

Preschool Children's Perceptions of Fairness

“I can wait, even if it takes a while”

Orit Hod-Shemer¹ · Hana Zimerman¹ · Safieh Hassunah-Arafat¹ · Cheruta Wertheim¹

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Abstract Most studies on fairness behavior in preschool focus on fair resource allocation and on children's behavior when faced with fairness dilemmas. The purpose of this study is to understand preschoolers' point of view: what do they think when presented with various scenarios that call for fairness behavior? We interviewed 66 children aged 3.5–6 years, half of them girls, asking them about four social events in preschool life. We found that the children included three aspects in their answers that constituted the foundation of their perception of fairness and construal of social events: an explanation, expression of empathy and offering a solution. The children did so spontaneously and consistently. Moreover, the results showed that the more personally committed to the scenario the children felt, the fairer the behavior they reported. The study underscores various aspects of fairness and suggests referring to them both in research and in educational practice.

Keywords Fairness · Preschool · Resource allocation · Empathy

Introduction

Fairness is one of the building blocks of social behavior. It is manifested in a range of social behaviors and skills, such

as being able to see and understand the other's perspective, interpret social situations and respond appropriately in various social contexts (Rosenthal et al. 2008). Most studies on fairness in childhood focus on how children refer to resource allocation as representative of their concept of fairness (Elenbaas and Killen 2016; Kenward et al. 2015; Melis et al. 2013; Moore 2009; Rakoczy et al. 2016; Schmidt et al. 2016; Ulber et al. 2015). The objective of this study is to provide deeper insights into childhood fairness by examining how children respond to specific events in preschool life that involve fair behavior.

Studies on the development of fairness in childhood are informed by classical psychological theories of moral judgment development. Piaget (1965) identified two developmental phases. In the first, children judge situations according to what they consider the adults' judgment would be. In the second, they rely solely on their own. In infancy, children's thinking tends to be egocentric, making it difficult for them to see the world from other people's point of view, hence their perspective in situations requiring moral judgment is constrained. Kohlberg (1978) identified three levels of moral judgment, from moral behavior driven by personal interests to the highest level of judgment driven by principles of considering the other.

These classical theories present the development of morality as part of the development of cognition is thinking more generally. As the number of studies on pre-lingual infants has increased (e.g. Hamlin 2013; Sengsavang et al. 2015; Sommerville et al. 2013), it has been found that infants' ability to learn moral principles precedes the development of their abstract and logical thinking abilities. Moral judgment has been found to be related to affective intuition more than to deliberate thought. Apparently, children are spontaneously engaged with

✉ Orit Hod-Shemer
oritshemer@gmail.com

Hana Zimerman
hanazimer@gmail.com

Safieh Hassunah-Arafat
safiehar@gmail.com

¹ Beit-Berl Academic College, Kfar Saba, Israel

social and moral activities; they care about the other and want to do the right thing.

Fair behavior is a product of the development of moral conception—a gradual process that begins in infancy and is influenced by biological, familial, and environmental factors (Orr 2014). Infants have innate moral foundations. They are equipped with knowledge that enables them to distinguish between appropriate and inappropriate behavior and understand social relations on a basic level. They demonstrate an ability to do the “right thing” in situations in which they are only observers (Hamlin 2013).

Like verbal abilities, innate moral foundations develop when infants experience a response to their needs and feel cared for and protected (Orr 2014; Govrin 2014). The caregiver’s positive support ignites the spark of moral behavior (Sengsavang et al. 2015). Children’s interaction with their parents exposes them to social situations, which mainly include social rules. Moreover, their interaction with siblings exposes them to issues of justice and equality (Rosenthal et al. 2008), which in turn lay the ground for early social and moral learning. For example, 3 year-old preschoolers already take the other’s needs into account, and this concern for the other increases towards the age of five (Svetlova 2013).

Sengsavang et al. (2015) showed children 4–12 years old short movies in which two puppets discussed positive and negative moral behaviors. The children were asked to choose one puppet and explain their choice. The results indicated that motives for moral behavior in childhood were multifaceted and heterogeneous. When the contents of the clips were antisocial and negative, the children explained their choice through a certain behavior supported by rules (external motivation), independent interests, and consideration of the other. However, when the contents were prosocial and positive, references to the needs and feelings of the other were significant in the children’s answers. Their findings suggest that care for the other is a dominant motive even among 4–6 year-olds, playing a key role in motivating them for moral behavior.

One of the most common ways of examining fair behavior is assessing children’s responses to resource allocation paradigms (the ability to fairly share and distribute resources, such as toys, stickers) and their linking of effort and reward. Awareness of the need for equal allocation of resources emerges already in infancy. The expectation for fair and equal allocation is a developmental process, which begins between the ages of 12–15 months. By 15 months, infants demonstrate higher attention when presented with unequal allocation (Sommerville et al. 2013). Similarly, by 19 months, infants were found to gaze longer at situations of unequal, as compared to, equal allocation (Sloane et al. 2012).

It is reasonable to assume that norms of fair behavior are also universal and develop in the course of socialization. It seems that by watching and participating in daily interactions, infants acquire a “list” of action patterns in different situations in which resources are allocated or awarded, identifying social laws and applying them to new situations as early as their second year (Sloane et al. 2012).

Fairness studies on preschoolers have found that preschoolers expect fair allocation and tend to allocate fairly (Moore 2009). They protest against unequal distributions (Rakoczy et al. 2016) and expect equal distributions among groups (Elenbaas and Killen 2016). Fair allocation of resources was found to be related to the ability to share, both in infancy (Sommerville et al. 2013) and in kindergarten (Paulus et al. 2013; Warneken and Tomasello 2009), the nature of the situation, the identity of the receiver, and the “price” the child pays. Moore (2009) found that when children were asked to share resources with a child they considered a friend, the allocation was fair and just, even if the “price” for them was high. When the child was an acquaintance rather than a friend, the allocation was less fair. It was also found that children tended to act more fairly and equally with their friends than with strangers (Olson and Spelke 2008). In other words, the fairness of resource allocation varies according to the nature of the event (Smith et al. 2013), with the potential “receiver” affecting the child’s allocation decision: the less the child is involved and the fewer personal stakes he or she has in the allocation, the easier it is for him or her to be fair (Kenward et al. 2015).

At the ages of 3–6 years, children proclaim they will divide resources fairly; however, when children need to actually divide resources and understand that they might lose something they love, they will not divide resources fairly. Hence, there is a gap between what children think about fairness and what they actually do (Smith et al. 2013). This gap between cognition and action may derive from the preschoolers’ thought that fair norms should be found in the other, but not necessarily in themselves. They feel obliged to follow behavioral norms, but fail when they need to divide things that concern themselves. Moreover, children are more generous when they know others are observing them and are aware of their actions (Leimgruber et al. 2012). This was supported by studies that examined how children relate to hypothetical situations. It was found that children go through several phases in explaining fairness: from need and personal interest, through faith in complete equality, to a needs-based allocation. However, when children find themselves in real situations similar to the hypothetical ones, they tend to favor themselves, as opposed to the principles they use to describe fairness (Gerson and Damon 1978).

The literature review indicates that most studies on fairness behavior among preschoolers have focused on the

resource allocation paradigm. The purpose of the present study is to understand the children's point of view: what they think when presented with various scenarios that call for fair behavior. The study is unique in that children are presented with dilemmas from their preschool life and asked to report their moral norms in the context of familiar situations, not only in the classical resource allocation paradigm. The children's responses to these hypothetical situations—or rather, the way they structure and phrase them—shed light on common themes or mental structures in the developing concepts of fairness. Accordingly, the objective of this study was to examine the children's perspectives on fairness-related events from preschool life and identify patterns of similarities and differences in them.

Method

Research Design

A mixed-methods design was used, combining qualitative and quantitative research (Creswell 2013). The qualitative aspect involved interviews with children and their categorical analysis. The emerging categories were analyzed and then coded to enable quantitative statistical comparison of the children's statements as these related to their age. The benefit of this design, especially when research is conducted *with* children and not only *on* children, is that it enables a fuller and more nuanced understanding of a complex issue such as fairness.

Participants

Participants were 66 children, aged 44–74 months ($M=59.21$, $SD=6.98$) from six public preschools in a town in central Israel, half of them girls. All spoke Hebrew as their mother tongue and all were from average socioeconomic background. All children approached by the researchers were willing to participate.

The children were sampled by a combination of convenience and quota sampling to ensure an equal number of boys and girls. There were no significant gender differences in relation to age, $t(53)=1.03$, $p>.05$.

Instrument

Semi-structured individual interviews were conducted with the children in order to examine their conception of fairness. The children were presented with four events related to preschool life, and were asked to express their opinion about them. The “protagonist” of each narrative was presented as male or female to match the interviewed child's gender.

These events were adapted from answers given by 3–6 year-olds who had participated in a pilot study about fairness. In the pilot, we asked children to describe fairness and to illustrate the concept with an example. The most common examples were selected for use in the present study. It was felt that by using personally meaningful and relevant events would motivate the children to engage in the research by exploring their own emotions, thoughts and behaviors (Bentley 2012; Malti et al. 2009). This approach was designed to elicit the children's honest opinions as reliable informants (Einarsdóttir 2007; Webster-Stratton and Woolley 1999).

The events described to the children were exactly as follows:

- (1) *Sharing: “New game”*: The preschool teacher brought a new game and everybody wants to play it. What do you think?
- (2) *Considering the other: “Slow-talking child”*. You want to say something to the teacher. At the same time, another child is talking to her. That child talks very very slowly. What do you think?
- (3) *Following the rules: “Tidying up toys”*. One child made a mess of the toys in the preschool. The preschool teacher told the children first to tidy up and then to come to the group activity. The child came to the group activity but did not put the toys back in place. What do you think?
- (4) *Accepting the other: “New kid”*. There is a new child in the preschool, and he does not speak Hebrew. Can you be his/her friend? What do you think?

Note that the children were not instructed to refer to any specific information, but were only asked for their opinion on the scenario as a whole.

Procedure

Prior to conducting the study, we obtained the approval of the Office of the Chief Scientist in the Ministry of Education, the preschool teacher's consent and the parents' signed informed consent, as well as the children's agreement to participate (the researcher told the child that she wanted to hear his/her opinion on some stories).

Next, a researcher conducted a personal interview with every child in a quiet corner of the preschool. Each interview lasted 15 min at most. The children were asked whether they would like to help the researcher by answering several questions related to their preschool. Prior to presenting the questions, the researchers asked the children their name and how they were doing in order to alleviate any concerns and create a pleasant atmosphere. Then the researchers told the children they wanted to tell them

a story and wanted to know what they thought about it. It should be noted that the study was conducted in the children’s natural environment rather than in a laboratory, enabling them to feel completely at ease.

Coding and Data Analysis

The children’s answers were analyzed both qualitatively and quantitatively. The qualitative analysis revealed emergent categories. The quantitative analysis enabled us to analyze the children’s answers and present the differences between the events and the fairness elements emerging from the qualitative analysis, as well as to examine their relation to the children’s age.

Analysis of the children’s answers indicated three aspects of conceptual fairness: behavioral, emotional, and cognitive. The behavioral aspect was manifested in proposing a solution to the problem presented in the event; the emotional aspect was manifested in empathy for the other; and the cognitive aspect was manifested in providing an explanation for the event or proposed solution.

Our rating system for each category is illustrated through the second scenario in Table 1. It should be noted that every child’s response was rated three times, with each score in relation to a different aspect. The rating for all three categories ranged from 0 to 2. As illustrated in Table 1 for the *solution* (behavioral) category, a score of 0 represented no solution offered by the child; 1 represented a basic or external solution (e.g., placing the responsibility for the solution on others); and 2 represented a fair solution that took the other into consideration. In the *empathy* (emotional) category, scores represented a growing ability to recognize the other and take him/her into consideration. In the *explanation* (cognitive) category, 0 represented a situation in which the child did not provide an explanation for the situation or the solution offered; 1 represented a basic explanation; and 2 represented an explanation supported by a rule.

The children’s answers were independently coded by the four researchers according to the emergent categories. In the case of disagreement among coders, a discussion was held until consensus was achieved. Interrater reliability was calculated according to *Cohen’s Kappa* (Cohen 1960), and was satisfactory: *Cohen’s Kappa* = 0.75–0.85, $p < .05$.

After coding the children’s answers, the data were entered into a spreadsheet and analyzed using SPSS Version 20.0. The initial analyses involved computing descriptive statistics for age and gender as well as for the children’s fairness category scores. For each aspect of fairness (solution, empathy, and explanation), a repeated-measures ANOVA were used to test for differences in mean fairness scores between the four events. Finally, Spearman’s *r* correlations was calculated to examine the relationship between children’s age and fairness category scores.

Table 1 The rating of children’s answers: example from the “Slow-talking child” scenario (consideration)

Fairness categories	Score		
	0	1	2
Solution	An unfair solution or one that ignores most of the scenario information: <i>They’ll take her from the preschool and then she won’t talk to the teacher, and I’ll talk to the teacher instead</i>	Placing the responsibility for the solution on others: <i>Give her a microphone so that they’ll hear her better</i>	Taking responsibility for the solution and offering a fair one that takes everyone involved into consideration: <i>I’ll wait until she finishes</i>
Empathy	No emotional involvement: <i>She should raise her voice</i>	Showing generalized empathy by describing what the child should do: <i>Wait</i>	Showing practical empathy by expressing an emotion and describing an action: <i>I help him speak, I say what he says to make it clear</i>
Explanation	Describing the situation without providing an explanation: <i>Then I’ll talk lots and lots</i>	No explanation or reasoning, only an expanded description of the action: <i>I’d wait patiently</i>	An explanation supported by a rule or causal inference: <i>Then I would have to wait, and when he finishes talking, then I can talk</i>

The coding in the table applies to all scenarios

Results

The Children’s Answers

Table 2 presents means and standard deviations for the level of solutions proposed by the children, the empathy they expressed, and the explanation they provided.

Solutions

The repeated-measures ANOVA showed statistically significant differences in mean fairness scores between the four events, $F(3,135)=19.57$, $MSE=6.97$, $p=.00$, $\eta^2=0.30$. Post-hoc tests using the Bonferroni correction revealed significant differences ($p=.00$) in the degree of fairness of the provided solutions between all events. The children offered fairer solutions for the *New game* and *Slow-talking child* events. However, there were no significant differences between events 3 (*Tidying up*) and 4 (*New kid*), and the level of fair solutions for these two events were lower compared to the other events.

Empathy

Similarly, with reference to *empathy*, a repeated-measures ANOVA showed statistically significant differences in mean scores between the four events $F(3,135)=5.47$, $MSE=1.96$, $p=.00$, $\eta^2=0.11$. Post-hoc tests using the Bonferroni correction revealed significant differences ($p=.03$). The children were found to be more empathetic when referring to *New game* than when referring to all the other events.

Explanations

With regard to *explanations*, no significant differences were found between the events, $F(3,135)=2.36$, $MSE=0.88$, $p=.052$. The explanation given by the children was at an equal level for all the events.

Repeated measures within each event including all three categories obtained the following results. In Event 1 (*New game*) there were significant differences across the categories of fairness, $F(2,110)=59.69$, $MSE=11.97$, $p=.00$, $\eta^2=0.52$. The Bonferroni test showed that these

significant differences ($p=.00$) were between all categories, with the mean fairness score of *solution* found to be higher than the other aspects of fairness.

In Event 2 (*Slow-talking child*) there were significant differences across the categories, $F(2,106)=11.38$, $MSE=3.00$, $p=.00$, $\eta^2=0.17$. The Bonferroni test showed that these significant differences ($p=.00$) were between all categories except between empathy and solution.

In Event 3 (*Tidying up*) there were no significant differences across the categories, $F(2,120)=0.24$, $MSE=0.06$, $p>.5$.

In Event 4 (*New kid*), there were significant differences across the categories, $F(2,126)=8.66$, $MSE=3.06$, $p=.00$, $\eta^2=0.12$. The Bonferroni test showed that these significant differences ($p=.00$) were between all categories except between empathy and explanation.

The Correlation Between Age and the Children’s Answers

In order to examine the correlation between the child’s age and the three categories of fairness, a general sum score was calculated for each category, and Spearman’s r was calculated between the child’s age and each of the combined solution, empathy and explanation scores. It was found that older children offered fairer solutions ($rs=0.38$, $p<.01$, $N=55$). An example for an unfair solution offered by a child aged 3:8 for Event 2: *They’ll take her from the preschool and then she won’t talk with the teacher, and I’ll talk to the teacher instead*. A fairer solution was found in the older children’s answers, such as the following by a child aged five years: *I’ll wait because she speaks slowly*.

Similarly, the older the children then the more empathic they were ($rs=0.43$, $p<.01$, $N=55$). For instance, a 5 year-old child stated: *If he doesn’t have any friends, he’ll be sad*, while a 4 year-old provided an answer that showed lack of empathy: *“She needs to speak fast”*.

Older children also provided significantly clearer explanations that included a rule ($rs=0.46$, $p=.000$, $N=55$). For instance, a boy aged 5:9 explained: *You need to wait until she finishes speaking*; whereas a 4-year-old provided the following explanation for Event 2: *I’ll talk a lot*.

Table 2 Children’s responses by event and fairness category

Event	Solution		Empathy		Explanation	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
<i>New game</i> (sharing)	1.76	0.50	1.58	0.62	0.89	0.41
<i>Slow-talking child</i> (consideration)	1.38	0.62	1.42	0.71	1.00	0.61
<i>Tidying up</i> (following rules)	1.04	0.64	1.11	0.66	1.08	0.64
<i>New kid</i> (accepting the other)	0.75	0.75	1.15	0.76	1.09	0.83

Discussion

The current study examined the perception of fairness from the perspective of preschool children by discussing with them hypothetical scenarios and identifying similarities and differences in the way the children referred to them. The children's answers revealed a complex mental structure of fairness. When children were asked to refer to an event from preschool life they consistently and spontaneously combined in their answers the following elements: empathy, explanation, and solution. It appears that preschoolers' concept of fairness inherently includes these three elements—a finding further supported by the fact that the researchers did not specifically ask them to refer to these elements in their answer.

The emotional element or category was expressed in responses of empathy and caring for the other, evincing successful or at least attempted understanding of the other's perspective. The cognitive aspect was expressed in providing an explanation for the event. Again, although the children were not explicitly required to explain the scenario presented to them, it appears that they needed to explain it to themselves in order to reflect on it and reach a conclusion. This conclusion, the behavioral solution offered, seems to have been motivated by their empathy and rationalized by their explanation, indicating a perceived need to help the child described in the scenario and more generally an emerging concept of social behavior at a young age. Again, the children were not told to refer to the different elements but were only asked a general question relating to what they thought about the story.

This important finding expands the definition of fairness as perceived by preschoolers. It could indicate that fairness is a natural human attribute, which develops in an environment that nurtures social skills (Govrin 2014; Sloane et al. 2012). The complexity of the children's concept of fairness may be partly due to the level of personal interest each child had in the event, in keeping with Bicchieri's findings (2008), which show that assessing a person's moral behavior depends on contextual factors.

In discussing the findings, we will first refer to the empathy and solution elements, where the levels of fairness differed across events, and then address the explanation element where fairness levels were constant across events. The children showed greater empathy and offered fairer solutions in the two events *New game* and *Slow-talking child*, compared to the other two events, *Tidying up* and *New kid*. It appears that in the latter events, whether or not the children act fairly, they have little to directly gain or lose, and they feel no personal commitment. However, in the two former events, if the children behave unfairly by snatching the game or not waiting for their turn, there will be direct consequences for them. In both cases, they could lose their

turn or right to speak to the teacher, as she could respond negatively to this unfair behavior. This means that children's self-interest—their estimated profit/loss—affects the fairness of their response to the event presented (Kenward et al. 2015; Moore 2009).

In the explanation aspect of fairness, unlike the others, no differences were found among the events. This finding can be explained by the fact that fair behavior does not necessarily require a verbal explanation. This interpretation is supported by studies on moral behavior among preverbal infants (Hamlin 2013; Solane et al. 2012; Sommerville et al. 2013).

The results of this study also show that the elements of fairness develop with age, further supporting the validity of the three-part mental structure of fairness. Older children propose fairer solutions, express more empathy, and explain the social event through a rule or a norm. This finding is similar to that obtained by Smith et al. (2013), who found that children's ability to allocate resources fairly improves with age. The younger children (aged 3–4 years) in their study rarely referred to normative considerations, and were more focused on their personal desires and needs, while the older ones (aged 7–8 years) presented more normative considerations.

Moreover, younger children focused on their own needs and desires when asked about allocation methods, while older children referred spontaneously and explicitly to fairness issues. Sally and Hill (2006), who obtained similar findings, explained them by assuming that the development of theory-of-mind helps the young child act in accordance with relevant norms of behavior such as fairness, and apply them to different situations. We suggest that children who showed empathy and presented a fair solution used their mind and their ability to foresee the future actions of others (Carlson et al. 2013).

As they grow older, children also care more about their moral reputation and will therefore be careful to act fairly even if they stand to lose. Hence, we can also say that with age, children develop a sensibility to what others think about them (Meuwese et al. 2015; Smith and Warneken 2016).

Practical Implications

This study has several research and educational implications. First, we propose including in the conceptualization of fairness the children's perspectives as emerging from this study. Thus, when referring to fairness in future studies, it should include the elements of empathy, explanation, and solutions spontaneously surfacing in the children's answers, suggesting that they constitute an inherent basis for the conception of fairness and together make

up a holistic mental structure for what constitutes “fairness” in preschoolers’ minds.

Methodologically, the study highlights the importance of conducting research *with* rather than *on* the children and of treating children as an important and relevant source for a deeper and more nuanced understanding of fairness.

Educationally, we recommend that when discussing a social event with preschoolers, teachers should emphasize the elements found consistently and spontaneously in the children’s answers. We recommend highlighting the emotional element (Onchwari and Keengwe 2011), listening attentively to their cognitive explanations in order to understand the way they think and ask them to offer solutions (the behavioral element) to the event. Although we found that the three elements emerged consistently and spontaneously in the interviews, we believe that highlighting them will raise the children’s awareness of the complexity and importance of fairness issues and help them expand their toolbox for coping with social events.

Limitations and Concluding Remarks

The study exposes the mental structure of children’s thoughts when discussing events calling for fair behavior. We have suggested referring to fairness based on these elements both in research and in educational practice. However, since the three elements that emerged from the study are based on the answers of preschoolers, we recommend further study to discover whether these elements are also evident in older children as well. Do both older children and adults show aspects of empathy, explanation, and solution when referring to fairness-related scenarios?

In this study, the methodology chosen was individual interviews with children, and it served the purpose of understanding their perspective. Naturally, however, there is a gap between children’s reports and actual behaviors. The children may show understanding and empathy and propose a fair solution when discussing hypothetical scenarios, but we may expect a gap between their actual behavior and their reports (Smith et al. 2013).

To conclude, the children’s reference to preschool scenarios, and not only those related to resource allocation, opens a window to a broader understanding of the way preschoolers conceive fairness. Our findings indicate the complexity of this conception.. Children seem to have an inherent concept of fairness and try to act fairly within the limits of their developing understanding.

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