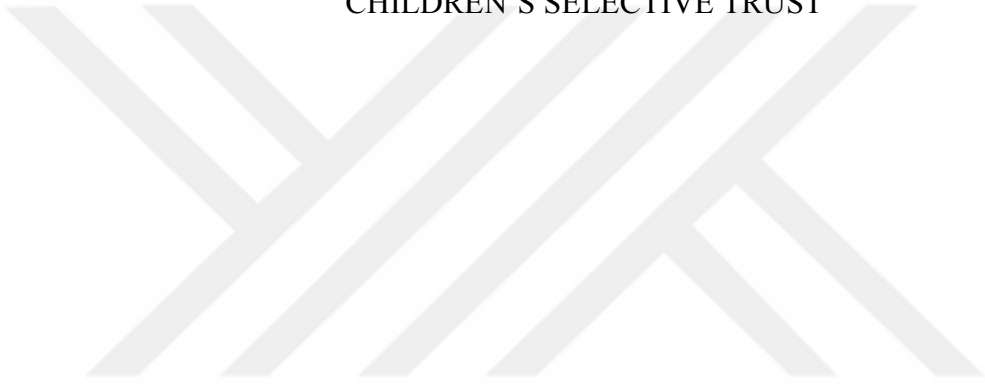


ARE PEERS BETTER INFORMANTS?
THE ROLE OF TESTIMONY CONTENT AND POSITIVITY IN
CHILDREN'S SELECTIVE TRUST



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DECLARATION OF ORIGINALITY

I, Günce Uğur, certify that

- I am the sole author of this thesis and that I have fully acknowledged and documented in my thesis all sources of ideas and words, including digital resources, which have been produced or published by another person or institution;
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ABSTRACT

Are Peers Better Informants?

The Role of Testimony Content and Positivity in Children's Selective Trust

When evaluating sources of information, children focus on the question “Whom to trust?”. Especially, the information preschoolers obtain from adults and their peers shapes their learning processes. Although the selectivity in children's trust decisions towards peers and adults is addressed in the literature, there is limited research on these decisions in contexts where contradictory testimonies are provided. The present study examined the factors affecting 5-year-old children's ($N = 66$) trust decisions toward peers and adults by detailing the content of the testimonies. In the study, children were presented with informational and emotional testimonies in toy (child-relevant) and household item (adult-relevant) domains, by peers and adults, which contradicted in terms of valence (i.e., positive vs. negative). Then, they were asked which testimonies of peers or adults they trusted. Additionally, without hearing any testimony from the informants, it was evaluated to whom children would like to direct questions about toys and household items. According to the results, the positivity of the testimony significantly affected children's trust decisions. The trust in peer informants was higher in the peer positive-adult negative testimony condition compared to the opposite condition (peer negative-adult positive). Children were also more likely to ask peers to find out if a toy was fun, and adults to find out how a household item worked. Overall, the findings of the study indicated that children trust peers rather than adults under certain conditions and that testimony-related factors shape children's selective social learning strategies.

ÖZET

Akranlar Daha İyi Bilgi Kaynağı mıdır?

Çocukların Seçici Güveninde İfadenin İçeriği ve Olumlu Olmasının Rolü

Çocuklar bilgi kaynaklarını değerlendirirken “Kime güvenmeli?” sorusuna odaklanırlar. Özellikle, okul öncesi dönem çocukların yetişkinler ve akranlarından edindiği bilgiler öğrenme süreçlerini şekillendirmektedir. Alanyazında çocukların akranlarına ve yetişkinlere yönelik güven kararlarındaki seçicilik ele alınmakla birlikte, çelişkili ifadelerin sunulduğu bağlamlarda bu kararlar üzerine sınırlı çalışma vardır. Bu çalışmada, 5 yaş grubu çocukların ($N = 66$) akranlarına ve yetişkinlere yönelik güven tercihlerini etkileyen faktörler, ifadenin içeriği detaylandırılarak incelenmiştir. Çalışmada, çocuklara oyuncak (çocuk-ilişkili) ve ev eşyası (yetişkin-ilişkili) bağlamlarında olumluluğu ve olumsuzluğu çelişen hem bilgilendirici hem de duygusal ifadeler, akranları ve yetişkinler tarafından sunulmuştur. Ardından, akranların ve yetişkinlerin ifadelerinden hangisine güvendikleri sorulmuştur. Ek olarak, kişilerden herhangi bir ifade duymaksızın, çocukların oyuncaklar ve ev eşyaları hakkındaki belirli soruları kime yöneltecekleri değerlendirilmiştir. Sonuçlara göre, ifadenin pozitifliği çocukların güven kararlarını anlamlı şekilde etkilemiştir. Çocukların akranına olan güveni, akranı olumlu-yetişkin olumsuz ifade sunduğunda tam tersi koşula kıyasla (akran olumsuz-yetişkin olumlu) daha yüksek bulunmuştur. Ayrıca, bir oyuncağın eğlenceli olup olmadığını öğrenme konusunda daha çok akranına, ev eşyasının nasıl çalıştığını ise daha çok yetişkine sormaya yönelmişlerdir. Genel olarak, çalışmanın bulguları çocukların belirli koşullar altında yetişkinlerden çok akranlarına güvendiğini ve ifade ile ilgili faktörlerin çocukların seçici sosyal öğrenme stratejilerini şekillendirdiğini göstermektedir.

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CHAPTER 1

INTRODUCTION

Young children begin to explore the world from birth on. In this learning-oriented exploration process, children make observations as a source of evidence and attempt to interpret these firsthand observations guided by their existing knowledge (Harris, 2002; Harris, 2007). In addition to this general impression, in the absence of relevant firsthand observation, children's body of beliefs develops through information gathered through others via testimonies (Clément et al., 2004; Harris & Koenig, 2006). Within this context, the question of "Whom to trust?" emerges as a central issue in children's process of acquiring knowledge from the testimonies of others (Markson & Luo, 2020). Therefore, researchers focused on selectivity in children's trust when trying to understand the role of various epistemic and social cues in children's decisions about whom to trust (for a review, see Tong et al., 2019).

During the early years of life, young children may form their conception of the world through the testimonies of adults in their close surroundings. However, in the play environments where they interact with their peers and with the beginning of the preschool education process, the information obtained from peers may also become meaningful for children. In this context, while the cues about the trust in others' testimonies are being investigated, the age of the informant (i.e., adult vs. peer) may also be a determining factor in children's development of strategies in selective trust decisions in early childhood.

While a substantial body of research indicates that adults are generally perceived as more credible sources of information compared to children (McGuigan & Stevenson, 2016; Rakoczy et al., 2010; Taylor et al., 1991), peers may also be

considered trustworthy sources in certain domains (e.g., toys and games), particularly relevant to the age group (Fitneva, 2010; Shutts et al., 2010; VanderBorghet & Jaswal, 2009). Although the informant's perceived expertise in a specific domain plays a crucial role in trust preferences (Boseovski & Thurman, 2014; Boseovski et al., 2016; Boseovski et al., 2017; Landrum et al., 2013), how children's trust decisions are shaped when peers and adults provide conflicting testimonies within the adult knowledgeable and child knowledgeable domains remains unclear. Only a small body of literature investigated children's selective trust decisions toward peers and adults (Fitneva, 2010; Jaswal & Neely, 2006; VanderBorghet & Jaswal, 2009). However, whether children trust their peers or adults more has not yet been examined by addressing the testimony-related factors (e.g., content type, valence, and domain). Therefore, the current study aims to examine preschoolers' selective trust decisions towards peers and adults, considering the effects of several testimony-related factors such as the type of testimony content (i.e., informational or emotional), valence of testimony content (i.e., positive or negative), and domains of testimonies where informants are considered knowledgeable (i.e., toys for children or household items for adults).

In this chapter, theoretical definitions of trust and selective trust, as well as the findings and limitations of the literature on children's selective trust towards adults and peers, are discussed.

1.1 Trust and importance of testimonies

Previous research on trust includes various ways of defining it, and several theoretical approaches to individuals' trust behaviors are prominent in these studies (Bernath & Feshbach, 1995; Harris, 2007; Harris & Corriveau, 2011; Markson &

Luo, 2020). Trust is regarded as a basic sense of belief in oneself and others, and the development of this fundamental trust, which is considered pre-rational and sensory, is based on sensitive caregiving (Erikson, 1950, as cited in Bernath & Feshbach, 1995). At the beginning of life, young children begin to trust their main caregivers or significant individuals who provide emotional reassurance and the reliable care fundamental to survival (Markson & Luo, 2020).

Since the early 1950s, trust has continued to be viewed as a fundamental variable in children's socioemotional and personality development (Bernath & Feshbach, 1995). Even as young as three years old, children may conceptualize trust and improve their knowledge about the social world by depending on other people's testimonies, trusting them, and acting accordingly (Harris, 2007; Koenig et al., 2004). Young children's trust serves as a cornerstone in terms of interpersonal relationships and social interactions from a developmental perspective (Betts & Rotenberg, 2008; Simpson, 2007). When trust is considered within the scope of the Social Learning Theory put forward by Rotter (1954), a generalized sense of interpersonal trust may be formed by repeated exposure to the reliability of a social partner's testimonies or promises, which creates an expectation that this person will keep their promise in the future and this expectation may be generalized to other social partners. From this perspective, trust may be viewed as a cognitive and rational phenomenon (Bernath & Feshbach, 1995; Clément et al., 2004; Harris et al., 2017). Hence, the contribution of testimonies in the process of the acquisition of reliable information and trust development in early childhood should not be overlooked.

The developing belief system of children is substantially enhanced by the information transmitted through testimony (Clément et al., 2004). *Testimony* is

defined as the expression of a person's thoughts or beliefs, and it involves the transmission of an informant's message to a listener (Harris et al., 2017; Sosa, 1991). In particular, the transmission of historical, scientific, and cultural information occurs through the transfer of information obtained from the testimonies of others (Koenig & Harris, 2005). The testimonies enable children to learn many novel concepts, increasing their access to empirical evidence they may not obtain through their observations (Harris & Koenig, 2006). At this point, young children may have the opportunity to acquire various information from adults who are the first individuals (as informants) they encounter at home, in school, and within their close surroundings in their daily lives. Additionally, as children begin to socialize in play environments and their kindergarten, they may learn new information from their peers. For this reason, focusing on the strategies that children follow when determining trust decisions between adults and peers, two main informants that they encounter in acquiring information at an early stage of life, has been a topic studied by researchers from the past to the present.

According to traditional wisdom, the idea that the average adult is more well-informed than the average child prevails in young children (Taylor et al., 1991). In addition, previous studies suggested that young children ascribe more knowledge to adults and perceive them as "omniscient" (Pillow & Weed, 1997; Wimmer et al., 1988). Taylor et al. (1991) found that when asked who knew certain facts (e.g., the meaning of unfamiliar words like "hypochondriac" or the appearance of unfamiliar animals like a lemur), children aged 4 to 5 expected an adult to know all the facts better than infants or peers. This adult-omniscience bias in children may occur not only in adult-knowledgeable domains but also in domains where children are considered more knowledgeable (e.g., toys and games). For instance, Rakoczy et al.

(2010) investigated young children's selective learning by comparing their preferences for peer versus adult models within a child-knowledgeable domain (e.g., learning the rules of a game), outside of the domains traditionally associated with adult expertise (e.g., learning new words). In this study, children watched videos where adult and peer models demonstrated and explained differing rules for a novel game (e.g., "Daxing"). When it was the children's turn to play the game, young children were more likely to imitate the game rules demonstrated by adult models rather than by peer models. Moreover, when a puppet was allowed to play the game but acted similarly to the peer model, children intervened in the puppet's game and imitated the actions of the game (which they learned from adult models) using normative terms (e.g., "No! It does not go like this!"). According to the researchers, children exhibited a tendency to criticize the puppet for acting incorrectly. The researchers interpreted young children's imitation of adult models by using normative vocabulary as considering an action learned from an adult model as the right and appropriate action to be followed. The findings in the literature indicated that preschoolers may be inclined to trust adults and may change their own beliefs in favor of adult testimony (Harris & Corriveau, 2011).

On the other hand, the perception of adults as know-it-alls may lead to risky situations in the trust decisions of young children. For example, adults, considered as credible, may provide inaccurate information on the labeling of a word (e.g., describing a shoe as a glass, Jaswal & Neely, 2006) or provide incorrect responses to questions about a story that they just listened to (Lampinen & Smith, 1995). McGuigan and Stevenson (2016) indicated that children adopt the incorrect response provided by adult informants more easily than the incorrect response provided by child informants. The circumstances where the informant provides a deceptive

testimony due to several reasons, such as incompetence, ignorance, or manipulative intentions, may pose a major challenge to young children as they are learning new information (Hermes et al., 2018; Koenig et al., 2004; Mills, 2013). This situation generates the risk that children acquire misinformation from others (Başaran, 2023). At this point, preschoolers' general acceptance of the testimonies of adults indicates that more research is needed on whether children trust all what adults say, or whether they are careful to trust adults' testimonies when there is contradictory information (Harris, 2007). Therefore, it is critical to understand what kind of reasoning children use in questions such as "When to trust?" and "When to doubt?" (Markson & Luo, 2020; Mills, 2013).

1.2 Selective trust

An increasing amount of developmental research revealed that there is selectivity in how children decide whom to trust (Corriveau & Harris, 2009; Harris & Corriveau, 2011; Johnston et al., 2015; Williams & Danovitch, 2019). In the literature, *selective trust* is expressed as a term that describes the capability of differentiating who should or should not be relied on (for a review, see Mills, 2013). The nature of selective trust in children and the development of this process has been a topic that developmental researchers have gradually become enthusiastic about during the past 15 years (for a review, see Tong et al., 2019). Currently, it is well-established that children are selective about whom they will obtain information from (Sobel & Finiasz, 2020) and that they are capable of reasoning about specific factors associated with the informant or situation in the selective trust process (Harris et al., 2017). In their meta-analysis, Tong et al. (2019) indicated that preschool-aged children may prioritize some epistemic (e.g., informant's prior knowledge state,

accuracy, and expertise) and social (e.g., informant's personality, social status, and relationships) characteristics of informants when evaluating the testimony of others.

In addition to the aforementioned epistemic and social cues, the age of the informant (e.g., children's peers vs. adults) is considered another significant social cue in children's selective social learning (Tong et al., 2019). This also highlights an important question: are children completely trusting of adults' knowledge, or are they selective and decide to learn from their peers under certain circumstances? Hence, the investigation of the question of whether there is selectivity in children's trust decisions for their peers and adults has also been considered critical by the researchers. As indicated by previous research, being aware of which informant is more reliable (Jaswal & Neely, 2006) and who possesses more knowledge about certain questions (Fitneva, 2010; VanderBorght & Jaswal, 2009) were guiding factors in deciding to trust peers and adults.

In addition to these informant-related situations, it may also be crucial to focus on the importance of the testimonies to expand on the findings about selective trust decisions toward peers and adults. For instance, various factors, such as whether the adult's and peer's testimonies are information or emotion-oriented, whether these testimonies are positive or negative, and which domain they address, may influence whether children consider their peers or adults to be more trustworthy sources of information. At this point, it remains an open question whether children will make decisions to trust an informant solely based on the informant's age (peer vs. adult) or whether these decisions will vary according to other factors relevant to the testimony. Thus, examining factors associated with testimony may provide a more comprehensive and in-depth perspective to determine whether children consider peers or adults to be more credible sources of information.

1.3 Factors affecting selective trust in adults and peers

A review of the literature investigating children's trust decisions in peers and adults reveals that various factors are taken into consideration. First of all, Jaswal and Neely (2006) compared the credibility of an adult and a peer informant by manipulating the past reliability of informants. Researchers conducted the study with 3- and 4-year-old preschoolers to answer the question of which of these two cues (i.e., past reliability and age) was found more persuasive by children. During the training phase, children were presented with some familiar objects (e.g., shoes, cups, airplanes, and telephones), and the informant's reliability varied depending on the conditions (e.g., reliable-adult vs. unreliable-peer, and reliable-peer vs. unreliable-adult). In the testing phase, unfamiliar novel objects were shown to the children, the informants named these novel objects differently (either correctly vs. incorrectly), and then the children were asked what these objects were called. According to the results, when the adult was more reliable than the peer, children obviously preferred the testimony of the adult informant, but when the peer was more reliable than the adult, children favored the testimony of the peer informant. The results of the study showed that preschoolers selectively trusted peers who had provided accurate information in a new object-learning context rather than adults who had provided inaccurate information in the past.

In addition to the importance of an informant's prior reliability, the informant's knowledge status in a provided domain may also play a critical role in guiding selective trust decisions toward peers and adults. Specifically, while adults are generally considered knowledgeable across most domains, there may be specific domains where children consider peers as more knowledgeable based on their observations and daily life experiences. VanderBorgh and Jaswal (2009) focused on

the question of whether children are aware that there may be some situations in which the child informant may be more knowledgeable than adults. Researchers determined some adult-oriented questions about the nutritional value of food (e.g., “How is a particular food good for you?”) and some child-oriented questions about toys (e.g., “How to play with a toy?”). Then, they asked preschoolers to decide whether an adult or a child informant would answer these questions better. The results showed that 3- to 5-year-old children decided that the child informant would know better the toy-related questions and that the adult informant would know better the food-related questions.

Fitneva (2010) extended the research of VanderBorgh and Jaswal (2009) to examine the development of peer and adult knowledge representations in 4- and 6-year-old children. Researchers detailed the types of knowledge as child-procedural (e.g., “A how question” about jumping rope), child-factual (e.g., “An information question” about which of the two certain storybooks is funnier), and child-explanatory (e.g., “A why question” about the children’s desire to play with Lego) in their study. In addition, adult knowledge was also grouped into three categories, as procedural (e.g., “A how question” about making cookies), factual (e.g., “An information question” about the meaning of a new word), and explanatory (e.g., “A why question” about the order of seasons). In this study, a protagonist who had recently arrived in the town was introduced to the children, and it was explained that the protagonist did not know the answers to the questions mentioned above. Then, children were asked whether they should direct these questions to an adult or a peer. When the representations of the type of knowledge were examined, findings revealed that children (both 4- and 6-year-olds) were most likely to direct *child procedural type of questions* to peers (rather than adults) compared to *child explanatory* and

child factual types. Procedural knowledge may be exhibited by actions and inferred by observing whether the action has achieved its purpose. Hence, procedural knowledge may be an easy-to-understand type of knowledge for children because it is based on observations. However, researchers stated that factual and explanatory knowledge is challenging to verify independently because more information may be required to determine what the evidence is for this type of knowledge beyond the observations. Therefore, children may have considered questions related to procedural knowledge to be more child-specific than questions related to explanatory and factual knowledge.

Moreover, Wang et al. (2019) claimed that when the testimonies involved subjectivity (e.g., “Most Americans like purple or yellow best.”) and direct observation (e.g., “The cat has more fingers on its back or front paws.”) rather than historical, scientific facts and numerical values, preschoolers were more influenced by their intuitions rather than informant’s knowledge status in their selective trust decisions. Also, Rakoczy et al. (2010) suggested that while the knowledge status of the informant may be considered important when receiving information in the factual domain, similarity of taste and sympathy may be important in domains related to personal preferences. In addition, while children typically value information from adults in information-based domains (i.e., where objective knowledge is essential), children and adolescents are more likely to adopt their peers’ behaviors in contexts associated with peer culture and concerning affective behaviors (for a review, see Lew-Levy et al., 2023).

At this point, Shutts and colleagues (2010) investigated the importance of social categories (age, gender, and race) when learning about four types of new items (i.e., toys, clothing, games, food) by using preference statements (e.g., “I love

playing with [toy name]. [Toy name] is my favorite thing to play with.”). In the part of the study examining the effect of age, children saw two informants (a peer and an adult) on a screen. The informants introduced two different items and said the above-mentioned statements about them. Children were then asked which item they preferred (e.g., “Would you rather play with [toy item] like [adult], or [another toy item] like [peer]?”). Researchers found that 3 and 4-year-old children chose items and activities (e.g., playing games, wearing clothes, and eating food) favored by same-age peers rather than adults. Researchers explained these findings that since children perceive their peers as belonging to the same social category as themselves, their social preferences may be driven by same-age peers. At this point, statements such as “loving” and “seeing as a favorite” may have led children to infer that they might favor similar things due to belonging to the same social category. Furthermore, the subjective and emotional nature of these statements may have also contributed to children’s preference for their peers. Children may consider their peers’ opinions as more trustworthy when choosing between items and activities that are favored and adopted by their peers versus other alternatives. Therefore, they may have preferred to select their peers’ favorite toys, clothes, and food compared to adults’ favorites.

The selectivity in the trust decision of young children sheds light on evidence that children may reduce their bias towards adult omniscience and recognize that their peers may also be reliable sources of information in specific situations. As supported by the literature reviewed above, when the content of the question is aimed at obtaining procedural information or when the statements carry emotional content, children’s decisions may be influenced by their observations and intuitions, and they tend to trust their peers over adults. Although previous studies have not incorporated testimonies or directly compared conflicting content types of testimonies,

preschoolers' trust may still be influenced by information provided by informants, both through individual testimony and in the presence of contradicting testimonies. Thus, the trust decision in these several content types needs to be examined in detail, not only through direct questions but also by comparing them with testimonies from adults and peers.

In outlining the content of statements, the valence of the testimony (i.e., positivity or negativity) may be another crucial factor to consider. In children's everyday experiences, they may be quite open to acquiring both positive and negative content information from adults and peers. However, these statements may not always be consistent with each other, and sometimes, they may even contradict in terms of positivity-negativity. For instance, children may hear highly positive statements from their peers about how enjoyable a computer game is, while receiving warnings from adults about not playing the same game. Also, adults may recommend a storybook as being highly informative and funny, whereas peers may describe the same book as boring due to its content. In circumstances where children encounter such conflicting valenced statements, it has become an open question whose testimony they find more trustworthy and why.

The literature robustly indicates that children demonstrate a positivity bias in social cognition, showing a tendency to selectively obtain or retain positive aspects of individuals when processing and interpreting information (Boseovski, 2010). This positivity bias is also observed in children's selective trust processes, where they tend to prioritize and endorse positive information over negative information (Croce & Boseovski, 2020; Marble et al., 2021). In the selective trust literature, positive information has been examined with different definitions (e.g., positive traits of informants such as niceness, and positive testimonies such as describing something

good). For example, children were more likely to trust the endorsement of the informants who were introduced with positive characteristics (e.g., kindness, honesty, smartness; Lane et al., 2013), informants who were described as reliable, and those who used positive trait labels to strangers (e.g., nice; Boseovski, 2012) compared to negative ones. Interestingly, children were more likely to endorse a mean person (e.g., a protagonist behaving negatively towards the other person) who gave positive testimony about a painting (e.g., “The painting looks very good.”) than a nice person (e.g., a protagonist behaving positively towards the other person) who provided negative testimony (e.g., “The painting looks very bad.”, Croce & Boseovski, 2020). These findings revealed that, sometimes, the strong effect of testimony valence (positive or negative) may even override the effect of informant characteristics (nice or mean) on selective trust.

In addition, Boseovski and Thurman (2014) studied children’s selective trust toward information about a novel animal by examining the expertise status of the informant (e.g., a zookeeper or a maternal figure) and the valence of the testimony (e.g., describing the unfamiliar animal as cuddly, soft, and friendly, or smelly, dirty, and dangerous). According to the results, 3- to 5-year-old preschoolers prioritized the expertise status of the informant, but 6- to 7-year-old children were more likely to endorse positive testimony of the informant. The researchers interpreted these findings that young children may greatly focus on expertise due to their sensitivity to the division of cognitive labor (i.e., experts know better in their expertise areas), while older children may have shown a greater focus on positive attitudes toward animals because they have more experience with animals in their daily lives and educational curricula. They suggested that positivity bias may also emerge when children are learning about animals, and their findings are consistent with evidence

indicating that positivity bias may continue in early to middle childhood. Although the literature demonstrated a considerable impact of positive testimony, the effect of the valence of the testimony on selective trust toward peers and adults has not yet been examined in detail.

Within the scope of studies on children's selective trust in adults and peers, findings indicate that preschoolers do not consistently consider adults as highly credible sources. Children's preferences to trust adults in certain situations and peers in others may depend on the specific circumstances. Given the selectivity children exhibit in trust decisions towards adults and peers, children's interaction dynamics with these groups (adults and peers) may play an important role in their selective learning. According to Piaget, the interaction between adult and child is not as efficient in facilitating learning because the child becomes a more passive receiver due to the natural authority of the adult during the information acquisition (Piaget, 1932, as cited in Tenenbaum et al., 2020). Recognizing that peers may sometimes serve as better sources of information may be crucial for fostering peer interaction and learning from peers in daily life. Children are active and free participants in their interactions with peers and are more likely to question peers in social communication and learning processes (Castellaro & Roselli, 2015). Researchers argued that cooperative interactions with peers are crucial in enhancing the social and cognitive development of children, and they may improve not only language skills but also social and problem-solving abilities through regular interactions with their peers (Henry & Rickman, 2007; Ramani & Brownell, 2014). In addition, recent empirical research suggested that efficient and effective transfer of new beliefs, behaviors, and practices may be enabled through peer learning (Lew-Levy et al., 2023).

Considering the benefits of learning from peers, credible peer sources may offer a new and collaborative approach to supporting children's development in early childhood. Although studies on the benefits of learning from peers mostly focus on preschoolers' cognitive skill development (e.g., expressive language, math, and pre-reading skills) in the context of kindergarten (e.g., Eggum-Wilkens et al., 2014; Henry & Rickman, 2007; Jiang et al., 2023), the impact of peer interactions in children's daily lives on trust and decision-making mechanisms remains an open area for research. At this point, while children acquire various information from both their peers and adults in daily life, they may encounter situations or statements where the information conflicts in content. Thus, during the trust decisions of children towards peers and adults in these situations, it is important to investigate whether they give importance to their peers due to their close collaborative interaction with them or to adults due to their knowledge and experience about the content.

Besides all these informant-based and testimony content-based factors that affect children's selective trust decisions, some individual-related cognitive factors may also have a determinant role in children's trust. Previous studies suggested that children who lack cognitive mechanisms such as Executive Functions (EF) may experience problems such as uncertainty in making decisions and being unable to critically evaluate information (Williams & Danovitch, 2019). Executive functions have three core components, which are known as working memory, shifting, and inhibition, and they develop in children from a young age on (Best & Miller, 2010). EF contains many capabilities used to assess and guide various actions and thoughts (Corriveau et al., 2018). With the help of these capabilities, humans propose a solution to a problem, apply this solution, and appraise the effectiveness of the solution (Diamond, 2013; Diamond et al., 2005; Frye et al., 1995; Zelazo et al.,

1997). It is considered that EF skills may play a role in the selectivity process of children's trust decisions toward others (Başaran, 2023; Harris et al., 2018). For example, in the process of selective trust, re-determining whom to trust when the rules of trust decision or informant characteristics change depends on the individual's cognitive flexibility abilities (Hoicka et al., 2017). In addition, rejecting the provided testimony rather than considering it as correct by default takes cognitive effort, such as inhibitory control, and individual differences in inhibitory control may influence children's decisions about whether to trust an unexpected testimony (Harris et al., 2018).

EF abilities may also facilitate hindering of halo-like generalizations, recognizing the appropriate characteristics for an assigned task, and changing from one particular cue to another among tasks (Başaran, 2023). In particular, children with improved EF abilities were found to be better at resisting biases and heuristics such as “general-trust” (i.e., trusting an informant regardless of his/her history) and “trust-the-better” (i.e., trusting the informant who is better in one condition also in the other condition; Hermes et al., 2018). In addition, individual differences in EF abilities may influence the inhibition of some specific cues (e.g., being able to control impulses when trusting or not trusting positive statements) in the process of information acquisition (Croce & Boseovski, 2020). At this point, Boseovski and Thurman (2014) also suggested that it is critical to examine the role of inhibitory control on children's positivity bias. In light of all these findings, controlling for individual differences in children's EF skills is important in order to evaluate whether they may inhibit themselves against testimony content-related (positivity bias) and informant-related (adult omniscient) bias.

1.4 The current study

The main aim of this study is to expand the children's selective trust literature by exploring and detailing the specific conditions under which preschool-aged children might trust a peer more than an adult, particularly concerning the content type (i.e., informational vs. emotional testimony), the valence (i.e., positive vs. negative testimony), and domain (i.e., about toys vs. household items) of the testimony.

In the current study, I wanted to focus on the informant's age (child vs. adult) because it is well-known as a strong social cue for the informant's credibility in selective trust decisions (Sobel & Finiasz, 2020). In adult-child interactions, the child may accept and conform to the information provided by the adult without questioning because of the hierarchical construct of the relationship (Mammen et al., 2019). While children tend to believe that adults are generally more likely to know better than children, some studies have provided evidence for the belief that children may also be more knowledgeable than adults in certain situations (Fitneva, 2010; Jaswal & Neely, 2006; VanderBorght & Jaswal, 2009). Therefore, as a key focus of this study, I wanted to examine the conditions under which children consider trusting their peers rather than adults in detail.

Another focus of the current study was to address methodological limitations in studies examining selective trust toward peers and adults. For example, some studies provided pre-determined questions to participants (e.g., "Who would know what this toy does?") and examined their trust preferences to whom (peer or adult) to direct the question (e.g., Fitneva, 2010; VanderBorght & Jaswal, 2009). At this point, when children would like to ask questions about toys, they may prefer their peers rather than adults. The children's preferences may depend on the informant's age or the informant's relevance to the topic when they have not heard the content of the

testimony. In contrast, the current study aimed to examine selective trust by focusing on the importance of testimony from adults and peers rather than directing specific questions to informants. It is well-known that testimonies are valuable sources of information for obtaining more information about the past and the future (Clément et al., 2004; Gelman, 2009). When there is insufficient information about something or when it is necessary to update information, the testimony may become a key source. Concerning this point, when peers and adults provide their testimonies about the toys, the factors that affect children's selective trust decisions may change because the testimonies that peers and adults provide about the toy may contain different and contradictory content. In such circumstances, an important consideration when deciding whom to trust is which factor the child prioritizes, whether it is the informant's age or the content of what the informant said. Thus, in this study, children's selective trust decisions towards peers and adults were examined in detail using different testimony contents.

One point regarding the importance of examining the content type of the testimony (e.g., informational vs. emotional) is that children may decide who is more trustworthy based on the type of content provided. The current study categorized the content of testimony into two distinct types. Firstly, informational testimony contents were used in this study based on objective and factual knowledge type in prior studies (e.g., Fitneva, 2010; Wang et al., 2019). The content of these testimonies of the current study was operationally defined as statements regarding comments containing prior experience and knowledge about the content (e.g., "This toy opens when you press the button."). In the present study, the objective knowledge type has been modified to "informational" because this condition focused on informative yet surface-level interpretations gained through experience with the content. The valence

of the testimonies was also potentially changeable (e.g., “When I press the button, it works/doesn’t work.”) rather than on immutable factual information. Additionally, since some of these informational testimonies also included observation-based information (e.g., “This object is clean/dirty, and pieces are broken/intact.”), these testimonies were combined with the procedural type from the previous study. Secondly, emotional testimony contents were used in this study based on the subjective knowledge type in prior studies (e.g., Shutts et al., 2010; Williams & Danovitch, 2019). The content of these testimonies in the current study was operationally defined as statements regarding the emotional interpretation of the content (e.g., “This toy is so much fun to play with.”). Emotional content type was also based on prior experience, but the statements about the object include a comment on how the informant feels after interacting with it, rather than giving information about the object’s function or properties.

Another important issue regarding the importance of testimony is how children evaluate testimonies that have contradictory and different valences. At this point, the current study elaborated on the valence of testimony into two categories (i.e., peer positive-adult negative testimony vs. peer negative-adult positive testimony) and investigated the trust decisions of children toward peers’ and adults’ testimonies.

Furthermore, the testimonies to be presented by both peer and adult informants in the current study were aimed to be given through the toy domain, in which children are considered knowledgeable, and the household item domain, in which adults are considered knowledgeable. First of all, the toy domain was selected because previous studies suggested that children’s familiarity with a specific domain and their knowledge status about the domain may be important determinants of their

decisions about an issue (Nguyen, 2012). For example, if children do not have enough knowledge about a domain, they may tend to think that the adult may be more knowledgeable without considering the importance of the testimony content during the information acquisition process. However, when children know about a specific domain, they may make a more confident decision about which source of information is likely to provide more relevant, efficient, and accurate information. At this point, Wang et al. (2019) stated that it might be important to use child-familiar domains for future studies when examining the strategies they use to choose sources of information to trust. Therefore, in order to ensure that children make effective decisions between conditions in the current study, the toy domain was determined as a domain where children were seen as knowledgeable in terms of familiarity and interest (e.g., Nguyen, 2012; VanderBorghet & Jaswal, 2009). In addition to the toy domain, this study included the object domain, which has been commonly used in previous studies involving testimonies from adult informants (Corriveau & Harris, 2009; Hermes et al., 2017; Jaswal & Neely, 2006; Williams & Danovitch, 2019). In the current study, objects were specified as household items, representing the domain in which adult female informants were considered knowledgeable. The household items and toys were compared in the current study to evaluate whether selective trust decisions change according to the content and valence of the testimony.

The current study had a within-subjects design; all participants received testimonies with two valences (e.g., peer positive-adult negative and peer negative-adult positive) in all of the toys-informational, toys-emotional, household item-informational, and household item-emotional testimony conditions. Also, the current study used the conflicting sources paradigm along with a two-informant design to measure selective trust decisions of children (e.g., Koenig et al., 2004; Tong et al.,

2019; Tong et al., 2021). To be more specific, when emotional testimonies about a toy were presented, the informants heard a peer providing positive testimony versus an adult providing negative testimony in one trial, and a peer providing negative testimony versus an adult providing positive testimony in another trial. Participants received conflicting testimonies in all content types (informational and emotional) and domains (toys and household items).

The questions of interest were as follows: When informational testimonies about the toy are provided, do children find their peers who gave positive testimonies trustworthy, or do they think that adults are more knowledgeable and trust them? Also, do they still find their peers trustworthy even if peers provide negatively valenced emotional testimonies, or does positivity bias prevail, and do they prefer adults? In addition, in real-life experiences, children may receive conflicting informational or emotional testimonies from adults and peers about both toys and household items. For example, when they hear conflicting emotional statements about a household item, do they choose to trust the adult because the context is adult-relevant, or do they endorse the emotional testimonies of their peers? To our knowledge, no study has investigated the testimonies received from peer and adult informants by examining different categories of contents and valences in the toy – a child-relevant – domain, and the household item – an adult-relevant – domain.

Last but not least, children were also asked to direct some questions to peers or adults without being provided with any testimonies from adults or peers in order to replicate the findings in the literature (Fitneva, 2010; VanderBorghet & Jaswal, 2009). These questions were defined as learning preferences questions (Boseovski et al., 2016; Boseovski et al., 2017). In the current study, children were asked to state their general learning preferences towards peers and adults within the domains of

toys and household items by responding to questions about whom they preferred to learn something from regarding toys and items. At this point, since children do not receive any testimony about the objects, their decisions may be based on their intuitions (e.g., similarity to themselves, relevance to specific domains, adult omniscience bias) about informants. Asking these questions was important to determine participants' learning preferences about toys or household items without including any cue in the question, and to control whether children see the toy domain as child-relevant and the household item domain as adult-relevant. Additionally, children were asked to indicate their emotional and informational learning preferences towards peers and adults by answering questions about whom they preferred to learn from, whether a toy or household item was fun, and how it worked. Furthermore, since it is well-known that executive functions play an important role in children's selective trust decisions (Başaran, 2023; Harris et al., 2018), EF skills were also measured in the current study to control for possible effects of these skills.

Overall, the main research question of the current study was whether the testimony content type (informational or emotional), valence of the testimony (positive or negative), and content domain of the testimony (about toys or household items) affect children's decisions to trust their peers or adults. When investigating the main research question, children's executive function scores were used as the control variable.

Since the literature highlighted the effect of the information and emotion-oriented content on trust decisions (Fitneva, 2010; Shutts, 2010; VanderBorghet & Jaswal, 2009; Williams & Danovitch, 2019), I expected that (H1) the trust in peer informants would be higher in emotional testimonies compared to informational testimonies, regardless of valence or domain. Consistent with the positivity bias in

the selective trust literature (Boseovski & Thurman, 2014; Boseovski et al., 2017; Croce & Boseovski, 2020), I expected that (H2) the trust in peer informants would be higher in positive testimonies compared to negative testimonies, regardless of testimony content type or domain. Based on findings that emphasize the role of children's knowledge about the domain in trust decisions (Nguyen, 2012; Wang et al., 2019), I expected that (H3) the trust in peer informants would be higher in the testimonies about toy domain compared to the household item domain, irrespective of valence and content type. Additionally, the possible interaction effects between testimony content type, valence, and domain were explored.

Moreover, in the hypotheses of the learning preference questions, since peer knowledge is prioritized in the toy domain (VanderBorghet & Jaswal, 2009), I expected that (H4a) children's preference for peers would be above the chance level in the general question about toys. Since adult knowledge is prioritized in the object domain (Jaswal & Neely, 2006; Williams & Danovitch, 2019), I expected that (H4b) children's preference for peers would be below the chance level in the general question about household items. In addition, since peer knowledge is prioritized in emotional content (Shutts, 2010), I expected that (H4c) children's preference for peers would be above the chance level in the additional emotional questions about toys and household items. Also, since adult knowledge is prioritized in informational content (Fitneva, 2010; Williams & Danovitch, 2019), I expected that (H4d) children's preference for peers would be below the chance level in the additional informational questions about toys and household items.

CHAPTER 2

METHOD

2.1 Design

The current study had a 2 (content type of testimony: informational vs. emotional) X 2 (valence of testimony: positive vs. negative) X 2 (domain of testimony: toy vs. household item) within-subject design. Executive function task scores were considered as a covariate. Children's selection of peer informants was the dependent variable of the study.

2.2 Pilot testing

2.2.1 Adult pilot testing

In order to evaluate whether the content types of testimony to be utilized in the study (i.e., informational vs. emotional) adequately represent the intended content and valence (i.e., positive vs. negative), two pilot studies were conducted with adult participants. Before asking adults, 12 emotional and 12 informational statements were written about an object (e.g., emotional: "Using this object is very fun."; informational: "When I press the button on this object, it turns on, so the button works."). These statements were presented to the participants using the concept of "an object" in the pilot study since the 'object' category contained both toys and household items. Half of these statements included positive and the other half included negative versions.

While determining the sentences in each testimony content type, some of the testimonies comprised the meaning of negation (e.g., I like vs. I don't like; it works vs. it doesn't work), and some of them comprised the meaning of contrast wording

(e.g., funny vs. boring; clean vs. dirty) in order to control the possible effect of the expression of valence in the statements.

Sixty-three adults participated in the first pilot study. Six participants were excluded due to missing data, and the final sample consisted of 57 adults aged between 22 and 49 (43 females; 13 males; $M_{age} = 29.1$, $SD = 6.5$ years). As a result of the first pilot study, the goal was to select statements containing four testimonies that included negation and four testimonies that included contrast in their expression of valence in each of the emotional and informational content types. In this direction, since the number determined for the emotional content type was insufficient as a result of the first pilot, the second pilot study was carried out on two new testimonies to test whether these additional emotional statements worked better. In the second pilot study, 22 adults aged between 25 and 43 (18 females; 3 males; $M_{age} = 31.8$, $SD = 6.2$ years) participated.

In these pilot studies, participants were presented with testimony examples about an object, one by one, whose content and valence varied in terms of emotionality and informativeness. Firstly, they answered content questions in a multiple-choice format (e.g., “This testimony contains an information-based comment/an emotion-based comment/neither an information-based nor an emotion-based comment about an object.”). Each multiple-choice content question was followed by two slider questions (e.g., “Please rate how information-based/emotion-based you think this testimony is.”) that were rated using a 5-point Likert scale (from 1-not at all information/emotion-based to 5-very information/emotion-based). In total, participants answered these questions for 24 testimony examples in the first pilot and for two testimony examples in the second pilot study. In the following part, participants answered valence questions for the same testimony examples in a

multiple-choice format (e.g., “This testimony contains a negative comment/a positive comment/neither a positive nor a negative comment about an object.”). Each multiple-choice valence question was followed by a slider question (e.g., “Please rate how positive or negative you think this testimony is.”) that was rated using a 5-point Likert scale from 1-very negative to 5-very positive. Participants completed the survey via Qualtrics, and the pilot study lasted approximately 10 minutes for the first pilot and five minutes for the second pilot study (See Appendix A for the questions of the adult pilot study and the list of sample testimonies).

According to the results of the pilot studies, a total of 16 testimonies with the highest ratings from adult participants in a sample of 24 testimonies (8 informative content: 4 positive and 4 negative; 8 emotional content: 4 positive and 4 negative) were selected for inclusion in the main study (See Table 1 and Table 2 for the results of all of the pilot studies for emotion-based and information-based testimonies, respectively).

Table 1. The Results of the Adult Pilots in the Emotion-Based Testimonies

	Content - Multiple Choice	Content – Informative	Content – Emotional	Valence – Multiple Choice	Valence
*Using this object makes me happy.	1,8% IB 96,5% EB 1,8% None	M = 1.82 SD = 1.14	M = 4.75 SD = 0.66	98,2% Pos 1,8% Neutr	M = 4.54 SD = 0.50
*Using this object does not make me happy.	94,7% EB 5,3% None	M = 1.52 SD = 0.96	M = 4.80 SD = 0.52	93% Neg 1,8% Pos 5,3% Neutr	M = 1.93 SD = 0.86
*I love using this object.	5,3% IB 94,7% EB	M = 2.05 SD = 1.38	M = 4.60 SD = 0.94	3,5% Neg 93% Pos 3,5% Neutr	M = 4.36 SD = 0.62
*I don't love using this object.	5,3% IB 87,7% EB 7% None	M = 1.68 SD = 1.10	M = 4.74 SD = 0.48	87,7% Neg 12,3% Neutr	M = 1.68 SD = 0.89
*Using this object is very fun.	5,3% IB 91,2% EB 3,5% None	M = 2.22 SD = 1.06	M = 4.49 SD = 0.60	96,5% Pos 3,5% Neutr	M = 4.80 SD = 0.40
*Using this object is very boring.	3,5% IB 86% EB 10,5% None	M = 1.82 SD = 1.21	M = 4.47 SD = 0.94	91,2% Neg 8,8% Neutr	M = 1.69 SD = 1.00
**Using this object makes me feel good.	4,5% IB 90,9% EB 4,5% None	M = 2.10 SD = 1.04	M = 4.62 SD = 0.59	95,5% Pos 4,5% Neutr	M = 4.57 SD = 0.50
**Using this object makes me feel bad.	13,6% IB 77,3% EB 9,1% None	M = 2.35 SD = 1.13	M = 4.55 SD = 0.68	86,4% Neg 4,5% Pos 9,1% Neutr	M = 1.85 SD = 1.04
The colors of this object interest me.	7% IB 71,9% EB 21,1% None	M = 1.98 SD = 1.19	M = 4.51 SD = 0.72	5,3% Neg 68,4% Pos 26,3% Neutr	M = 3.98 SD = 0.71
The color of this object does not interest me.	14% IB 61,4% EB 24,6% None	M = 2.33 SD = 1.41	M = 4.16 SD = 1.21	68,4% Neg 1,8% Pos 29,8% Neutr	M = 2.20 SD = 0.91
I like using this object.	7% IB 93% EB	M = 2.09 SD = 1.12	M = 4.56 SD = 0.68	96,5% Pos 3,5% Neutr	M = 4.33 SD = 0.64
I don't like using this object.	7% IB 84,2% EB 8,8% None	M = 1.87 SD = 1.08	M = 4.67 SD = 0.58	89,5% Neg 7% Pos 3,5% Neutr	M = 2.38 SD = 1.25
It is very easy to use this object.	36,8% IB 43,9% EB 19,3% None	M = 3.30 SD = 1.34	M = 3.26 SD = 1.39	84,2% Pos 15,8% Neutr	M = 4.50 SD = 0.61
It is very tiring to use this object.	42,1% IB 33,3% EB 24,6% None	M = 3.33 SD = 1.32	M = 2.93 SD = 1.26	89,5% Neg 1,8% Pos 8,8% Neutr	M = 1.81 SD = 1.04

Note. IB = Information-based testimony; EB = Emotion-based testimony; None = Neither information-based nor emotion-based testimony; Neg = Negative testimony; Pos = Positive testimony; Neutr = Neutral testimony.

*Testimonies were selected from the first adult pilot for the main study.

**Testimonies were selected from the second adult pilot for the main study.

Table 2. The Results of the Adult Pilots in the Information-Based Testimonies

	Content - Multiple Choice	Content – Informative	Content – Emotional	Valence – Multiple Choice	Valence
*When I press the button on this object, it turns on, so the button works.	96,5% IB 1,8% EB 1,8% None	M = 4.82 SD = 0.43	M = 1.29 SD = 0.75	1,8% Neg 52,6% Pos 45,6% Neutr	M = 4.06 SD = 0.72
*When I press the button on this object, it doesn't turn on, so the button doesn't work.	93% IB 7% None	M = 4.70 SD = 0.66	M = 1.36 SD = 0.85	70,2% Neg 29,8% Neutr	M = 1.95 SD = 1.15
*When I take the pieces of this object off and put them back, it works.	98,2% IB 1,8% None	M = 4.75 SD = 0.47	M = 1.27 SD = 0.61	3,5% Neg 42,1% Pos 54,4% Neutr	M = 4.04 SD = 0.82
*When I take the pieces of this object off and put them back, it doesn't work.	94,7% IB 5,3% None	M = 4.76 SD = 0.47	M = 1.26 SD = 0.65	61,4% Neg 1,8% Pos 36,8% Neutr	M = 2.08 SD = 1.13
*The pieces of this object are intact.	80,7% IB 1,8% EB 17,5% None	M = 4.77 SD = 0.69	M = 1.38 SD = 0.79	64,9% Pos 35,1% Neutr	M = 4.19 SD = 0.70
*The pieces of this object are broken.	82,5% IB 1,8% EB 15,8% None	M = 4.73 SD = 0.49	M = 1.29 SD = 0.77	61,4% Neg 38,6% Neutr	M = 2.03 SD = 0.89
*This object is clean.	68,4% IB 8,8% EB 22,8% None	M = 4.41 SD = 0.87	M = 2.05 SD = 1.25	64,9% Pos 35,1% Neutr	M = 4.22 SD = 0.63
*This object is dirty.	73,7% IB 5,3% EB 21,1% None	M = 4.47 SD = 0.86	M = 1.67 SD = 1.10	66,7% Neg 3,5% Pos 29,8% Neutr	M = 1.90 SD = 0.87
I make the sound of this object louder or quieter.	94,7% IB 5,3% None	M = 4.78 SD = 0.46	M = 1.17 SD = 0.63	3,5% Neg 24,6% Pos 71,9% Neutr	M = 3.88 SD = 1.08
I don't make the sound of this object louder or quieter.	91,2% IB 1,8% EB 7% None	M = 4.75 SD = 0.58	M = 1.30 SD = 0.74	47,4% Neg 1,8% Pos 50,9% Neutr	M = 2.00 SD = 1.12
The pieces of this object move.	84,2% IB 1,8% EB 14% None	M = 4.76 SD = 0.48	M = 1.33 SD = 0.71	28,1% Pos 71,9% Neutr	M = 4.31 SD = 0.47
The pieces of this object don't move.	84,2% IB 15,8% None	M = 4.85 SD = 0.41	M = 1.25 SD = 0.70	29,8% Neg 70,2% Neutr	M = 2.00 SD = 1.22

Note. IB = Information-based testimony; EB = Emotion-based testimony; None = Neither information-based nor emotion-based testimony; Neg = Negative testimony; Pos = Positive testimony; Neutr = Neutral testimony.

*Testimonies were selected from the first adult pilot for the main study.

2.2.2 Child pilot testing

Another pilot study was conducted with 5 children aged between 5 and 6 (4 boys, 1 girl; $M_{age} = 74.4$ months, $SD = 8.4$ months, range = 60 to 82 months) to assess the appropriateness of the testimony contents, visuals, materials, executive functioning tasks, and task durations for children in the context of the study. According to the result of the child pilot study, no alterations were found necessary, except for a small visual addition to the end of the selective trust task. The tasks to be implemented in the child pilot study were the same as the tasks in the main study and are explained in detail below.

2.3 Participants

Looking at the effect size of previous studies examining selective trust using peer and adult informants, Wang et al. (2019) stated a medium effect size of 0.25 for an ANOVA analysis in their study. A priori power analysis in G*Power 3.1 Software revealed that 46 participants were needed to achieve a power of .80 at the alpha level of 0.05 with a medium effect size, $f = 0.25$ (Faul et al., 2009) for a repeated measures ANOVA. Considering the possibility of unfinished tasks and drop-outs of participants from the study, the number of total participants was planned to increase by 20% to 55.

The main age focus of the study was 5-year-old preschoolers because the literature has shown that age 5 is an important point in terms of considering epistemic and social cues and understanding which informants may be more relevant in which situations when selectively trusting informants' testimonies (Lane et al., 2013; Tong et al., 2019; Vanderbilt et al., 2011). Sixty-nine preschool-aged children participated in the study. Three participants were excluded due to parental report of

developmental diagnosis ($N = 1$) and data obtained from their twin sibling ($N = 2$). The final sample consisted of 66 preschool children (37 girls and 29 boys, $M_{age} = 64.02$ months, $SD = 6.76$, range = 52 to 74 months).

Data were collected from six different private kindergartens in Istanbul, Türkiye. All participants took part in the study voluntarily. According to the results of the reports received from 40 parents, the majority of the parents had university degrees and had high-income levels (See Table 3). All tasks and procedures of the study were approved (2025-05T, Date: 04.02.2025) by the Ethics Committee of the Boğaziçi University's Institutional Review Board of Research with Human Subjects (See Appendix B for the approval of the ethics committee).

Table 3. Demographic Information About the Parents

		<i>n</i>	%
Mother Education Status	Graduated from high school	3	4%
	Graduated from a two-year education institution	9	14%
	Graduated from university	19	29%
	Completed an advanced professional degree	9	14%
	Missing	26	39%
Father Education Status	Did not have a high school degree	1	1%
	Graduated from high school	4	6%
	Graduated from a two-year education institution	4	6%
	Graduated from university	21	32%
	Completed an advanced professional degree	5	8%
	Missing	31	47%
Household Income (per month)	40.001 – 60.000 TL	3	5%
	60.001 – 80.000 TL	4	6%
	80.001 – 100.000 TL	13	20%
	100.001 – 120.000 TL	6	9%
	> 120.000 TL	14	21%
	Missing	26	39%

Note. *n* = Number of participants

2.4 Procedure

First, the objectives of the study were introduced to the kindergarten administrators. Then, consent was obtained from parents in kindergartens who agreed to participate in the study. The current study was conducted with parents and their children who consented to participate. The experiment was conducted individually in a quiet room in the children's kindergarten.

At the beginning of the experiment, the experimenter introduced herself and told the children that they would play a new game of opening boxes together on a laptop screen. Then, the children were asked if they would like to participate in the study. Verbal assent for participation was obtained from the children.

First, the experiment began by introducing informants and administering the familiarization phase on the laptop screen. Afterward, the selective trust task and learning preference questions were administered. Lastly, the experimenter administered the executive functioning task. Sessions with children lasted approximately 15-20 minutes. At the end of the testing, each child participant was thanked and given a blank coloring page and a sticker. Additionally, children received a special certificate for their participation. Testing sessions conducted with children were video (60 participants) or voice-recorded (6 participants), depending on the consent of the parent, for later coding purposes. After the session with the children was completed, parents filled out the demographic form online via Qualtrics.

2.5 Materials

2.5.1 Introduction of the informants

Following the design of previous studies comparing the testimony of peer and adult informants (Jaswal & Neely, 2006; VanderBorghet & Jaswal, 2009), children were first introduced to two actors, including a peer and an adult informant. As is widely used in selective trust research (e.g., Boseovski & Thurman, 2014; Croce & Boseovski, 2020; Johnston et al., 2015; Tong et al., 2021), the visual of the female informants was employed for the adult informant in this study. Materials were provided to participants on a laptop screen. In this study, the stimuli consisted of realistic images of peers and females wearing white colored T-shirts and closed box images which the testimonies were provided about containing toys. Images were produced using Fotor artificial intelligence program (Fotor, 2025). When producing the images of the female informants, the following prompt was used: “Portrait of a European-origin woman, 30-45 years old, in a white t-shirt, neutral background.”. In addition, when producing the images of the child informants, the following prompt was used: “Portrait of a European-origin girl/boy, 5-6 years old, in a white t-shirt, neutral background.”.

At the beginning of the task, the child participant saw only the images of an adult and a child on the screen. Then, the experimenter said that in order to meet these people, we need to listen to them. Firstly, participants heard the voice of a female adult informant as “*My name is Zeynep. I am a grown-up just like your mother.*”, and heard the voice of a peer informant as “*My name is Ali/Ayşe. I am a kid, just your age.*”. Peer informants were displayed in a way that matched the gender of the participants. Then, children were asked manipulation check questions about the informant’s age (e.g., “*Which person is young?*” and “*Which person is grown-*

up?”) to test whether children comprehend the age differences between informants. All children passed these manipulation check questions.

The current study used a modified version of the task used by Lane et al. (2013) to measure trust in testimony. Before the main task began, children were given a familiarization phase. In *the familiarization phase*, a closed box appeared on the screen, and the experimenter informed the participants that she did not know what was inside the box. Children were asked, “*Do you know what is in the box?*”, and the majority of children answered this question with “*I don’t know*” or provided irrelevant responses. Then, the previously introduced peer and adult informants were displayed and the experimenter said, “*They looked inside the box before. We can ask them to help us find out what is inside the box.*”. In this familiarization phase, first, both informants stated that “*There is a toy in the box.*”. Then, the box was opened and the participant children saw on the screen that a toy was inside the box. Then, another box came to the screen and both informants said, “*There is a torch in the box.*”. Then, the box opened and the participant children saw on the screen that a torch was inside the box. Thus, children became familiarized that the adult and peer informants gave correct information about the items in the box during this phase (See Appendix C for the visuals and instructions for the familiarization phase).

2.5.2 Selective trust task

Consistent with previous studies (e.g., Bascandziev, & Harris, 2016; Corriveau & Harris, 2009; Croce & Boseovski, 2020; Johnston et al., 2015; Lane et al., 2013; Tong et al., 2021), to measure trust in the testimony, participants were administered a selective trust task. At the beginning of this task, children were shown that there were 16 novel boxes. The experimenter said that “*Each box contains a different toy*

or a household item. However, since these boxes are closed, we do not know what kind of toy or household item is inside the boxes.” In order to prevent participants from making judgments based on their previous experiences or intuitions, the external appearance of the objects in the box (e.g., toys and household items) were not visible to the participants, as in previous studies (e.g., Lane et al., 2013; Nguyen, 2012; Tong et al., 2021; Williams & Danovitch, 2019). Due to the extreme interest and curiosity of the children in the pilot study about what was inside the box, an additional visual was added at the end of the main study. Only after the task was completed, children were able to see what kind of toy and what kind of household item was inside the boxes.

Next, the experimenter told the child, “Now, we will play a new game of finding what is in the box.” In this game, it was stated that we would select boxes one by one and listen to the statements of the new peers and adults to learn something about the objects (toys or household items) in these boxes. The experimenter stated that informants had previously looked inside the box. Then, visuals of a new peer and adult informant pair, similar to the previously introduced peer and adult informant, were shown along with each selected box to the children. The participant children listened to these various vocalized testimonies for 16 boxes.

In these trials, participants received testimonies that differ in content types, such as informational or emotional, in a toy or a household item domain. However, for each trial, the valence of the testimonies from the peer and the adult informant conflicted in terms of negativity and positivity. For instance, if the adult informant provided a positive emotional testimony about a toy (e.g., “*There is a toy in this box. Playing with this toy is very fun.*”), the peer informant provided a negative emotional testimony about a toy in the box (e.g., “*There is a toy in this box. Playing with this*

toy is very boring.”). In addition, if the adult informant provided a negative informational testimony (e.g., *“There is a household item in this box. When I press the button on this item, it doesn’t turn on, so the button doesn’t work.”*), the peer informant provided a positive informational testimony about the household item in the box (e.g., *“There is a household item in this box. When I press the button on this object, it turns on, so the button works.”*). All participants received both valence of testimony across two types of content in two domains in 16 trials.

In addition, 4 different trial order versions were formed to check whether the initial trial and the order of the 16 testimony trials had any effect on children’s decisions in the selective trust task. The first trials of the 4 versions included statements in which informants differed in terms of testimony type and domain (i.e., Version 1 started with emotional testimony in toy domain, version 2 started with informational testimony in household item domain, version 3 started with emotional testimony in household item domain, and version 4 started with informational testimony in toy domain). The rest of the list of testimonies in each of these four versions was randomized using randomizer.org, and the order in which children heard the peer or adult first was counterbalanced. Children were similarly distributed in terms of gender and age in these trial order versions (Table 4 for descriptives among the four trial order versions).

After receiving testimonies from both informants, the experimenter asked, *“What kind of toy do you think is in the box? Is it [fun] like this grown-up [pointing to adult informant] says or [boring] like this child [pointing to peer informant] says?”*. Children were asked to choose by pointing or saying. Children’s selective trust in testimonies of adults and peers was measured through these questions after

each testimony (See Appendix D for the instructions, visuals, and questions of the selective trust task).

In the coding process of the selective trust task, children received 1 point when they chose peer informants and 0 points when they chose adult informants. There were 16 trials (i.e., 4 trials in emotional testimony in a toy domain, 4 trials in informational testimony in a toy domain, 4 trials in emotional testimony in a household item domain, and 4 trials in informational testimony in a household item domain; with 2 peer positive-adult negative and 2 peer negative-adult positive in each) for each participant.

Table 4. Demographics of the Children in the Trial Order Versions

Trial Order Version	Girls, <i>n</i> (%)	Boys <i>n</i> (%)	Age in months <i>M</i> (<i>SD</i>)
V1 (<i>n</i> = 17)	9 (53%)	8 (47%)	63.06 (6.61)
V2 (<i>n</i> = 17)	10 (59%)	7 (41%)	66.59 (7.65)
V3 (<i>n</i> = 16)	9 (56%)	7 (44%)	62.44 (5.53)
V4 (<i>n</i> = 16)	9 (56%)	7 (44%)	63.88 (6.86)
Total (<i>N</i> = 66)	37 (56%)	29 (44%)	64.02 (6.76)

Note. *M* = Mean, *SD* = Standard deviation.

2.5.3 Learning preference questions

As in previous studies (e.g., Boseovski et al., 2016; Boseovski et al., 2017), learning preference questions were asked after the selective trust task. At this point, the peer and adult informants were displayed on the screen. The general preference questions about the toy (e.g., “*If you wanted to learn something about toys, would you rather ask an adult or a child? Why?*”) and the household item (e.g., “*If you wanted to learn something about household items, would you rather ask an adult or a child? Why?*”) were asked. Then, each child was asked additional preference questions related to the

content types of testimonies in the conditions of informational and emotional testimony. For example, to assess their preferences for emotional interpretation about the toy, “*Would you ask an adult or a child to find out if a toy is fun? Why?*”, and for knowledge status about the functions of the toy, “*Would you ask an adult or a child to find out how a toy works? Why?*” were asked. Similar questions were asked to measure emotional (e.g., “*Would you ask an adult or a child to find out if a household item is fun? Why?*”) and informational (e.g., “*Would you ask an adult or a child to find out how a household item works? Why?*”) preferences toward household items (See Appendix E for the instructions).

In the coding process of learning preference questions, children received 1 point when they picked the child, and 0 points when they picked the adult. In addition, several categories were created based on the justifications given by the children for each why question (e.g., seeing the adult/child as knowledgeable, the children’s own likes, seeing the child as a similar peer, etc.). Three undergraduate research assistants from the Family and Child Studies Laboratory of Boğaziçi University were trained on the coding protocol. Responses of 14 children (20% of the data) were independently coded by four coders (one was the main researcher and three were undergraduate research assistants). The inter-rater agreement among four coders was high in these 6 why questions, and Fleiss’ Kappa ranged between .75 and .90. Disagreements between coders were resolved through discussion meetings, and one coder completed the coding of the remaining data (See Appendix F for the categories of coding and results).

Lastly, in order to measure whether children have beliefs about the existence of child-specific knowledge, two questions used in Fitneva (2010) were asked: “Do

grown-ups always know more than children?” and “Do children sometimes know more than grown-ups?”. The responses to these questions were recorded as yes/no.

2.5.4 Executive functioning task

The Dimensional Change Card Sort (DCCS) task was used to measure children’s executive function skills (Carlson, 2005). DCCS is an easy-to-administer and widely used executive function task for children aged 3 to 7 that involves sorting a series of test cards according to various dimensions (e.g., shape, color, and border) in sequence.

The task began with the demonstration phase, during which the boxes were introduced to the participant. The child saw two boxes, including pictures of a red rabbit and a blue boat. Then, the experimenter stated that we would play a shape game by sorting the cards according to their shape and placing them in the appropriate boxes. Two trials were performed in the demonstration phase (e.g., the blue rabbit is placed in the rabbit box, and the red boat is placed in the boat box), and if the child placed the cards in the wrong box in these trials, the child was given feedback, and this phase was repeated.

Then, the pre-switch phase started. This phase consisted of 5 trials of sorting by shape without any feedback or reminding the rules of the game in each trial. Participants who correctly sorted at least 4 out of 5 cards were able to move on to the next phase. In the next stage, the post-switch phase, the experimenter stated that a new game, namely the color game, would be played instead of a shape game. The rules of the color game were introduced to the children (e.g., red cards are placed in the red rabbit box and blue cards in the blue boat box). This phase also consisted of 5

trials, and the rules of the game were reminded after each trial. Children who correctly sorted at least 4 out of the 5 cards were able to move on to the next phase.

Lastly, the border game phase was started. In this phase, the rules of the new game were introduced to the participants. The experimenter stated that when the cards had a black frame, the color game would be played. When the cards were without a black frame, the shape game would be played. The child was reminded of the rules of the color and shape games again in each trial. This stage consisted of 10 trials. Children received 1 point for each correct response in all stages. The total of the correct scores in the DCCS task was 20 (see Appendix G for the task instructions).

The total score of children from the DCCS task was used as a control variable in the study. Only two children received less than four points in the pre-switch phase; the DCCS scores of these children were entered as missing data.

2.5.5 Demographic form

Demographic information about the child (e.g., gender, age, number of siblings, and whether there is a developmental diagnosis or not) and information about the parents (e.g., age, educational status, income, and perceived socioeconomic status) were collected from the parents online via Qualtrics (See Appendix H for English and Appendix I for original Turkish version).

CHAPTER 3

RESULTS

3.1 Statistical analyses and coding

IBM SPSS Statistics software version 29 (IBM Corp., 2023) was used for the descriptive, correlation, and chance level analyses. First of all, children's selection of peer informants in 16 testimony trials was assessed using: 2 content types (informational and emotional) X 2 domains (household items and toys) X 2 valences (peer positive-adult negative and peer negative/adult positive) factorial design. Based on this design, peer selection in each trial was entered over eight separate variables in the SPSS data file. Each variable reflected the total score of the two trials in the relevant condition (e.g., peer-positive informational testimony in toy domain) and took the scores 0 (no peer was selected, adult was selected in both trials), 1 (peer was selected in one trial, adult was selected in one trial), or 2 (peer was selected in both trials).

Secondly, since our dependent variable was coded as selecting the peer informant (0 = not selected, 1 = selected), our data showed a binomial distribution. In addition, each participant made more than one selection within the within-subject design (16 testimony trials in total). This situation required the use of mixed-model analyses to investigate trial-based data and avoid violating the assumption of independence. In order to investigate the effects of testimony-related factors on children's selective trust decisions towards adults and peers, a generalized linear mixed model (GLMM) with binomial distribution in R statistical software version 4.5.0 (R Core Team, 2024) was performed. The *glmer()* function in the lme4 package (Bates et al., 2015) was utilized for data analysis. In this analysis, content type

(informational/emotional), domain (toy/household item), and valence (positive/negative) factors were included as the fixed effects, and participants and testimony trials were included as the random effects in the main model.

At first, before the main model was run, the effects of gender and order of trials on peer selection were checked in preliminary analyses. Next, when the main model was performed, executive function task scores in DCCS were added to the model in order to control their effects. Furthermore, some exploratory analyses were conducted on the model; for instance, whether the expression of valence in testimonies (negation or contrast) had any effect on the model was examined.

3.2 Descriptives and correlations

First of all, children's performance patterns in selecting peer informants and the frequencies of selection of peer and adult informants were presented across the two content types and two valence conditions, separately for testimonies concerning household items (see Figure 1 and Table 5) and toys (see Figure 2 and Table 6). These figures and tables revealed a clear contrast in children's peer informant selection patterns; they tended to select peers in peer positive-adult negative testimonies, but not in peer negative-adult positive testimonies.

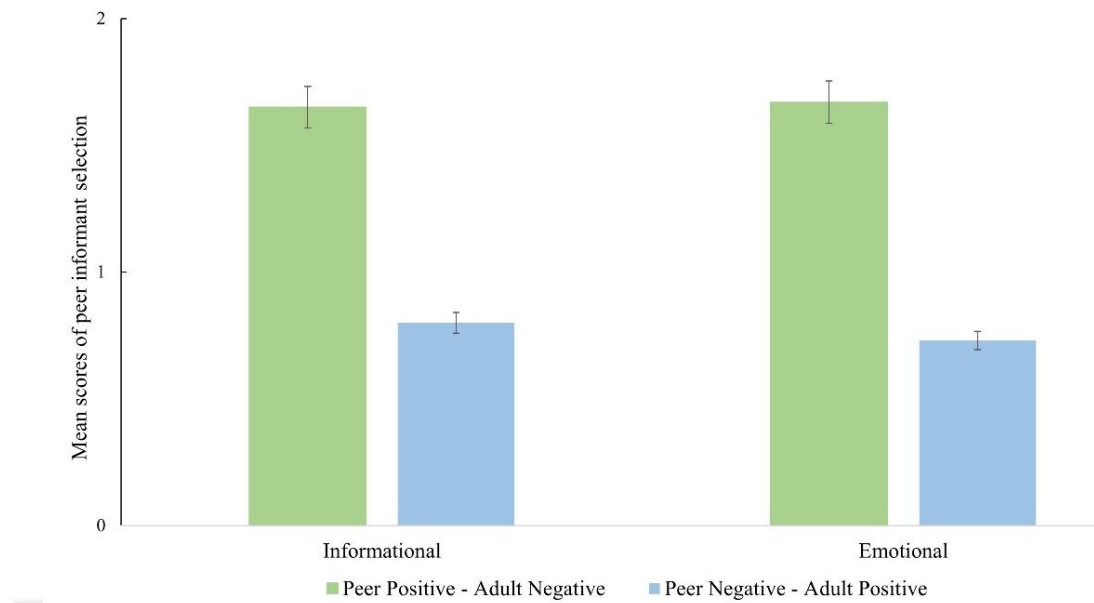


Figure 1. Performance of children's selection of peer informants in the household item domain

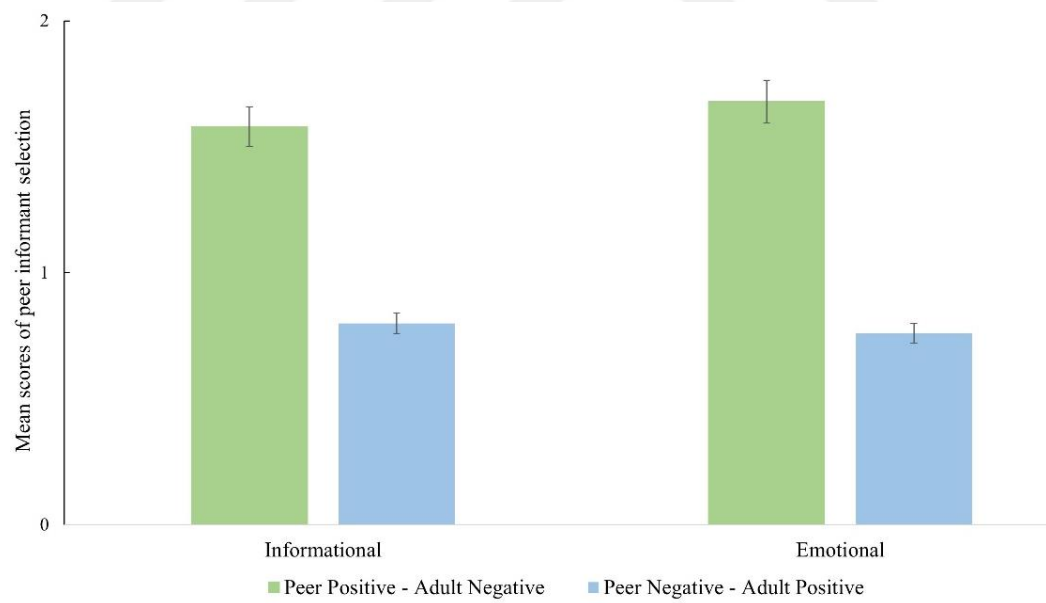


Figure 2. Performance of children's selection of peer informants in the toy domain

Table 5. Peer and Adult Testimony Selection Frequencies in the Household Items

Type	Trial no	Informant	Testimony	n (%)
Informational	1	Peer (+)	When I press the button on this household item, it turns on, so the button works.	55 (83%)
		Adult (-)	When I press the button on this household item, it doesn't turn on, so the button doesn't work.	11 (17%)
	2	Peer (+)	This household item is clean.	54 (82%)
		Adult (-)	This household item is dirty.	12 (18%)
	3	Peer (-)	When I take the pieces of this household item off and put them back, it doesn't work.	22 (33%)
		Adult (+)	When I take the pieces of this household item off and put them back, it works.	44 (67%)
	4	Peer (-)	The pieces of this household item are broken.	32 (49%)
		Adult (+)	The pieces of this household item are intact.	34 (51%)
	5	Peer (+)	Using this household item makes me happy.	56 (84%)
		Adult (-)	Using this household item does not make me happy.	10 (15%)
Emotional	6	Peer (+)	Using this household item is very fun.	54 (82%)
		Adult (-)	Using this household item is very boring.	12 (18%)
	7	Peer (-)	I don't love using this household item.	23 (35%)
		Adult (+)	I love using this household item.	43 (65%)
	8	Peer (-)	Using this household item makes me feel bad.	25 (38%)
		Adult (+)	Using this household item makes me feel good.	41 (62%)

Note. n = Number of participants; % = Percentage of children's selection of peers; (+) = Positive testimonies; (-) = Negative testimonies.

Table 6. Peer and Adult Testimony Selection Frequencies in the Toys

Type	Trial no	Informant	Testimony	n (%)
Informational	1	Peer (-)	When I press the button on this toy, it doesn't turn on, so the button doesn't work.	25 (38%)
		Adult (+)	When I press the button on this toy, it turns on, so the button works.	41 (62%)
	2	Peer (-)	This toy is dirty.	28 (42%)
		Adult (+)	This toy is clean.	38 (58%)
	3	Peer (+)	When I take the pieces of this toy off and put them back, it works.	51 (77%)
		Adult (-)	When I take the pieces of this toy off and put them back, it doesn't work.	15 (28%)
	4	Peer (+)	The pieces of this toy are intact.	53 (80%)
		Adult (-)	The pieces of this toy are broken.	13 (20%)
	5	Peer (-)	Playing with this toy does not make me happy.	25 (38%)
		Adult (+)	Playing with this toy makes me happy.	41 (62%)
Emotional	6	Peer (-)	Playing with this toy is very boring.	25 (38%)
		Adult (+)	Playing with this toy is very fun.	41 (62%)
	7	Peer (+)	I love playing with this toy.	62 (94%)
		Adult (-)	I don't love playing with this toy.	4 (6%)
	8	Peer (+)	Playing with this toy makes me feel good.	50 (76%)
		Adult (-)	Playing with this toy makes me feel bad.	16 (24%)

Note. n = Number of participants; % = Percentage of children's selection of peers; (+) = Positive testimonies; (-) = Negative testimonies.

Additionally, the relationship between the demographics (e.g., age) and children's performances in the study variables (e.g., children's selection of peer informants and executive function task scores) is displayed in Table 7. According to the results, children's selection of peer-positive testimonies across content types and domains were positively correlated; $r_s(64) > .28, p < .01$. However, no significant correlation was found between children's selection of peers when the peer provided a positive informational testimony and when the peer provided a positive emotional testimony; $r(64) = .17, p = .15$. In addition, positive correlations were also found between each type of content and domain for peer-negative testimonies; $r_s(64) > .38, p < .001$. Moreover, DCCS scores of children had no significant relationship with age or children's selection of peer informants; $p > .05$

Table 7. Descriptives and Correlations Between the Main Variables

Variable	M	SD	1	2	3	4	5	6	7	8	9	10
1. Age in Months	64.02	6.76	-									
2. DCCS Total Score	14.77	3.96	-.03	-								
<i>Household Item Domain</i>												
3. Peer Selection in Positive-Informational Testimony (%)	82.58	28.41	-.07	.08	-							
4. Peer Selection in Negative-Informational Testimony (%)	40.15	37.43	-.06	-.01	.05	-						
5. Peer Selection in Positive-Emotional Testimony (%)	83.33	25.31	-.14	.02	.28*	-.09	-					
6. Peer Selection in Negative-Emotional Testimony (%)	36.36	39.75	-.08	.07	.09	.52**	.00	-				
<i>Toy Domain</i>												
7. Peer Selection in Positive-Informational Testimony (%)	78.79	31.69	-.19	.06	.30*	.08	.17	.16	-			
8. Peer Selection in Negative-Informational Testimony (%)	40.15	39.43	-.02	-.07	.01	.48**	.06	.62**	.07	-		
9. Peer Selection in Positive-Emotional Testimony (%)	84.09	29.29	-.10	.05	.54**	-.00	.31*	-.05	.41**	-.07	-	
10. Peer Selection in Negative-Emotional Testimony (%)	37.88	39.28	.13	-.01	-.05	.59**	-.12	.38**	-.14	.49**	-.17	-

* $p < .05$; ** $p < .01$

Note. DCCS = Dimensional Change Card Sorting.

3.3 Main analyses

Preliminary analyses were conducted to check the effects of several variables on children's peer informant selection. At first, the effect of children's gender on the selection of peer informant among the conditions was assessed, and no significant gender differences were observed ($p = .53$). Secondly, there were four versions of the main selective trust task, each with a randomized order of trials. Thus, the effect of the order of trials on the peer informant selection was assessed, and the results did not reveal any significant trial order effect on children's selection ($p = .31$).

Therefore, gender and trial order were not included in the upcoming analyses.

In order to test our hypotheses, a generalized linear mixed model with a binomial distribution was fitted. The effects of fixed factors such as testimony content type (informational vs. emotional), domain (toy vs. household item), and valence (peer-positive vs. peer-negative) on outcome variable (children's peer selection decisions) were examined in the baseline model. Participants and testimony trials were incorporated in the model as random effects.

According to the results, only a significant main effect of valence of testimony was found in the model. The rate of selecting peer informants was significantly higher in the peer positive-adult negative testimony condition (82.39%) than in the peer negative-adult positive testimony condition (38.82%), regardless of content type and domain of the testimony. Neither the content type of testimony nor the domain of testimony showed significant main effects. No significant two-way or three-way interactions between content type, domain, and valence of testimony were found. Also, the random intercept of participants exhibited a considerable variance, indicating that individual differences among children made a meaningful

contribution to the model. Table 8 summarizes the baseline model, including the fixed and random effects.

Table 8. The Model Summary of Children's Selection of Peer Informants

	Children's Selection of Peer Informants			
	<i>Estimate</i>	<i>SE</i>	<i>z value</i>	<i>p</i>
<i>Fixed Effects</i>				
Domain	.07	.27	.28	.77
Content Type	.23	.27	.83	.40
Valence	2.52	.32	7.86	<.001***
Domain X Content Type	-.11	.39	-.29	.76
Domain X Valence	.04	.44	.10	.92
Content Type X Valence	-.29	.44	-.65	.50
Domain X Content Type X Valence	-.27	.62	-.44	.65
	Variance	SD		
<i>Random Effects</i>				
Subject (Intercept)	9.48	0.97		
Testimony Trial (Intercept)	1.02	.001		

Note. SE = standard error; Significance codes = * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

A second generalized linear mixed model analysis was run, including the DCCS total score as a covariate in the baseline model (see Table 9). Results demonstrated that the main effect of the valence of testimony remained significant. None of the remaining main effects or interactions were significant (all $ps > .05$). Lastly, the DCCS score indicated no significant effect on children's decision to select peer informants. Thus, DCCS scores were not added in the upcoming models.

Table 9. The Model Summary of Children's Selection of Peer Informants with DCCS

	Children's Selection of Peer Informants			
	<i>Estimate</i>	<i>SE</i>	<i>z value</i>	<i>p</i>
<i>Fixed Effects</i>				
Domain	.04	.28	.14	.88
Content Type	.27	.28	.98	.32
Valence	2.59	.33	7.84	<.001***
DCCS	-.00	.03	-.03	.97
Domain X Content Type	-.11	.39	-.29	.76
Domain X Valence	.02	.46	.05	.95
Content Type X Valence	-.46	.44	-1.02	.30
Domain X Content Type X Valence	-.11	.63	-.18	.85
	Variance	SD		
<i>Random Effects</i>				
Subject (Intercept)	9.78	0.98		
Testimony Trial (Intercept)	1.12	.001		

Note. SE = standard error; DCCS = Dimensional Change Card Sorting; Significance codes = * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

A likelihood ratio test was run using the *anova()* function in R to compare a baseline model (including domain, content type, valence, and their interactions) with a model that additionally included DCCS total score (covariate). Results revealed that adding DCCS to the baseline model did not significantly improve model fit, $\chi^2(1) = 0.48$, $p = .48$. Table 10 indicates the AIC and BIC values of the baseline and covariate models. AIC increased slightly (from 860.66 to 862.18) in the model with the covariate, suggesting that the inclusion of the DCCS resulted in a poorer model fit and did not improve the model's predictive power.

Table 10. Model Comparison Based on AIC and BIC Values

	Baseline Model	Baseline Model with Covariate
AIC	860.66	862.18
BIC	907.10	913.26

We also wanted to examine the baseline model through some exploratory analyses. We observed that some children ($n = 5$) selected the peer informant in all 16 trials, regardless of the testimony type, valence, or domain. These participants were removed from the analysis, and the baseline model was retested. In the re-analysis, similar results were found that the effect of valence remained significant ($p < .001$), and there was no other difference in the model (all $ps > .05$). Additionally, we observed that several children ($n = 8$) systematically selected the positive testimony in all 16 trials, regardless of the testimony type or domain. In order to reduce biased effects on the model outputs, an additional analysis was conducted on the baseline model by removing these children from the analysis. However, no different pattern was found in the results.

Moreover, in order to examine the effects of the negation and contrast meanings used in the testimonies, an additional GLMM analysis was performed by adding the factor “expression of valence (negation vs. contrast)” to the baseline model. In this analysis, whether the negation or contrast had a significant main effect on children’s decisions to select peer informants and whether this factor interacted with other factors were investigated. Results indicated that there was no significant main effect of expression of valence ($b = -.16$, $SE = .39$, $z = -.41$, $p = .68$). In addition, no significant interactions were found between expression of valence and

other factors (all $ps > .05$). The main effect of testimony valence remained significant in this exploratory analysis ($b = 2.33$, $SE = .43$, $z = 5.31$, $p < .001$).

3.4 Selection of peer informants in learning preferences

Children's learning preferences were evaluated by two general preference questions about toys and household items and four additional learning preference questions in two content types (emotional and informational). No age or gender differences were found in children's learning preferences on six questions about toys and household items (all $ps > .05$). Descriptives and frequencies of children's selection in the learning preferences questions can be seen in Table 11.

The general preference questions examined whether children prefer to ask a peer or an adult when they want to learn something new about toys and household items. Since the measurement of the responses in learning preference was binary (0: adult, 1: peer), two separate chance-level tests were conducted using the binomial distribution to test the hypotheses regarding the learning preference questions in toys and household items. According to the results, children's selection of peer informants was not significantly different from chance level in the general preferences question about toys ($p = .17$) and household items ($p = .53$).

Four separate binomial tests were conducted to test the additional learning preferences hypotheses related to four questions in two content types (emotional and informational). Results indicated that children's preference for asking their peers whether the toy is fun (emotional content) was significantly above the chance level ($p = .004$), and children's selection of peers to ask how the household item works (informational content) was significantly below the chance level ($p = .03$). Additionally, their preference for asking their peers whether the household item is

fun (emotional content) and how the household item works (informational content) were not significantly different from chance (all $ps > .05$).

Table 11. Descriptives and Frequencies in Learning Preference Questions

Questions	Peer selection <i>n</i> (%)	<i>M</i> (<i>SD</i>)	Adult selection <i>n</i> (%)	Total <i>n</i>
<i>General learning preferences</i>				
If you wanted to learn something about toys, would you rather ask an adult or a peer?	39 (59%)	.59 (.49)	27 (41%)	66
If you wanted to learn something about household items, would you rather ask an adult or a peer?	30 (45%)	.45 (.50)	36 (55%)	66
<i>Emotional content</i>				
Would you ask an adult or a peer to find out if a toy is fun?	45 (68%)	.68 (.46)	21 (32%)	66
Would you ask an adult or a peer to find out if a household item is fun?	38 (58%)	.58 (.49)	28 (42%)	66
<i>Informational content</i>				
Would you ask an adult or a peer to find out how a toy works?	28 (42%)	.42 (.49)	38 (58%)	66
Would you ask an adult or a peer to find out how a household item works?	24 (36%)	.36 (.48)	42 (63%)	66

3.5 Belief in child-specific and adult-specific knowledge

At the end of the session, two questions were asked to evaluate whether the participants had a belief that adults know more than children and a belief that children know more than adults. No age and gender differences were found in either question. Two binomial tests were conducted to analyze whether children's yes/no responses to these two questions differed from chance level (.50). The results showed that yes responses ($n = 52$) in the first question, indicating that adults would know more than children were significantly above chance ($p < .001$). However, yes

responses ($n = 39$) in the second question, indicating that children would know more than adults, were not different from chance ($p = .13$).

In order to evaluate the belief consistency of children's responses to these two questions, their responses were divided into several categories. Accordingly, yes/no responses were classified as belief in "adult-specific knowledge" (yes-no, $n = 22$), belief in "child-specific knowledge" (no-yes, $n = 9$), and inconsistency in belief (yes-yes, $n = 30$ and no-no, $n = 4$). Since the responses were assigned among four possible patterns (yes-no / no-yes / yes-yes / no-no), the probability of any response pattern emerging was 25%. At this point, two separate chi-square goodness of fit tests were conducted to evaluate whether the preschool children's belief patterns regarding child-specific and adult-specific knowledge were consistent with the expected distribution. As a result of the analyses, children's child-specific knowledge belief pattern (no-yes, 14%) was found to be significantly lower than chance (25%), $\chi^2(1, N = 65) = 4.31, p = .03$. On the other hand, children's adult-specific knowledge belief pattern (yes-no, 34%) did not show a statistically significant difference from the chance (25%), $\chi^2(1, N = 65) = 2.71, p = .10$.

CHAPTER 4

DISCUSSION

The current study aimed to examine the factors influencing preschool children's selective trust decisions toward peers and adults in a comprehensive investigation. Accordingly, I aimed to investigate the role of the given testimony in children's trust in detail, while the content type (emotional or informational), domain (toys or household items), and valence (positive or negative) of the testimonies were inclusively considered. In addition, children's selective trust towards peers and adults was also examined in terms of who they would direct a specific question to without hearing any testimony. Lastly, I explored children's general beliefs about child and adult-specific knowledge.

First of all, a strong positivity bias was seen in the findings of the study, consistent with the literature (e.g., Boseovski et al., 2017; Boseovski & Thurman, 2014; Boseovski et al., 2017; Croce & Boseovski, 2020). When children encountered conflicting testimonies in terms of positivity and negativity, they were more likely to trust the informant who gave a positive testimony. The current data confirmed the hypothesis that the valence of testimony (i.e., positivity or negativity) played a critical role in children's trust decisions towards their peers among the testimony-related factors. Children were more likely to trust their peers in conditions when peers provided positive and adults provided negative testimony than when peers provided negative and adults provided positive testimony, regardless of the testimony content and domain.

It is well-known that positivity bias emerges around the age of 3 (Boseovski & Lee, 2006). Especially in the preschool period, children's development of positive

intentions towards their peers plays a critical role in developing strong social bonds and cooperative behaviors with their peers (Ladd & Price, 1987). In this context, positivity bias may contribute to children's positive attitudes towards their peers when there are ambiguous interpersonal situations (Boseovski, 2010). Thus, high-trust decisions regarding peer-positive testimonies obtained about a closed box with unknown content may be related to the attributions of positivity towards peers in the interactions. Both the positive valence of testimony and peer informants may have played a decisive and cooperative role in increasing the children's trust towards peers rather than adults.

In addition, children's tendency to trust positive testimony in the selective trust task may be interpreted as follows: When children see a closed box with unknown content, they may make assumptions that there may be a positive thing (e.g., a nice and good toy or item) inside the box, in line with their own initial positive beliefs and expectations (Boseovski, 2010). At this point, the positive testimonies of the informants may have had a more convincing effect, as they met the expectations of the children. In contrast, since negative testimonies contradicted children's initial positive beliefs and expectations, they may have been more skeptical of such testimonies and disregarded them (Boseovski, 2012; Croce & Boseovski, 2020). In order to overcome these potential positive thoughts of children, it may be important to introduce to the child that there may be something positive or negative in this box before the main task. Thus, children's expectations may be shaped within the scope of both positive and negative content.

When testimony-related other factors were examined, we found that the content type (i.e., informational or emotional) of testimony had no effect on children's trust decisions toward peers, contrary to our hypothesis. Although the

literature indicated that children prioritize adult knowledge when it comes to factual information and peer knowledge when it comes to emotional interpretations (Fitneva, 2010; Shutts et al., 2010; Wang et al., 2019), the findings of the current study contrasted with these previous studies. The informational or emotional nature of testimony did not influence children's decision to trust their peers. One reason for this finding may be related to the informativeness and emotionality levels of testimonies. To explain in more detail, since the informational and emotional testimonies used in the study contradicted in terms of positivity and negativity, the informational ones did not include certain, obvious factual information, as in previous studies (Wang et al., 2019). Instead, they contained more surface-level positive or negative functional information about the toy or household item (e.g., "When I press the button on this item, it turns on/does not turn on" or "This toy is clean/dirty"). When the informational testimonies were valenced, it may be possible that children perceived the statement as a subjective interpretation about toys or household items rather than the objective information contained in direct factual knowledge.

Although prior research on selective trust generally focused on objective judgments (e.g., object labeling; Koenig et al., 2004; Koenig & Harris, 2005), the subjectivity of the judgments (e.g., defining the taste of food as yummy or yucky; Williams & Danovitch, 2019) also seemed to influence selective trust decisions of preschoolers. Williams and Danovitch (2019) found that when the statement about food is objective (i.e., labeling the food), the knowledge status of the informant is prioritized, whereas when the statement is subjective (i.e., defining food taste), what the informant says (e.g., yummy or yucky) is prioritized rather than informant's himself/herself by 4-5-year-old preschoolers. In connection with this finding,

children may perceive both emotional and informative testimonies as subjective evaluations due to the contradicting valence of testimonies in the current study. Hence, children's focus on the informant's utterances rather than the level of knowledge of the informant highlighted that the valence of the testimony may be more effective on children's trust decisions.

In addition, we found that the domain of the testimony (i.e., toys or household items) did not have a meaningful impact on preschool children's decision of trust towards peers. These results did not support our hypothesis regarding the main effect of the domain of testimony. One possible explanation for this finding is that, although the object domain is generally considered to be an adult-relevant context (Corriveau & Harris, 2009; Hermes et al., 2017; Jaswal & Neely, 2006; Williams & Danovitch, 2019), children may have thought that peers also used these objects, described as household items, in their daily life experiences. Indeed, when household item testimonies were presented in the selective trust task, some participants thought out loudly and associated household items in the closed box with household item they used in their own homes (e.g., saying 'a remote control' or 'a lamp' for an item that turns on or off when the button is pressed; saying 'a plate' or 'a t-shirt' for an item that is dirty or clean). In this context, it is possible that children considered their peers as competent and relevant in this domain based on the first household items that came to their minds. Therefore, children may have exhibited similar decisions for the household item and the toy domains in terms of trusting their peers.

Moreover, we did not find any interactions between these factors. At this point, the robust effect of the testimony valence was an indicator that positivity was the most powerful testimony-related factor on children's selective trust decisions toward their peers' testimony. During the main selective trust task, some of the

participants explained their trust decisions by emphasizing the positivity of the content (e.g., “I will always choose the person who says nice things.”). These self-explanations revealed that positivity in content was particularly influential in children’s decisions. Hence, this strong effect of positivity bias may have overridden the effects of other factors, as in previous selective trust studies (Aldan & Soley, 2019; Boseovski, 2012; Boseovski et al., 2017).

In addition to examining testimony-related factors on children’s selective trust, the current study examined the factors that influence children’s preferences for learning information when no testimony was provided from peers or adults. At this point, our hypotheses regarding learning preferences were partially supported. While children preferred to ask the emotional question about toys (e.g., “Would you ask an adult or a child to find out if a toy is fun?”) to their peers, they preferred to ask the informational question about household items (e.g., “Would you ask an adult or a child to find out how a household item works?”) to adults rather than their peers. These findings were consistent with the literature (Fitneva, 2010; Shutts, 2010; VanderBorghet & Jaswal, 2009; Williams & Danovitch, 2019) and indicated that if the information to be learned consisted of emotional interpretation in a child-relevant domain, children’s preference was in favor of their peers. Moreover, if the information to be learned consisted of certain knowledge in an adult-relevant domain, children’s preference shifted towards adults. However, children did not display similar selection patterns in their decisions when they heard conflicting testimonies from peers and adults in these content types and domains in the main selective trust task. This situation revealed that the positivity/negativity of the content was a dominant factor in children’s selective trust towards peers and adults. Results of learning preference questions also highlighted that children’s trust

decisions may vary according to the interaction of content type and domain of the information, without focusing on testimony valence. Thus, future research is needed to examine this interaction between content type and domain.

Consistent with the findings of the main selective trust task, children did not show a significant selection pattern for peers or adults in two general learning preference questions about the toy and household item domains. These findings may be explained that children consider peers and adults as relevant in both the toy and household item domains. When looking at the frequencies of responses, the number of participants who chose the child ($n = 39$) and the adult ($n = 27$) to the question “If you wanted to learn something about toys, would you rather learn from an adult or a child?” were close to each other. Likewise, for the question “If you wanted to learn something about household items, would you rather learn from an adult or a child?”, the child selections ($n = 30$) and adult selections ($n = 36$) were also found to be nearly equal. The responses to the “Why questions” asked after these learning preference questions demonstrated that the category including the explanation of “Child/adult knows better” had the highest number of responses in each question. These explanations of children were an indicator of children’s beliefs in both adult and child knowledge about both toy and household item domains. Thus, there may be an inconsistency among children’s selection of informants in these questions for a similar reason as in the main selective trust task.

Finally, the general epistemic belief of the participant children towards informants was explored in terms of whether they considered adults as more knowledgeable than their peers or whether they considered their peers as more knowledgeable than adults. The findings of the current study showed that 5-year-olds had a slightly common belief that adults know more than children ($n = 22$) and a

limited belief that children know more than adults ($n = 9$) in a general question context. Fitneva (2010) found that 6-year-old preschoolers had a belief that “children sometimes know better than adults” (child-specific knowledge), whereas 4-year-olds did not. At this point, the current study revealed that the idea that children may sometimes be more knowledgeable than adults (in a general context) may not have yet developed in the 5-year-olds. In addition, approximately half of the children ($n = 30$) responded yes to both questions and demonstrated inconsistency in their beliefs. The possible reason for this inconsistent response pattern may be related to the “response bias” existing in preschoolers for these types of yes/no questions. In particular, the “yes bias” in children demonstrated that young children may not suppress their tendency to respond yes to yes/no questions (Okanda & Itakura, 2011). Also, it is well-known that the tendency towards a “yes” response is strong in the preschool period and decreases with age (Mehrani & Peterson, 2017; Okanda & Itakura, 2010). Thus, most of the children may have automatically answered “yes” to both questions without much thought.

In addition to the aforementioned findings, we examined children’s EF skills using the DCCS task as a control measurement. However, we found that EF performance did not significantly correlate with children’s selection of peers in any of the content type, domain, or valence of the testimony, and was not a significant covariate when included in the models assessing selective trust decisions towards peers and adults. At this point, children’s trust decisions might have been guided more by their emotions, intentions, and expectations, which may have led to a strong selection pattern towards positive testimonies. This situation may indicate that EF did not play a significant role in the context of the current study. However, these non-significant findings might also be stemming from potential problems associated

with the measurement of EF in the current study. Although the DCCS task in our study showed a moderate level of variance, the negatively skewed distribution may indicate the presence of a potential ceiling effect. These results suggest that the discriminatory power of the EF scores may be limited. Thus, in future studies, a more comprehensive assessment may be achieved by measuring not only card sorting scores but also reaction times in the DCCS task. Alternatively, researchers may use different executive function measures to investigate which sub-components (i.e., inhibitory control, cognitive flexibility, and working memory) of executive function play the most decisive role in trust decisions towards peers and adults.

Additionally, although EF skills were assumed as decisive on children's selective trust decisions, Lucas and colleagues (2012) did not find a significant relationship between EF abilities and selective trust decisions in preschool children. The researchers interpreted these findings as executive function skills may be a necessary but not a sufficient factor in the development of selective trust in children. Similarly, EF skills measured in the current study were not found to be the critical cognitive mechanism in children's selective trust decisions towards peers and adults. Hence, future research may also consider the role of other cognitive mechanisms underlying selective trust. For example, it is well-known that the Theory of Mind (ToM) skills enable children to conduct more sophisticated thinking processes when deciding which informant is more knowledgeable about which type of content (Tong et al., 2021). In addition, children's complex language use may be considered as another cognitive mechanism that may be effective in selective trust decisions. Children with more advanced language development may make better sense of testimony content and make more confident decisions about which testimonies are more relevant to which informant. Therefore, when examining children's selective

trust decisions toward peers and adults in future research, it may be useful to control for children's ToM skills and levels of complexity in language use.

There were some limitations of the current study. During the familiarization phase, the introduction of a female adult informant as "I am a grown-up just like your mother" may have caused children to think about their mothers when making choices. For example, if the child knows that his mother was not interested in toys, this personal experience could have influenced his/her selection in the domain of toys. In order to avoid this potential inclination, it may be critical for future studies to have informants introduce themselves only as "I am an adult" and "I am a child". Hence, children may make more objective and generalizable decisions.

Furthermore, in the familiarization phase, the introduction of the domains to children as "There is a toy in the box" and "There is a torch in the box" may have made it difficult for them to conceptualize these two objects as different domains. While the term "toy" provided a general category, the specificity of the term "torch" may have directed children's attention to the function of the object. This may have prevented children from making inferences based on domain knowledge and led them not to generalize the torch to the household item domain. Therefore, introducing the domain more explicitly in future studies, such as "This is a toy" or "This is a household object", may enable children to distinguish the two domains more clearly.

In addition, the household item was considered a domain where especially an adult woman might be knowledgeable, based on previous studies (Corriveau & Harris, 2009; Hermes et al., 2017; Williams & Danovitch, 2019). However, children may not have considered household items as adult-relevant enough because they imagined items in the closed boxes and associated them with the household items

they used in their daily lives. At this point, when assessing the potential effect of the testimony domain, it is important for researchers to carefully specify the testimony domain by considering whether the domain is perceived to be adequately relevant to the informant's knowledge status. In particular, future studies may examine the impact of domain on trust decisions more systematically by comparing toys with domains more closely associated with adults in the literature, such as foods or tools (e.g., Nguyen et al., 2016; Tong et al., 2021).

An additional limitation was related to the positivity of the testimonies. Since the valence of the testimony was found to be a determining factor in the current study, the main effects of the domain and the emotional or informational content of the testimonies were suppressed. In order to examine the main effects of the factors related to testimony in more detail, future studies may apply two-way designs in two studies instead of a three-way design. In the first study, children's selective trust decisions towards adults and peers may be investigated in a two-factor design based on the factors of content type (informational vs. emotional) and domain (toy vs. household item). In this stage, the valence of testimony may be excluded because the positivity or negativity used in informational testimonies (e.g., "It works when I press the button" vs. "It doesn't work when I press the button") may be interpreted by children with connotations such as defect or inability. Excluding valence of the testimony may provide informational testimonies to be perceived more factually and objectively, allowing the difference in objectivity/subjectivity between content types (informational and emotional) to be assessed more clearly. In the second study, domain or content type and valence may be addressed within a different two-way design. In this way, the effects of each factor may be assessed separately and may not be masked by the effects of other variables. This approach may offer the opportunity

to more comprehensively explore the contributions of testimony-related factors to children's trust decisions.

The present study focused only on selective trust decisions of 5-year-olds. Future studies may further expand the study design by focusing on how different age groups (4, 5, and 6 years old) in the preschool period differ in their selective trust preferences towards peers and adults. Especially, older children may exhibit higher selective trust decisions toward peers compared to younger children due to the increased peer interactions among older preschoolers in the kindergarten. Furthermore, future studies may develop tasks that examine whether children's selective trust decisions are reflected in their daily life behaviors, rather than being limited to assessing these decisions only through verbal tasks. Considering the limited number of tasks in the literature that investigate the observation of selective trust at a behavioral level, using behavioral measures may make an important contribution to the selective trust literature.

To sum up the main findings, the current study examined whether children trust adults, considering traditional wisdom, under all circumstances, or decide to trust informants other than adults (e.g., peers) under certain circumstances. Contrary to previous findings that claimed the widespread opinion of "adults are omniscient" exists in preschool children (McGuigan & Stevenson, 2016; Rakoczy et al., 2010; Taylor et al., 1991), the findings of the current study partially supported that children selectively trust their peers compared to adults in certain situations. This study contributes to the literature by demonstrating that not only the characteristics of the informant but also the factors related to the testimony may be crucial when examining children's selective trust decisions towards peers rather than adults. In particular, the effect of positive testimony highlighted that children were more likely

to trust positive testimonies provided by peers rather than negative testimonies provided by adults. This finding extends the literature on preschoolers' selective trust towards peers and adults by revealing that positive testimony from informants affects children's trust, as it was in the positive traits of informants.

Overall, although the belief that adults know more than children was common among the preschoolers in a general context, they may ask some questions to their peers and some to adults to learn about specific content types and domains. The findings of children's preference for asking an emotional question about a toy to their peers and an informational question about an item to adults, even when no testimony was obtained, shed light on the literature that content type and domain of information may be influential on preschoolers' trust decisions between peers and adults. Furthermore, when they receive conflicting testimonies in terms of positivity/negativity from both adults and their peers, they may alter these general epistemic beliefs, and their decisions about an informant's credibility may be shaped by the valence of the testimony, as an important finding of the current study. However, future studies are still needed to gain a deeper understanding of the effects of these factors on children's trust decisions.

In conclusion, when the powerful effect of positive testimony is considered together with children's daily life and school interactions with their peers, the research outcome may offer notable implications for preschool education. Learning novel information, rules, and behaviors that children have difficulty with in daily life from their peers through the transfer of positive information may enhance preschoolers' social learning.

APPENDIX A

TESTIMONIES AND QUESTIONS USED IN ADULT PILOT STUDY

In this section, we want you to think of an object (e.g., a household item, a toy, etc.).

In this part of the survey, you will be presented with different statements used in everyday life about such objects. These statements include various comments about the objects. You will be asked to indicate whether each statement is based more on information or emotion. You will also be asked to rate how information-oriented or emotion-oriented the statements are on a scale of 1 to 5.

(“Bu bölümde, herhangi bir objeyi (örneğin, bir ev eşyası, bir oyuncak vb.,) düşünmenizi istiyoruz. Anketin bu kısmında size günlük hayatta bu tür objelerle ilgili kullanılan farklı ifadeler sunulacaktır. Bu ifadeler, objeler hakkında farklı yorumları içermektedir. Sizden, her ifadenin daha çok bilgiye mi yoksa duyguya mı dayandığını belirtmeniz istenecektir. Ayrıca, ifadelerin ne kadar bilgi odaklı ve ne kadar duygu odaklı olduğunu 1'den 5'e kadar bir ölçek üzerinde değerlendirmeniz istenecektir.”)

- When I press the button on this object, it turns on, so the button works. (*“Bu objenin tuşuna basınca açılıyor, yani tuşu çalışıyor.”*)
- When I press the button on this object, it doesn't turn on, so the button doesn't work. (*“Bu objenin tuşuna basınca açılmıyor, yani tuşu çalışmıyor.”*)
- When I take the pieces of this object off and put them back, it works. (*“Bu objenin parçaları çıkartılıp tekrar takınca çalışıyor.”*)
- When I take the pieces of this object off and put them back, it doesn't work. (*“Bu objenin parçaları çıkartılıp tekrar takınca çalışmıyor.”*)
- The pieces of this object are intact. (*“Bu objenin parçaları sağlam.”*)

- The pieces of this object are broken. (*"Bu objenin parçaları kırık."*)
- This object is clean. (*"Bu obje temiz."*)
- This object is dirty. (*"Bu obje kirli."*)
- I make the sound of this object louder or quieter. (*"Bu objenin sesi açılıp kısıılıyor."*)
- I don't make the sound of this object louder or quieter. (*"Bu objenin sesi açılıp kısıılmıyor."*)
- The pieces of this object move. (*"Bu objenin parçaları hareket ediyor."*)
- The pieces of this object don't move. (*"Bu objenin parçaları hiç hareket etmiyor."*)
- Using this object makes me happy. (*"Bu objeyi kullanmak beni mutlu ediyor."*)
- Using this object does not make me happy. (*"Bu objeyi kullanmak beni mutlu etmiyor."*)
- I love using this object. (*"Bu objeyi kullanmayı seviyorum."*)
- I don't love using this object. (*"Bu objeyi kullanmayı sevmiyorum."*)
- Using this object is very fun. (*"Bu objeyi kullanmak çok eğlenceli."*)
- Using this object is very boring. (*"Bu objeyi kullanmak çok sıkıcı."*)
- Using this object makes me feel good. (*"Bu objeyi kullanmak bana iyi hissettiriyor."*)
- Using this object makes me feel bad. (*"Bu objeyi kullanmak bana kötü hissettiriyor."*)
- The colors of this object interest me. (*"Bu objenin renkleri ilgimi çekiyor."*)
- The color of this object does not interest me. (*"Bu objenin renkleri ilgimi çekmiyor."*)

- I like using this object. (*"Bu objeyi kullanmayı seviyorum."*)
- I don't like using this object. (*"Bu objeyi kullanmayı sevmiyorum."*)
- It is very easy to use this object. (*"Bu objeyi kullanmak çok rahat."*)
- It is very tiring to use this object. (*"Bu objeyi kullanmak çok yorucu."*)

Content Question 1 – Multiple Choice:

- This testimony contains an information-based comment about an object. (*"Bu ifade bir obje hakkında bilgi odaklı bir yorum içeriyor."*)
- This testimony contains an emotion-based comment about an object. (*"Bu ifade bir obje hakkında duygu odaklı bir yorum içeriyor."*)
- This testimony contains neither an information-based nor an emotion-based comment about an object. (*"Bu ifade bir obje hakkında ne bilgi ne de duygu odaklı bir yorum içermiyor."*)

Content Question 2 – Slider:

Please rate how information-based you think this testimony is. (*"Sizce bu ifadenin ne kadar bilgi odaklı olduğunu işaretleyiniz."*)

1 (Not at all information-based, *"Hiç bilgi odaklı değil"*) – 2 – 3 – 4 – 5
(Very information-based, *"Çok bilgi odaklı"*)

Content Question 3 – Slider:

Please rate how emotion-based you think this testimony is. (*"Sizce bu ifadenin ne kadar duygu odaklı olduğunu işaretleyiniz."*)

1 (Not at all emotion-based, *"Hiç duygu odaklı değil"*) – 2 – 3 – 4 – 5 (Very emotion-based, *"Çok duygu odaklı"*)

In this section, you will be asked to indicate whether these statements about the object are positive or negative. You will also be asked to rate how positive or negative each statement is on a scale of 1 to 5.

(“Bu bölümde, objeye ilgili verilen bu ifadelerin olumlu mu yoksa olumsuz mu olduğunu belirtmeniz istenecektir. Ayrıca, her ifadenin ne kadar olumlu veya olumsuz olduğunu 1'den 5'e kadar bir ölçek üzerinde değerlendirmeniz istenecektir.”)

Positivity Question 1 – Multiple Choice:

- ☐ This testimony contains a negative comment about an object. (*“Bu ifade bir obje hakkında olumsuz bir ifadeyi içeriyor.”*)
- ☐ This testimony contains neither a positive nor a negative comment about an object. (*“Bu ifade bir obje hakkında ne olumlu ne olumsuz bir ifadeyi içeriyor.”*)
- ☐ This testimony contains a positive comment about an object. (*“Bu ifade bir obje hakkında olumlu bir ifadeyi içeriyor.”*)

Positivity Question 2 – Slider:

Please rate how positive or negative you think this testimony is. (*“Sizce bu ifadenin ne kadar olumlu veya olumsuz olduğunu işaretleyiniz.”*)

1 (Very negative, “Çok olumsuz”) – 2 – 3 – 4 – 5 (Very positive, “Çok olumlu”)

APPENDIX B

ETHICS COMMITTEE APPROVAL



T.C.
BOĞAZİÇİ ÜNİVERSİTESİ REKTÖRLÜĞÜ
Sosyal ve Beşeri Bilimler İnsan Araştırmaları Etik Kurulu (SBİNAREK)

Sayı : E-84391427-050.04-219459
Konu : 2025-05T Kayıt Numaralı Başvurunuz
Hakkında

04.02.2025

Sayın Dr. Öğr. Üyesi Deniz TAHİROĞLU

Tez danışmanlığını yürüttüğünüz öğrenciniz Günce Uğur'un "Çocuklar için Yaşlıları Yetişkinlerden Daha İyi Bilgi Kaynağı Olabilir mi? Seçici Güvende İfadenin İçeriği ve Olumlu Olmasının Rolü / Can Peers be Better Informants than Adults for Children? The Role of Content and Positivity of the Testimony in Selective Trust" başlıklı projesi ile Boğaziçi Üniversitesi Sosyal ve Beşeri Bilimler İnsan Araştırmaları Etik Kurulu (SBİNAREK)'e yaptığınız 2025-05T kayıt numaralı başvuru 17.01.2025 tarih ve 2025/01 sayılı kurul toplantısında incelenmiş ve projeye etik onay verilmesi uygun bulunmuştur.

Bu karar tüm üyelerin toplantıya on-line olarak katılımıyla ve oybirliği ile alınmıştır. Onay mektubu tüm üyeler adına Komisyon Başkanı tarafından e-imzalanmıştır. Bilgilerinizi rica ederiz.

Saygılarımızla,

Dr. Öğr. Üyesi Işıl ERDUYAN
Kurul Başkanı

Bu belge, güvenli elektronik imza ile imzalanmıştır.

Belge Doğrulama Kodu : 0B9Z-VP46-0YGU

Belge Doğrulama Adresi : <https://www.turkiye.gov.tr/bogazici-universitesi-ebys>

APPENDIX C

FAMILIARIZATION PHASE

1. Introduction of the Informants



“Hello, my name is Zeynep. I am a grown-up just like your mother.”

(“Merhaba, ben Zeynep. Annen gibi bir yetişkinim.”)



“Hello, my name is Ali/Ayşe. I am a kid, just your age.”

(“Merhaba, ben Ali/Ayşe. Senin yaşlarında bir çocuğum.”)

Experimenter: “Which person is young?” (*“Hangisi çocuk?”*)

Experimenter: “Which person is grown-up?” (*“Hangisi yetişkin?”*)

2. Familiarization Phase



Experimenter: “There is a box here. Do you know what is in the box? I don’t know.

Ali/Ayşe and Zeynep looked inside the box before. We can ask them to help us find

out what is inside the box.” (*“Burada bir kutu var. Bu kutunun içerisinde ne var*

biliyor musun? Ben de bilmiyorum. Kutunun içerisinde ne olduğuna daha önce

Ali/Ayşe ve Zeynep bakmıştı. Öğrenmek için onlara sorabiliriz.”)



Zeynep: “There is a toy in the box.”

Ali/Ayşe: “There is a toy in the box.”

(*“Kutunun içinde bir oyuncak var.”*)





Experimenter: “There is another box here. Do you know what is in the box? I don’t know. Ali/Ayşe and Zeynep previously looked inside the box. We can ask them again to help us find out what is inside the box.” (*“Burada başka bir kutu daha var. Bu kutunun içerisinde ne var biliyor musun? Ben de bilmiyorum. Kutunun içerisinde ne olduğuna yine daha önce Ali/Ayşe ve Zeynep bakmıştı. Öğrenmek için tekrardan onlara sorabiliriz.”*)



Zeynep: “There is a torch in the box.”
(*“Kutunun içinde bir el feneri var.”*)

Ali/Ayşe: “There is a torch in the box.”



APPENDIX D

SELECTIVE TRUST TASK

Experimenter: “Now we are going to play a new game with you. In this game, we have 16 different boxes. Each box has a different toy or household item inside. However, since these boxes are closed, we do not know what kind of toy or household item is inside the boxes. In order for us to learn what kind of toy or household item is inside these boxes, we will need the help of some people. When we click on each box, a child and an adult who have looked inside that box before and used the toys and household items in the box will tell us some things about the contents of the box. Now, shall we explore the boxes one by one?”

(“Şimdi seninle yeni bir oyun oynayacağız. Bu oyunumuzda 16 tane farklı kutumuz var. Her bir kutunun içerisinde de farklı bir oyuncak veya farklı bir ev eşyası var. Bu kutuların içinde nasıl bir oyuncak veya nasıl bir ev eşyası olduğunu öğrenebilmemiz için yine bazı kişilerin yardımına ihtiyacımız olacak. Her bir kutunun üzerine tıkladığımızda daha önce o kutunun içine bakmış ve kutudaki oyuncak ve ev eşyalarını kullanmış olan bir çocuk ve bir yetişkin bize kutunun içindekiler hakkında bazı şeyler söyleyecek. Şimdi, sırayla kutuları keşfedelim mi?”)



Example of emotional testimony in a toy domain:

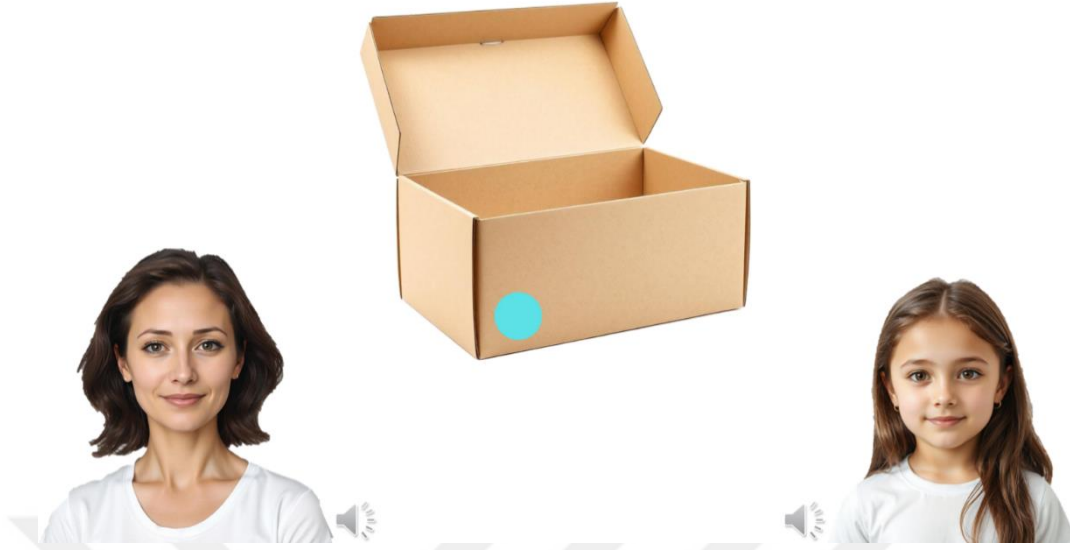


Peer: “There is a toy in the box. Playing with this toy is very boring.” (“*Bu kutunun içinde bir oyuncak var. Bu oyuncakla oynamak çok sıkıcı.*”)

Adult: “There is a toy in the box. Playing with this toy is very fun.” (“*Bu kutunun içinde bir oyuncak var. Bu oyuncakla oynamak çok eğlenceli.*”)

Question: “What kind of toy do you think is in the box? Is it boring like this child says, or fun like this grown-up says?” (“*Bu kutudaki sence nasıl bir oyuncak, çocuğun dediği gibi sıkıcı mı yoksa yetişkinin dediği gibi eğlenceli mi?*”)

Example of informational testimony in a household item domain:

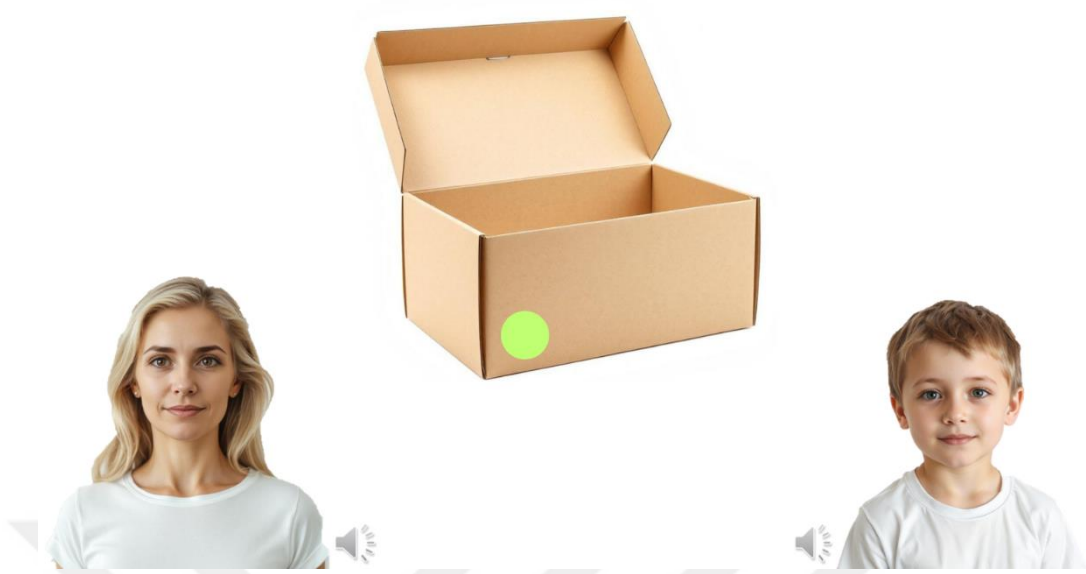


Adult: “There is a household item in the box. This household item is dirty.” (“*Bu kutunun içinde bir ev eşyası var. Bu ev eşyası kirli.*”)

Peer: “There is a household item in the box. This household item is clean.” (“*Bu kutunun içinde bir ev eşyası var. Bu ev eşyası temiz.*”)

Question: “What kind of household item do you think is in the box? Is it dirty like this grown-up says, or clean like this child says?” (“*Bu kutudaki sence nasıl bir ev eşyası, yetişkinin dediği gibi kirli mi yoksa çocuğun dediği gibi temiz mi?*”)

Example of emotional testimony in a household item domain:



Adult: “There is a household item in the box. I love using this household item.” (*“Bu kutunun içinde bir ev eşyası var. Bu ev eşyasını kullanmayı seviyorum.”*)

Peer: “There is a household item in the box. I don’t love using this household item.” (*“Bu kutunun içinde bir ev eşyası var. Bu ev eşyasını kullanmayı sevmiyorum.”*)

Question: “What kind of household item do you think is in the box? Is it loved like this grown-up says, or unloved like this child says?” (*“Bu kutudaki sence nasıl bir ev eşyası, yetişkinin dediği gibi sevilen mi yoksa çocuğun dediği gibi seilmeyen mi?”*)

Example of informational testimony in a toy domain:



Peer: “There is a toy in the box. When I take the pieces of this toy off and put them back, it works.” (*“Bu kutunun içinde bir oyuncak var. Bu oyuncağın parçaları çıkartılıp tekrar takınca çalışıyor.”*)

Adult: “There is a toy in the box. When I take the pieces of this toy off and put them back, it doesn’t work.” (*“Bu kutunun içinde bir oyuncak var. Bu oyuncağın parçaları çıkartılıp tekrar takınca çalışmıyor.”*)

Question: “What kind of toy do you think is in the box? Does it work when the pieces are off and put back like this child says, or does it not work like this grown-up says?” (*“Bu kutudaki sence nasıl bir oyuncak, çocuğun dediği gibi parçaları çıkartılıp takıldığında çalışan mı yoksa yetişkinin dediği gibi parçaları çıkartılıp takıldığında çalışmayan mı?”*)

APPENDIX E

LEARNING PREFERENCE QUESTIONS



“Do you remember Zeynep and Ali/Ayşe? Zeynep is an adult. Ali/Ayşe is a child around your age.”

- If you wanted to learn something about toys, would you rather ask an adult or a child? Why? (*“Oyuncaklar hakkında bir şey öğrenmek istesen, bir yetişkine mi yoksa bir çocuğa mı sorarsın? Neden?”*)
 - Adult/Child
- If you wanted to learn something about household items, would you rather ask an adult or a child? Why? (*“Ev eşyası hakkında bir şey öğrenmek istesen, bir yetişkine mi yoksa bir çocuğa mı sorarsın? Neden?”*)
 - Adult/Child
- Would you ask an adult or a child to find out if a toy is fun? Why? (*“Bir oyuncuğun eğlenceli olup olmadığını öğrenmek için, bir yetişkine mi yoksa bir çocuğa mı sorarsın? Neden?”*)
 - Adult/Child

- Would you ask an adult or a child to find out how a toy works? Why? (*“Bir oyuncuğun nasıl çalıştığını öğrenmek için, bir yetişkine mi yoksa bir çocuğa mı sorarsın? Neden?”*)
 - Adult/Child
- Would you ask an adult or a child to find out if a household item is fun? Why? (*“Bir ev eşyasının eğlenceli olup olmadığını öğrenmek için, bir yetişkine mi yoksa bir çocuğa mı sorarsın? Neden?”*)
 - Adult/Child
- Would you ask an adult or a child to find out how a household item works? Why? (*“Bir ev eşyasının nasıl çalıştığını öğrenmek için, bir yetişkine mi yoksa bir çocuğa mı sorarsın? Neden?”*)
 - Adult/Child
- Do grown-ups always know more than children? (*“Yetişkinler her zaman çocuklardan daha fazla şey bilir mi?”*)
 - Yes / No
- Do children sometimes know more than grown-ups? (*“Çocuklar bazen yetişkinlerden daha fazla şey bilir mi?”*)
 - Yes / No

APPENDIX F

CODING AND RESULTS OF WHY QUESTIONS

After each learning preference question, the responses of children to the why question regarding their selection of the informant (adult or peer) were transcribed. Next, several categories were formed depending on the child's responses to the questions, and the responses were coded by trained coders under these categories.

The category of "informant knows" consisted of responses from children that refer to the knowledge of a peer or adult (e.g., "I would ask the peer because the child knows.", "I would ask the adult because the adult knows better."). The category of "I like" included responses from children who based their preferences on their own liking (e.g., "I would ask to peer because I love children very much."). Also, "The informant likes" category involved child responses that based their preferences on the informant's likes (e.g., "I would ask to peer because the child loves or children loves toys."). The "seeing as peer" category included responses where the child preferred peers because they are similar to him/her (e.g., "I would ask to peer because the child is my age or the child is my school friend."). The category of "positive attributions" consisted of responses in which the child attributed positive characteristics to the informants (e.g., "I would ask to peer because the child is very beautiful and sweet.", "I would ask to adult because adults are both beautiful and smart."). Additionally, some responses were coded as the categories of "other" (e.g., "He/she is a boy/girl/big/little"), "irrelevant" ("I want to ask him/her", "It is a pen", "I like to paint", "I want to be a ballet teacher"), and "no response" (See Table F1 for distributions of responses across categories).

Table F1. Frequencies of the Responses to Why Questions

	Informant knows	I like	Informant likes	Seeing as peer	Positive attributions	Other	Irrelevant	No response
Learning about toys	27 (41%)	9 (14%)	2 (3%)	5 (8%)	2 (3%)	3 (4%)	12 (18%)	6 (9%)
Learning about household items	27 (41%)	6 (9%)	-	3 (4%)	3 (4%)	3 (4%)	19 (29%)	5 (8%)
Is a toy fun	24 (36%)	7 (11%)	4 (6%)	4 (6%)	2 (3%)	3 (4%)	16 (24%)	6 (9%)
Is a household item fun	17 (26%)	3 (4%)	3 (4%)	4 (6%)	4 (6%)	4 (6%)	19 (29%)	12 (18%)
How a toy works	30 (45%)	5 (8%)	2 (3%)	-	2 (3%)	3 (4%)	16 (24%)	8 (12%)
How a household item works	28 (42%)	4 (6%)	3 (4%)	-	4 (6%)	2 (3%)	11 (17%)	14 (21%)

APPENDIX G

THE DIMENSIONAL CHANGE CARD SORT TASK (CARLSON, 2005)



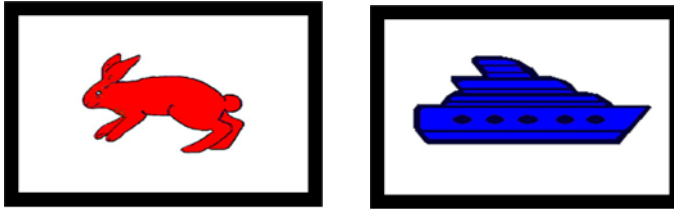
Demonstration phase: The target cards and boxes were introduced to the child one by one: “This is a box with a red rabbit on it. This is a box with a blue ship on it. Now we will play a card game with you and place the cards in these boxes. Our first game is a shape game. In the shape game, all the rabbit cards will go here [pointed to the box with a red rabbit on it], and all the ship cards will go here [pointed to the box with a blue ship on it].” A demonstration phase was performed with 2 trial cards. After the trials were completed correctly, the shape game was started.

Pre-switch phase (Shape game): Five test cards were introduced to the child in order: “Here is a blue rabbit card, which box will this card go in?” For the next trial, the next card was selected by saying, “Let’s do another one. Now it’s the red ship. Which box will this card go?” No rule was reminded during these trials, and when at least 4 out of 5 trials were completed correctly, the child passed to the next stage.

Post-switch phase (Color game): “Now we are moving on to a new game. We will not play the shape game anymore. Our next game is the color game.” The rules of the new game were explained to the child: “In the color game, I want you to put all the red cards here [pointed to the red rabbit box] and all the blue cards there [pointed to the blue ship box].”

The cards were given to the child in order, and the rule was reminded after each trial: “Remember, if it is red, it will go in this box, if it is blue, it will go in the other box.”

The child who completed at least 4 of the 5 trials correctly moved on to the next phase.



Border game: The next game was introduced to the child as follows: “Now I have another game. In this game, sometimes you will see cards with a black frame, just like this card [pointed to red rabbit card with frame]. If you see cards with black frames like this, you will play the color game. In the color game, the red ones went in this box and the blue ones in the other box [appropriate boxes are pointed to]. This card is red, so I will put it in this box [a card is placed in the box]. However, if the cards do not have a black frame, you will play the shape game, just like this card [pointed to red rabbit without black frame]. In the shape game, if it is a rabbit, it goes in this box; if it is a boat, it goes in the other box [point to appropriate boxes]. This card is a rabbit, so I will put it in this box [a card is placed in the box]. Okay? Now it is your turn.” This stage consisted of 10 trials, and the rules were reminded in each trial: “Remember, if there is a black frame, you will play the color game; if there is no black frame, you will play the shape game.” The test cards were given to the child in order, and asked which box the card go in. The game was completed after 10 trials.

APPENDIX H

DEMOGRAPHIC FORM (ENGLISH)

- Please write your ID number: _____

Section 1. Child Demographics

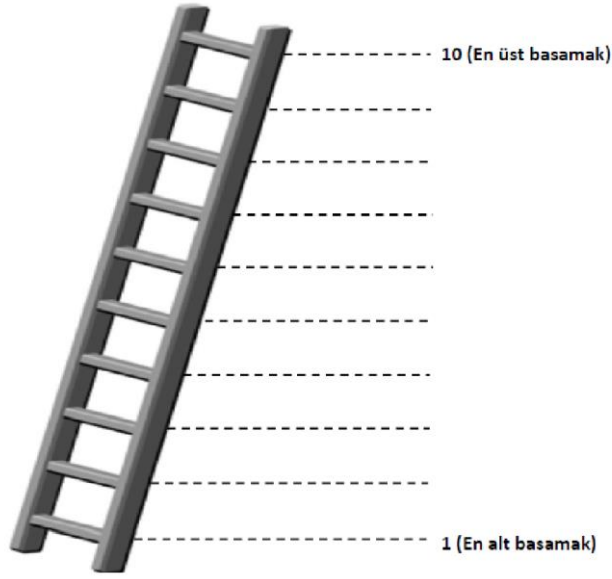
- Please write your child's date of birth in the format day / month / year: _____
- Please mark your child's gender: Girl / Boy
- Does your child have a sibling? Yes / No
 - If your answer is yes to the previous question, how many siblings does your child have? _____
 - If yes, what are their ages? _____
- Has your child been diagnosed with any developmental disorder? (e.g., autism, Down syndrome, attention deficit, learning disability, hyperactivity)
Yes/No
 - If yes, please explain: _____

Section 2. Parent Demographics

- Your age: _____
- Your gender: Female / Male / Other
- Your relationship to the child: Mother / Father / Other: _____
- Your occupation: _____
- Your education level:
 - Illiterate / Literate, or did not finish elementary school / Graduated from elementary school / Did not finish secondary school / Graduated from secondary school / Did not finish high school / Graduated from high school / Graduated from a two-year education institution / Did

not finish college / Graduated from college / Completed an Advanced Professional degree (e.g., M.A., Ph.D., or expertise in medicine)

- Is there another parent taking care of your child? Yes / No
- If yes, Parent 2's relationship to the child: Mother / Father / Other: _____
- Parent 2's age: _____
- Parent 2's occupation: _____
- Parent 2's education level:
 - o Illiterate / Literate, or did not finish elementary school / Graduated from elementary school / Did not finish secondary school / Graduated from secondary school / Did not finish high school / Graduated from high school / Graduated from a two-year education institution / Did not finish college / Graduated from college / Completed an Advanced Professional degree (e.g., M.A., Ph.D., or expertise in medicine)
- Think of this ladder as representing where people stand in your city. At the top of the ladder, people who have the highest income, the most education, and the most respected jobs stand. The bottom of the ladder stands for the people who have the least income, the worst education, and the least respected jobs. Moving higher up on this ladder, you get closer to the people at the top of the ladder, and moving down on the ladder, you get closer to the people at the bottom of the ladder. Where would you consider yourself on the ladder? Please choose the step (10 is the highest) where you stand in the current stage of your life, considering other people in your city.



- Please mark monthly total income of households (including the income of other households):
- ☐ Less than 22100 TL per month
 - ☐ Between 22100 – 40000 TL per month
 - ☐ Between 40001 – 60000 TL per month
 - ☐ Between 60001 – 80000 TL per month
 - ☐ Between 80001 – 100000 TL per month
 - ☐ Between 100001 – 120000 TL per month
 - ☐ More than 120001 TL per month

APPENDIX I

DEMOGRAPHIC FORM (ORIGINAL TURKISH VERSION)

- Lütfen katılımcı numaranızı yazınız. _____

Bölüm 1. Çocuklarla ilgili Sorular

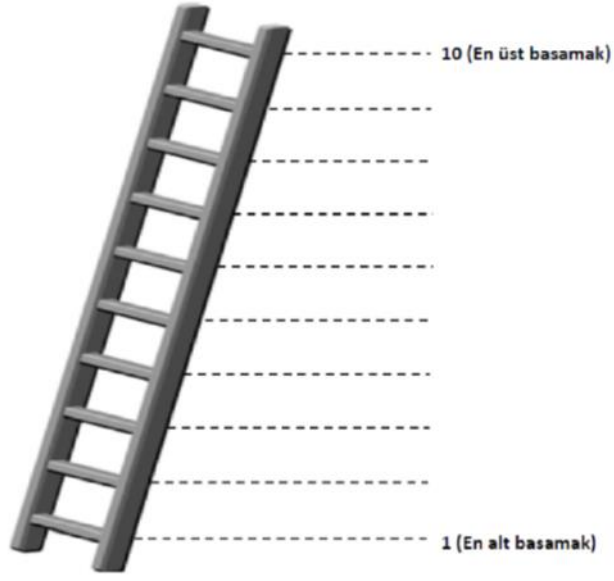
- Lütfen çocuğunuzun doğum tarihini gün/ay/yıl şeklinde yazınız: _____
- Lütfen çocuğunuzun cinsiyetini işaretleyiniz: Kız / Erkek
- Çocuğunuzun kardeşi var mı? Evet / Hayır
 - Bir önce soruya cevabınız evet ise çocuğunuzun (kendisi hariç) kaç kardeşi var? _____
 - Evet ise, yaşları nedir? _____
- Çocuğunuzun tanısı konmuş herhangi bir gelişimsel sorunu var mı (Örn. Otizm, Down sendromu, mongolizm, dikkat eksikliği, öğrenme güçlüğü, hiperaktivite)? Evet / Hayır
 - Evet ise, lütfen açıklayınız. _____

Bölüm 2: Ebeveyn Soruları

- Yaşınız: _____
- Cinsiyetiniz: Kadın / Erkek / Diğer
- Çocuk ile yakınlık dereceniz: Annesiyim / Babasıyım / Diğer _____
- Mesleğiniz: _____
- Eğitim seviyeniz:
 - Okuma yazma bilmiyor / İlkokuldan terk veya okuma yazma biliyor / İlkokul mezunu / Ortaokuldan terk / Ortaokul mezunu / Liseden terk / Lise mezunu / Yüksekokul mezunu (2 yıllık) / Üniversiteden terk /

Üniversite mezunu (4 yıllık) / Uzmanlık derecesi (yüksek lisans,
doktora veya tıpta uzmanlık gibi)

- Çocuğunuzun bakımını üstlenen başka bir ebeveyn var mı? Evet / Hayır
- Evet ise, ikinci ebeveynin yakınlık seviyesini açıklayınız: Anne / Baba /
Diğer _____
- İkinci ebeveynin yaşı: _____
- İkinci ebeveynin mesleği: _____
- İkinci ebeveynin eğitim seviyesi:
 - Okuma yazma bilmiyor / İlkokuldan terk veya okuma yazma biliyor /
İlkokul mezunu / Ortaokuldan terk / Ortaokul mezunu / Liseden terk /
Lise mezunu / Yüksekokul mezunu (2 yıllık) / Üniversiteden terk /
Üniversite mezunu (4 yıllık) / Uzmanlık derecesi (yüksek lisans,
doktora veya tıpta uzmanlık gibi)
- Lütfen şekilde gördüğünüz merdivenin sizin şehrinizde yaşayan insanların sosyoekonomik seviyesini yansıttığını hayal edin. Merdivenin en üst basamağında en zengin, en eğitilmiş ve en prestijli işlere sahip insanların, en altında ise en az paraya sahip, en eğitimsiz ve en az prestijli işlere sahip insanların bulunduğunu varsayın. Yukarı doğru çıktıkça en tepedeki insanlara daha çok yaklaştığınızı ve aşağıya doğru indikçe en alttaki insanlara daha çok yaklaştığınızı düşünün. Bunları göz önüne aldığınıza sizce siz bu merdivenin neresindesiniz? Lütfen hayatınızın şu andaki evresinde şehrinizde yaşayan diğer insanlara kıyasla nerede olduğunuzu gösteren basamağın (“10” en yüksek olmak üzere) yanına “X” işareti koyunuz.



- Lütfen evin toplam gelir düzeyini işaretleyiniz (Evde sürekli yaşayan tüm bireylerin toplam kazancı):
- ☐ Ayda 22100 TL'nin altında
 - ☐ Ayda 22100 – 40000 TL
 - ☐ Ayda 40001 – 60000 TL
 - ☐ Ayda 60001 – 80000 TL
 - ☐ Ayda 80001 – 100000 TL
 - ☐ Ayda 100001 – 120000 TL
 - ☐ Ayda 120001 TL'nin üzerinde

REFERENCES

- Aldan, P., & Soley, G. (2019). The role of intergroup biases in children's endorsement of information about novel individuals. *Journal of Experimental Child Psychology*, 179, 291-307.
- Bascandziev, I., & Harris, P. L. (2016). The beautiful and the accurate: Are children's selective trust decisions biased? *Journal of Experimental Child Psychology*, 152, 92-105.
- Başaran, B. (2023). *Epistemic or interpersonal? Children's selective trust in others* [Master's Thesis, İhsan Doğramacı Bilkent University].
- Bates, D., Mächler, M., Bolker, B., & Walker, S. (2015). Fitting linear mixed-effects models using lme4. *Journal of Statistical Software*, 67, 1-48.
- Bernath, M. S., & Feshbach, N. D. (1995). Children's trust: Theory, assessment, development, and research directions. *Applied and Preventive Psychology*, 4(1), 1-19.
- Best, J. R., & Miller, P. H. (2010). A developmental perspective on executive function. *Child Development*, 81(6), 1641-1660.
- Betts, L. R., & Rotenberg, K. J. (2008). A social relations analysis of children's trust in their peers across the early years of school. *Social Development*, 17(4), 1039-1055.
- Boseovski, J. J. (2010). Evidence for "rose-colored glasses": An examination of the positivity bias in young children's personality judgments. *Child Development Perspectives*, 4(3), 212-218.
- Boseovski, J. J. (2012). Trust in testimony about strangers: Young children prefer reliable informants who make positive attributions. *Journal of Experimental Child Psychology*, 111(3), 543-551.
- Boseovski, J. J., & Lee, K. (2006). Children's use of frequency information for trait categorization and behavioral prediction. *Developmental Psychology*, 42(3), 500.
- Boseovski, J. J., & Thurman, S. L. (2014). Evaluating and approaching a strange animal: Children's trust in informant testimony. *Child Development*, 85(2), 824-834.
- Boseovski, J. J., Hughes, C., & Miller, S. E. (2016). Expertise in unexpected places: Children's acceptance of information from gender counter-stereotypical experts. *Journal of Experimental Child Psychology*, 141, 161-176.

- Boseovski, J. J., Marble, K. E., & Hughes, C. (2017). Role of expertise, consensus, and informational valence in children's performance judgments. *Social Development, 26*(3), 445-465.
- Carlson, S. M. (2005). Developmentally Sensitive Measures of Executive Function in Preschool Children. *Developmental Neuropsychology, 28*(2), 595-616.
- Castellaro, M. A., & Roselli, N. D. (2015). Peer collaboration in childhood according to age, socioeconomic context and task. *European Journal of Psychology of Education, 30*, 63-80.
- Clément, F., Koenig, M., & Harris, P. (2004). The ontogenesis of trust. *Mind & Language, 19*(4), 360-379.
- Corriveau, K., & Harris, P. L. (2009). Choosing your informant: Weighing familiarity and recent accuracy. *Developmental Science, 12*(3), 426-437.
- Corriveau, K. H., Ronfard, S., & Cui, Y. K. (2018). Cognitive mechanisms associated with children's selective teaching. *Review of Philosophy and Psychology, 9*, 831-848.
- Croce, R. C., & Boseovski, J. J. (2020). Trait or testimony? Children's preferences for positive informants. *Journal of Experimental Child Psychology, 190*, 104726.
- Diamond, A. (2013). Executive functions. *Annual Review of Psychology, 64*, 135-168.
- Diamond, A., Carlson, S. M., & Beck, D. M. (2016). Preschool children's performance in task switching on the dimensional change card sort task: Separating the dimensions aids the ability to switch. *Developmental Neuropsychology, 28*(2), 689-729.
- Doebel, S., & Zelazo, P. D. (2015). A meta-analysis of the Dimensional Change Card Sort: Implications for developmental theories and the measurement of executive function in children. *Developmental Review, 38*, 241-268.
- Eggum-Wilkens, N. D., Fabes, R. A., Castle, S., Zhang, L., Hanish, L. D., & Martin, C. L. (2014). Playing with others: Head start children's peer play and relations with kindergarten school competence. *Early Childhood Research Quarterly, 29*(3), 345-356.
- Erikson, E. (1950). *Childhood in society*. New York: Norton.
- Faul, F., Erdfelder, E., Buchner, A., & Lang, A.-G. (2009). Statistical power analyses using G*Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods, 41*, 1149-1160.
- Fitneva, S. A. (2010). Children's representation of child and adult knowledge. *Journal of Cognition and Development, 11*(4), 458-484.

- Fotor. (2025). *Fotor – Online Photo Editor & Design Maker*. <https://www.fotor.com>
- Frye, D., Zelazo, P. D., & Palfai, T. (1995). Theory of mind and rule-based reasoning. *Cognitive Development*, 10(4), 483-527.
- Gelman, S. A. (2009). Learning from others: Children's construction of concepts. *Annual Review of Psychology*, 60(1), 115-140.
- Harris, P. L. (2002). What do children learn from testimony? In P. Carruthers, S. Stich, & M. Siegal (Eds.), *The cognitive basis of science* (pp. 316–334). Cambridge University Press.
- Harris, P. L. (2007). Trust. *Developmental Science*, 10(1), 135-138.
- Harris, P. L. (2012). *Trusting what you're told: How children learn from others*. Harvard University Press.
- Harris, P. L., & Corriveau, K. H. (2011). Young children's selective trust in informants. *Philosophical Transactions of the Royal Society B: Biological Sciences*, 366(1567), 1179-1187.
- Harris, P. L., & Koenig, M. A. (2006). Trust in testimony: How children learn about science and religion. *Child Development*, 77(3), 505-524.
- Harris, P. L., Koenig, M. A., Corriveau, K. H., & Jaswal, V. K. (2018). Cognitive foundations of learning from testimony. *Annual Review of Psychology*, 69, 251-273.
- Harris, P. L., Pasquini, E. S., Duke, S., Asscher, J. J., & Pons, F. (2006). Germs and angels: The role of testimony in young children's ontology. *Developmental Science*, 9(1), 76-96.
- Henry, G. T., & Rickman, D. K. (2007). Do peers influence children's skill development in preschool? *Economics of Education Review*, 26(1), 100-112.
- Hermes, J., Behne, T., & Rakoczy, H. (2018). The development of selective trust: Prospects for a dual- process account. *Child Development Perspectives*, 12(2), 134-138.
- Hoicka, E., Butcher, J., Malla, F., & Harris, P. L. (2017). Humor and preschoolers' trust: Sensitivity to changing intentions. *Journal of Experimental Child Psychology*, 154, 113-130.
- IBM Corp. (2023). *IBM SPSS Statistics for Windows* (Version 29.0.2.0) [Computer software]. Armonk, NY: IBM Corp. <https://www.ibm.com/spss>
- Jaswal, V. K., & Neely, L. A. (2006). Adults don't always know best: Preschoolers use past reliability over age when learning new words. *Psychological Science*, 17(9), 757-758.

- Jiang, H., Justice, L. M., Lin, T. J., Purtell, K. M., & Sun, J. (2023). Peer experiences in the preschool classroom: Contribution to children's academic development. *Journal of Applied Developmental Psychology, 86*, 101542.
- Johnston, A. M., Mills, C. M., & Landrum, A. R. (2015). How do children weigh competence and benevolence when deciding whom to trust? *Cognition, 144*, 76-90.
- Koenig, M. A., Clément, F., & Harris, P. L. (2004). Trust in testimony: Children's use of true and false statements. *Psychological Science, 15*(10), 694-698.
- Koenig, M. A., & Harris, P. L. (2005). Preschoolers mistrust ignorant and inaccurate speakers. *Child Development, 76*(6), 1261-1277.
- Ladd, G. W., & Price, J. M. (1987). Predicting children's social and school adjustment following the transition from preschool to kindergarten. *Child Development, 58*, 1168-1189.
- Lampinen, J. M., & Smith, V. L. (1995). The incredible (and sometimes incredulous) child witness: Child eyewitnesses' sensitivity to source credibility cues. *Journal of Applied Psychology, 80*(5), 621.
- Lane, J. D., Wellman, H. M., & Gelman, S. A. (2013). Informants' traits weigh heavily in young children's trust in testimony and in their epistemic inferences. *Child Development, 84*(4), 1253-1268.
- Landrum, A. R., Mills, C. M., & Johnston, A. M. (2013). When do children trust the expert? Benevolence information influences children's trust more than expertise. *Developmental Science, 16*(4), 622-638.
- Lew- Levy, S., van den Bos, W., Corriveau, K., Dutra, N., Flynn, E., O'Sullivan, E., Pope-Caldwell, S., Rawlings, B., Smolla, M., Xu, J., & Wood, L. (2023). Peer learning and cultural evolution. *Child Development Perspectives, 17*(2), 97-105.
- Lucas, A. J., Lewis, C., Pala, F. C., Wong, K., & Berridge, D. (2013). Social-cognitive processes in preschoolers' selective trust: three cultures compared. *Developmental Psychology, 49*(3), 579.
- Mammen, M., Köymen, B., & Tomasello, M. (2019). Children's reasoning with peers and parents about moral dilemmas. *Developmental Psychology, 55*(11), 2324-2335.
- Marble, K. E., Boseovski, J. J., & Hill, A. (2021). Is honesty always the best policy? Children's perceptions of negative performance feedback. *Social Development, 30*(4), 910-923.
- Markson, L., & Luo, Y. (2020). Trust in early childhood. *Advances in Child Development and Behavior, 58*, 137-162.

- McGuigan, N., & Stevenson, A. (2016). Does the Age and Familiarity of the Informant Group Influence the Tendency of 3-and 4-year-old Children to Conform? *The Journal of Genetic Psychology*, 177(4), 122-130.
- B. Mehrani, M., & Peterson, C. (2017). Interviewing preschoolers: Response biases to yes–no questions. *Applied Cognitive Psychology*, 31(1), 91-98.
- Mills, C. M. (2013). Knowing when to doubt: Developing a critical stance when learning from others. *Developmental Psychology*, 49(3), 404–418.
- Nguyen, S. P. (2012). The role of external sources of information in children's evaluative food categories. *Infant and Child Development*, 21(2), 216-235.
- Nguyen, S. P., Gordon, C. L., Chevalier, T., & Girgis, H. (2016). Trust and doubt: An examination of children's decision to believe what they are told about food. *Journal of Experimental Child Psychology*, 144, 66-83.
- Oh, J., Ju, N., Graham, S., & Choi, Y. (2023). Cultural divergence in children's selective word learning: Korean and Canadian children differ in their trust of adult informants. *Social Development*, 33(1), e12707.
- Okanda, M., & Itakura, S. (2010). When do children exhibit a “yes” bias? *Child Development*, 81(2), 568-580.
- Okanda, M., & Itakura, S. (2011). Do young and old preschoolers exhibit response bias due to different mechanisms? Investigating children's response time. *Journal of Experimental Child Psychology*, 110(3), 453-460.
- Piaget, J. (1932). *The moral judgment of the child*. London: Routledge & Kegan Paul.
- Pillow, B. H., & Weed, S. T. (1997). Preschool children's use of information about age and perceptual access to infer another person's knowledge. *The Journal of Genetic Psychology*, 158(3), 365-376.
- R Core Team. (2024). *R: A language and environment for statistical computing* [Computer software]. R Foundation for Statistical Computing. <https://www.R-project.org>
- Rakoczy, H., Hamann, K., Warneken, F., & Tomasello, M. (2010). Bigger knows better: Young children selectively learn rule games from adults rather than from peers. *British Journal of Developmental Psychology*, 28(4), 785-798.
- Ramani, G. B., & Brownell, C. A. (2014). Preschoolers' cooperative problem solving: Integrating play and problem solving. *Journal of Early Childhood Research*, 12(1), 92-108.
- Rotter, J. B. (1954). *Social learning and clinical psychology*. Prentice-Hall, Inc.

- Shutts, K., Banaji, M. R., & Spelke, E. S. (2010). Social categories guide young children's preferences for novel objects. *Developmental Science*, 13(4), 599-610.
- Simpson, J. A. (2007). Psychological Foundations of Trust. *Current Directions in Psychological Science*, 16(5), 264-268.
- Sobel, D. M., & Finiasz, Z. (2020). How children learn from others: An analysis of selective word learning. *Child Development*, 91(6), e1134-e1161.
- Sosa, E. (1991). Testimony and coherence. In *Knowledge in perspective: Selected essays in epistemology*, pp. 215-22. Cambridge, UK: Cambridge Univ. Press
- Taylor, M., Cartwright, B. S., & Bowden, T. (1991). Perspective taking and theory of mind: Do children predict interpretive diversity as a function of differences in observers' knowledge? *Child Development*, 62(6), 1334-1351.
- Tenenbaum, H. R., Winstone, N. E., Leman, P. J., & Avery, R. E. (2020). How effective is peer interaction in facilitating learning? A meta-analysis. *Journal of Educational Psychology*, 112(7), 1303.
- Tong, Y., Danovitch, J., Wang, F., Williams, A., & Li, H. (2021). Unsafe to eat? How familiar cartoon characters affect children's learning about potentially harmful foods. *Appetite*, 167, 105649.
- Tong, Y., Wang, F., & Danovitch, J. (2019). The role of epistemic and social characteristics in children's selective trust: Three meta- analyses. *Developmental Science*, 23(2), e12895.
- Vanderbilt, K. E., Liu, D., & Heyman, G. D. (2011). The development of distrust. *Child Development*, 82(5), 1372-1380.
- VanderBorght, M., & Jaswal, V. K. (2009). Who knows best? Preschoolers sometimes prefer child informants over adult informants. *Infant and Child Development: An International Journal of Research and Practice*, 18(1), 61-71.
- Wang, F., Tong, Y., & Danovitch, J. (2019). Who do I believe? Children's epistemic trust in internet, teacher, and peer informants. *Cognitive Development*, 50, 248-260.
- Williams, A. J., & Danovitch, J. H. (2019). What does Mickey Mouse know about food? Children's trust in favorite characters versus experts. *Journal of Experimental Child Psychology*, 187, 104647.
- Wimmer, H., Hogrefe, G. J., & Perner, J. (1988). Children's understanding of informational access as source of knowledge. *Child Development*, 386-396.

Zelazo, P. D., Carter, A., Reznick, J. S., & Frye, D. (1997). Early development of executive function: A problem-solving framework. *Review of General Psychology*, 1(2), 198-226.

