Introduction

Feelings such as love and sympathy towards others are some of the basic forces that shape social relationships. Many studies have shown that such reactions are often automatically elicited on the basis of unconsciously perceived attributes (Duckworth, Bargh, Garcia, & Chaiken, 2002; Tranel & Damasio, 1993). Further, as demonstrated by studies involving people with amnestic disorder, it is not necessary to have a conscious memory of a person to form an affective relationship with them (Johnson, Kim, & Risse, 1985).

Affective tagging as a phenomenon was first described by Kristina Olson, who defined it as a process in which an affect is associated with positive or negative objects and/or events, which are then transferred to a person experiencing the event or possession of the object. The result is a transfer of affect in the direction of that person, even after disappearance of the event or object originally associated with it (Olson, Dunham, Dweck, Spelke, & Banaji, 2008). Initially, research on the phenomenon concerned the preferences of people experiencing fortune over those who were unfortunate. In the study, Olson, Banaji, Dweck, and Spelke (2006) found that people associated with positive outcomes were more likely to be assessed as higher in likeability than those associated with negative events (experiencing unlucky, or unfortunate events). In addition, in a series of studies, Olson et al. (2006) showed that the preference for lucky ones over those who are unlucky is a cross-cultural phenomenon.

Li, Spitzer, and Olson (2014) conducted a series of investigations on the impact of wealth on the perception of the agent by children. In one of the experiments, the researchers presented children with two other, unknown children, who were of the same age and gender. One of them had one, and the other two, playdough jars. The children played the Where’s Waldo game with the experimenter to divert their attention. The participants were then asked to assess which child they would prefer to play with. The study found that the majority of participants preferred a child who had more resources (the playdough jars). Moreover, they were more likely to share their toy with that child, even though the majority did not remember which of the children had more playdough.

It is worth noting that also moral judgments are intuitive in the majority. According to Haidt’s theory which is an example of intuitionist approach to the debate about the nature of moral judgments, the assessment of moral behavior is automatic and intuitive (Haidt, 2001). According to Haidt’s theory, all moral judgments are based on intuitive processes, not rational assertion. Decisions of moral nature are made in the first few seconds, in fact in
Evidence of the intuitive nature of moral judgments is provided by the results of studies involving preverbal infants (Hamlin, Wynn, & Bloom, 2007). It seems that already several months old infants are able to make moral judgments based on observing the behavior of two characters in relation to each other. Thus, both affective and moral judgments are frequently based on emotional intuitions that emerge without intention or effort. Therefore, it is important to study emotional and affective processes that determine moral judgments.

Despite numerous studies on the affective tagging in children toward those who have more resources, there is no empirical research (according to the researcher’s best knowledge) on the influence of this factor on moral judgments. It can be expected that if a greater number of resources attractive for children is associated with higher level of liking for an individual, it will also have a direct impact on the assessment of the moral behavior of a given character.

**Study 1**

The main purpose of the study was to determine whether the agent’s welfare affects not only the affective attitude toward him/her, but also the perception of him/her in terms of moral agent and moral recipient (and, analogously, immoral agent and recipient). The moral agent and recipient were defined according to Kurt Gray’s theory (Gray & Wegner, 2011). According to the authors, perception of morality is always involved in the process of casting at least two roles by an observer: the moral agent and the moral recipient of a given behavior. The moral agent is the person who performs the (im)moral act, the moral recipient is the person towards whom the act is aimed. An important element of this theory is the assumption about completing the moral dyad. As Gray and Wegner claim, the two sides of moral behavior mentioned must always appear in the mind of the observer. This means that in a situation in which the character of the perpetrator or moral recipient is not expressed directly, observers automatically seek a person suffering from a given behavior and vice versa if there is a victim, in the observer’s mind, the perpetrator must also appear. The motives for seeing individual in the role of the moral agent or recipient can vary. According to the theory of Johnatanm Haidt, most of them are emotional. That is why, based on the results obtained by Li et al. (2014), we wanted to determine whether having more desired resources would influence the character’s moral assessment. We assumed that children can base their moral judgements on their liking and in that case, attribute positive moral agency to the richer agent. Put somewhat differently, we posited that children can see the agent who has more resources as having more agentic than communal traits, and then see that agent as more willing to be a moral (as opposed to immoral) agent. Additionally, in consonant with results by Li and colleagues (2014) we expected all this effects without explicit memory for wealth information in the exposure phase.

**Method**

**Participants**

The study involved 46 children aged 45 to 57 months (M = 51.11, SD = 2.77); there were 21 girls and 25 boys. These age group was chosen for consistency with the original research by Li et al. (2014). The sample size was determined based on power analysis conducted using proportion power calculation for binomial distribution in R 3.2.5. Results suggest that, given alpha of .05 and power of .95 a sample of 43 total participants would be required to detect an medium effect size of Cohen’s h = .50 (equivalent of difference between proportions .37 vs .63). Our sample of 46 children is based on the fact that we decided to test all participants for whom we had have parental informed consent.

All participants attended local kindergartens. The children were recruited from local kindergartens and day-care centers. Informed consent was obtained from the children’s caregivers via the preschools. Children were tested in a quiet room in their kindergarten and received colored marbles as a gift for their participation.

**Materials and Procedures**

The study was based on the Li et al. (2014) experiment, with a few important modifications. First, instead of images of children on the computer screen, two identical puppets were presented, which differed only in the color of the ribbon and the names (Lucek and Antek). The use of animal puppets instead of humans follows previous literature, which has shown that children mostly treat puppets in a similar to humans (Schmidt, Rakoczy, & Tomasello, 2012). Three pairs of the puppets were used in the experiment: lions, giraffes and elephants. The type, order of presentation and amount of resources that puppets possessed were counterbalanced across participants. Another modification was the use of glass balls instead of the playdough jars and the memory game MEMO instead of Where’s Waldo.

At the beginning of the procedure, each participant was introduced to the puppets. The experimenter presented Lucek and Antek and showed that one of them had five glass balls and the other only two. This was the only information about the puppets the children received. Then the puppets disappeared from their view, together with the glass balls they possessed. In the next step, the experimenter played with the child in the MEMO game (12 elements – 6 pairs). The purpose of the game was to engage the participant’s working memory and redirect his/her attention. At the end of the game (about two minutes), the experimenter left the room, and the second experimenter, blind to the hypothesis, came in. The second experimenter again showed two puppets (Lucek and Antek) to the participants and asked which of them he/she would like to play with. Four additional questions were posed about the role of moral agent and moral recipient (and, analogously, immoral agent/recipient) using visual material (Appendix 1):
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1) Someone made a mess in the room. Who do you think it was: Lucek or Antek? – indicator of immoral agent
2) This boy broke somebody’s toy. Whose toy was it, Lucek or Antek’s? – immoral recipient
3) Someone cleaned up the room. Who do you think it was, Antek or Lucek? – moral agent
4) This girl wants to share her toy. Who do you think she will share it with Antek or Lucek? – moral recipient

The stimuli was chosen on the basis of previous research, which showed that destroying or taking someone’s toy is considered immoral by children (Liberman, Howard, Vasquez, & Woodward, 2017; Schmidt, Rakoczy, & Tomasello, 2012), whereas tidying up a room or sharing is treated as moral behavior by preschoolers (Grafenhain, Carpenter, & Tomasello, 2013; Hamlin, Wynn, Bloom, & Mahajan, 2011). The order of the questions was counterbalanced across participants.

Results

We conducted McNemar tests on the within-participant responses to the preference and positive moral agency ascription, comparing children who: rated the disadvantaged as nicer and ascribed positive moral agency to them (n = 3); rated the advantaged as nicer but ascribed positive moral agency to the disadvantaged (n = 1); rated the disadvantaged nicer but ascribed positive moral agency to the advantaged (n = 1); rated the advantaged nicer and ascribed positive moral agency to them (n = 41). The McNemar test revealed that the preference and attribution measures did not differ from one another, \( p = 1.00 \). Consistent with our hypotheses, the children said that the advantaged recipient was nicer (n = 42; 91.3%; 95% CI 80.6% to 97.0%) than the disadvantaged recipient (n = 4), \( z = 5.46, p < .001 \), binomial test, Cohen’s \( h = 1.93 \). The children were also more likely to ascribe positive moral agency to the advantaged agent (n = 42; 91.3%; 95% CI 80.6% to 97.0%) than the disadvantaged agent (n = 4), \( z = 5.46, p < .001 \), Cohen’s \( h = 1.93 \). The children were also more likely to say that the advantaged character was the positive moral recipient (n = 36; 78.3%; CI 64.9% to 88.2%) compared to the disadvantaged character (n = 10), \( z = 3.69, p < .001 \), Cohen’s \( h = 1.20 \). The opposite pattern was seen with the disadvantaged character: they were far more likely to be seen as the negative moral agent (n = 39; 84.8%; CI 92.9% to 72.4%) than the advantaged character (n = 7), \( z = 4.57, p < .001 \), Cohen’s \( h = 1.54 \).

The children were only able to correctly identify which puppet had more glass balls in the previous phase 41% of the time (95% CI 28.0% to 55.7%). This does not differ from chance (50%), \( z = 1.03, p = .302 \). This finding confirms that children ascribed moral agency without explicit memory as to which agent was seen with more resources in the exposure phase.

Discussion

In the current study we showed that the amount of desirable resources influenced not only the level of liking toward the advantaged agent, but also the assessment in terms of moral agency. The children were inclined to perceive the advantaged puppet as the moral agent and moral recipient, while the puppet with fewer resources was often viewed as the one who committed the immoral act and toward whom another person had behaved immorally. The majority of the children pointed to the puppet with more resources as the one they would like to befriend and the one who was a positive moral agent and positive moral recipient. Our study also confirmed the role of the affective tagging mechanism in shaping children’s attitudes towards others: The children pointed to the advantaged agent as being nicer and more moral, even though they could not identify the reason as to why they made that choice. In other words, they had no explicit memory of which character had more resources. Additionally, the tendency to attribute positive moral traits (positive moral agency and positive moral recipiency) to the agent with more resources seems stronger than the reverse tendency (i.e., to attribute negative moral traits to a disadvantaged character).

The results of the presented study are consistent with Haidt’s theory concerning the intuitive nature of moral judgments. As it was shown, children did not have explicit memory of which character had more resources, and yet attributed a positive moral agency to the puppet with more resources. Referring to Haidt’s concept, one can expect that knowing which of the characters was privileged would modify children’s assessment of their moral character. As Haidt points out, rational post hoc justifications can modify previously taken moral judgments (Haidt, 2001; Haidt & Joseph, 2007).

The psychological mechanism that explains the effects of affective tagging on children’s moral assessment in our study can be a liking effect. In the series of studies conducted by Bocian, Baryła, Kulesza, & Wojciszke (2018) involving adults, the researchers proved that the pure feeling of liking influences the moral judgements of the agent’s behavior. The behavior of characters who were given higher scores in the liking scale (caused by mimicry, mere exposure or belief similarity) was assessed to be more moral in comparison with persons to whom the respondents declared a less liking. In this context it is worth mentioning the classical Halo Effect, which is defined currently as a bias consisting of “unwarranted inferences about the positive or negative qualities of a person based on information about other unrelated characteristics [...] such as physical attractiveness, social status, having an unusual name, interpersonal style, etc.” (Forgas & Laham, 2017, p. 289). The Halo Effect can also be triggered by the social status of the person, including (especially in the case of children) by the amount of resources he/she owns. Thus, the perception of a character with more desirable resources in terms of moral perpetrator and recipient, and the character poorer in resources as immoral agent and immoral recipient can be explained by referring to mere liking effect, which is confirmed in the referenced studies by the choice of the privileged puppet as a nicer friend.

It is worth referring to the studies of Mikiewicz and Wojciszke (2007) with adults, which show that Polish
adults tend to perceive wealthy people as less moral. This is clearly in contradiction with the results of our research. It seems that this might be explained by the cultural specificity of the phenomenon. Perhaps, attributing smaller morality to wealthy people is specific to Polish culture. Therefore, children in preschool age, when the process of internalization of cultural values is not yet completed, do not show this type of thinking. This is confirmed by research by Horwitz and Dovidio (2017), which shows that adult Americans are willing to attribute more positive attitudes to rich people compared to people from the middle class. In their research, participants more often attributed the blame for causing a car accident to a middle class person than to a rich one (Horwitz & Dovidio, 2017). To verify this hypothesis, it is worth checking what the relation between the degree of possession of resources and the attributed moral character looks like in older children.

To the best of our knowledge, the current research is the first study on children that shows the impact of the amount of resources available to perceive the other person in terms of moral agent and moral recipient. However, our results are consistent not only with previous studies involving children (Field, 2006; Olson et al., 2012), but also with studies on adult participants (Somerville, Wig, Whalen, & Kelley, 2006). In future studies, it would be interesting to test how stable the influence of possession of resources on moral judgement across development is. As Sigelman (2013) in her series of studies showed, children who are eight years old are less willing to ascribe certain traits and attributes to agents based only on the perception of being lucky or unlucky than younger children.

References


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Appendix 1