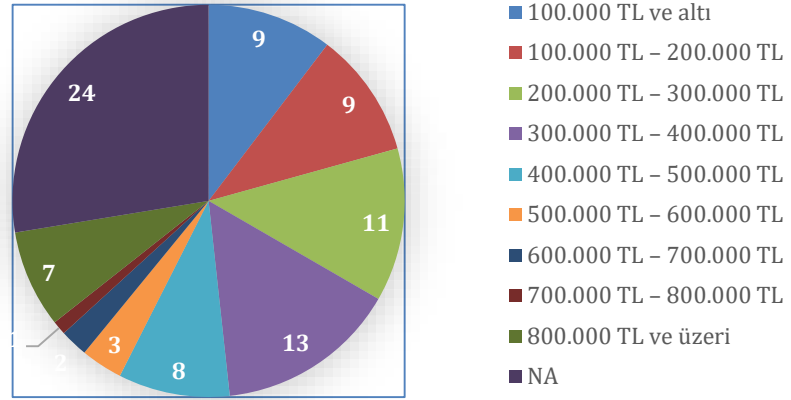


Figure 9. Yearly parental income.

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