BELIEFS OF SOCIAL EQUALITY AND ATTRIBUTION OF TRAITS TO IN-GROUP AND OUT-GROUP PEERS: A STUDY OF ITALIAN CHILDREN

Cristina MOSSO *, Emanuela RABAGLIETTI, Giovanni BRIANTE, Silvia CIAIRANO
Department of Psychology, University of Torino, Torino, Italy

ABSTRACT

The study investigated firstly, gender and age differences with respect to the beliefs of social equality, a cognitive component of system justification; secondly, the attribution of positive and negative traits to in-group and out-group peers in school age children. Thirdly and finally, we explored the relations between social equality and attribution of traits, controlling for gender and age.

163 Italian children (M age = 8.37 years, SD = 1.11; 49% girls) participated in the study. They were administered a short self-report questionnaire investigating social equality and were asked to attribute positive and negative traits to the figures of two children (one in-group child with “white” skin; one out-group child with “black” skin). We found that: a) older children perceived higher social equality and girls were less likely than boys to attribute negative traits to the in-group peer; b) children who had higher social equality beliefs were less likely to attribute negative traits and more likely to attribute positive traits to both in-group and out-group peers, also controlling for gender and age. Increasing the beliefs of social equality in children appears a useful educational intervention for promoting both in-group and out-group non-discriminatory peer relations.

KEYWORDS: social equality, trait attribution, children.

* Corresponding author:
E-mail: cristina.mosso@unito.it
INTRODUCTION

Immigrant children are the fastest growing segment in all western child population, including Italy, the country where this study was conducted (Ine, 2008; Istat, 2008). These children come from a variety of nations, speak a multitude of languages, and have a range of ethnic, cultural, religious, and socioeconomic backgrounds. Sometimes some physical characteristics, such as the color of the skin and/or a traditional dressing, suggest a foreign origin with respect to the country where they live and indicate their belongings to the out-group. Besides, one may be perceived and categorized as out-group and therefore stigmatized as “diverse” even if he/she feels an in-group member.

Nevertheless, some episodes showed that in many Western countries immigrant and/or diverse people, including children, may be victims of discrimination and even of racism (Zincone, 2001; Johnson & Lambrinos, 1985; Licata & Klein, 2002). Episodes of discrimination and racism are often supported by negative stereotypes versus the out-group and in-group favoritism. Furthermore, violence and discrimination towards peers in general have dramatically increased at all school levels (Menesini, 2008). Therefore, the investigation of the processes underlying discrimination among children is becoming an increasingly pressing issue for scholars, as well as educators and policymakers.

We do not want to enter here in the large debate (e.g., Jost, Burgess, & Mosso, 2001), which has concerned especially adults, about the possible relations among ideology (Havel, 1991) and other belief systems that serve as excuses and justifications for discriminatory individual, political, social, and economic behavior and attitudes. We would just mention that according to the system justification theory some ideology and beliefs make people feel better when expressing in-group favoritism and negative stereotypes towards the out-group (Jost & Hunyady, 2005). However, other previous studies on social dominance (Sidanius & Pratto, 1999), ego justification (Fein & Spencer, 1997), and social identity (Tajfel & Turner, 1986) contributed to an appreciation of the functional basis of stereotype content. A key assumption is that people in general, and also children from the age of three (Aboud & Amato, 2001), are motivated to evaluate their own group positively, enhancing or maintaining a positive sense of their social self. For children, learning an adequate understanding of social rules, regulations, and practices is crucial in the process of growing up (Fischer & Connell, 2003). The acquisition of this knowledge is inherently linked to group membership and self-categorisation (Hirschfeld, 1996). We also already know that social categorisation, as the process for establishing favourable distinctiveness and in-group favouritism do not lead only to a positive identity and self-perception (Aboud, 2003). They can also lead to a distorted perception of variability, as they exaggerate differences between and similarities within groups (Messick & Mackie, 1989). Besides, social categorisation and in-group favouritism may encourage the attribution of negative
traits to the out-group and the formation and use of social stereotypes, which are based on the notion that all members of a particular category are alike in some way (Hamilton & Troiler, 1986). The exaggeration of similarities is especially pronounced when one evaluates groups to which he/she does not belong.

In spite of the importance of investigating these phenomena in children, to our knowledge, no studies have systematically examined whether and how system justification, and/or some of its components like cognitive beliefs of social equality, affect intergroup evaluation in children. Studies have rather focused either on social identity processes and/or on cognitive development in terms of increased ability to interpret social reality (Bigler, Brown, & Markell, 2001; Nesdale, Durkin, Maass, & Griffiths, 2004). Among others, the study by Rholes and Ruble (1984) showed that 9-10 years old children were relatively more consistent than younger children in predicting the actor's behaviour on the bases of vignettes that were designed to reveal his/her abilities and/or personality traits. Also, the study by Yuill and Pearson (1998) highlighted that children from 5 years appreciated traits as psychological causes of behavior.

Furthermore, we already know that the perception of being similar to other people (whatever group they belong to) is at the basis of friendships from childhood on (Kupersmidt, DeRosier, & Patterson, 1995), and it may promote empathy and prosocial behaviour and prevent the use of aggression (Eisenberg & Miller, 1987). Previous studies illustrated that as children age and cognitive development advances from concrete to formal thinking they also show an increasing ability of using high-order morality and being emphatic with other people (Hoffman, 2000).

It is also important to consider gender differences when social equality and the attribution of traits to peers are concerned. Previous studies already showed that boys and girls construct peer relations and friendships differently at least starting from late childhood. Girls seem more likely to appreciate the quality and the deepness of relations, while boys are more likely to regard sharing activities with peers (Rubin, 1985; Stein, 1986). The value of different facets of social relations may affect also the beliefs of social equality and the use of social categorization. However, the findings of a recent meta-analysis on moral orientation (Jafée & Hyde, 2000) do not offer strong support for the claim that women use predominantly a care orientation and that men use predominantly a justice orientation.

The present study aims to investigate a) age and gender differences for beliefs of social equality, as a cognitive component of system justification; b) the attribution of positive and negative traits to in-group (represented as a “white” child) and out-group (represented as a “black” child) peers in school-age children. Besides, it focuses on the relations between the beliefs of social equality and trait attribution.
More specifically, we posed two research questions:

1. Are there mean level differences with respect to beliefs of social equality and the attribution of positive and negative traits to in-group and out-group peers between boys and girls, and younger and older children?
2. Is there a relationship between social equality and the attribution of positive and negative traits to others, after having controlled for gender and age?

We expected to find an age-related progression in the beliefs of social equality in terms that older children show higher social equality. This assumption is based on the fact that younger children may be less able to disentangle their personal interests from general social considerations of other people.

Similarly, we expected some age-related progression in respect to trait attribution, with younger children attributing traits to peers more easily than older ones. In fact, although trait attribution is very common in adult population, as people grow they seem to require a large amount of information for trait inference (Aloise, 1993).

Previous information we had about gender is too scarce to allow us to make any strong prediction about gender-related findings with respect to both social equality and trait attribution. However, for trait attribution, we have to consider that the gender of the figure presented to the children in this study is male. On the one side, we might expect to find out that boys are more extreme than girls in their judgment. That is, boys might attribute in ease both positive and negative traits to the peers represented in the figures because their possibility of identification is stronger. On the other side, we already learned that the ratings of personality traits by eight- to ten-year-old children reflect strong biases favoring their own sex (Powlishta, 2005).

Finally, as adults use negative stereotypes towards the out-group much more when they justify social inequality (Jost & Hunyady, 2005), we expected that the beliefs of social equality are negatively related to the attribution of negative traits. On the same bases, we expected also that beliefs of social equality are positively related to the attribution of positive traits, especially in the figure representing the out-group child. However, we did not find any previous study exploring in children the role of imbuing social inequality with legitimacy and of seeing it as good, fair, natural, desirable, and even unavoidable.

METHOD

Participants
The participants were 163 children ages 6 to 11 (M age = 8.37 years, SD = 1.11; 49% females) attending the second and the fourth grades (8 classes, 4 for each school) in two primary schools in Torino, Italy. In the following text the children in the second classes are classified as younger (49%) and those in the fourth classes as older. In order to exclude the possibility that acquaintance with immigrant mates

_Cognition, Brain, Behavior. An Interdisciplinary Journal_  
14 (2010) 47-61
changes the pattern of findings, we selected only classes in which there were no non-Italian children.

Most parents (98% of fathers, 89.1% of mothers) were employed. Based on the responses to questionnaires completed by the parents we found that 46% of fathers and 26% of mothers could be classified as low social status (they were unemployed, or manual workers), 54% of fathers and 73% of mothers could be classified at an intermediate level of social status (they held sales, administrative, or intellectually-oriented jobs, e.g. teachers, researchers, designers) and finally 1% of the mothers held managerial positions. These socio-demographic figures are similar to those found in the general population from the same Italian province (Istat, 2007).

Procedure
Parents provided consent for their children to participate, and the children themselves agreed to participate in accordance with Italian law and the ethical code of the Association of Italian Psychologists. The children completed questionnaires, which were distributed by research staff during classroom time. They also took home a questionnaire requesting socio-demographic information to be completed by their parents. This questionnaire was completed by 94% of parents. We found no relevant differences between the children of parents who filled in the questionnaire and those who did not with respect to the other information considered.

The children’s and parents’ questionnaires took approximately 30 and 10 minutes respectively to complete. Both children and parents were assured confidentiality and anonymity. Teachers were not present in the classroom while the questionnaire was administered to the children. Pencils and rubbers were offered as incentive for participation. 100% of the children completed the questionnaires.

Measures
Perception of social equality. This was assessed using five items - developed taking into consideration the young age of the children - after having described the following situation: “Z’s family is poor. Z has always been hard working, dedicated and confident in his/her ability to succeed. Unfortunately, people aren’t always given the same opportunities to succeed in our society”. The children were asked whether or not they think that it is fair or true that: a) Z’s teacher always gives him/her the last choice of colored pencils; b) Z’s classmates never play with

---

1 The majority of children’ parents (58.1% of fathers and 52.7% of mothers) had a high school diploma. 11.7% of fathers and 20.9% of mothers had a university degree. Regarding family structure, 92% of the parents lived together, and 8% were separated or divorced.
2 The parental questionnaire was filled by 69.2% of mothers (M age=39.72 years) and 43% (M age =43.79 years) of fathers.
him/her; c) the class leader often mistreats him/her; d) Z’s teacher and classmates don’t always act the same way towards him/her; e) there’s no difference between rich people and poor people. The answers ranged from 1 (not at all agree) to 5 (complete agree). The items a, b, and c were recorded for having higher scores for social equality.

**Trait attribution to in-group and out-group peers.** Considering the necessity to present children of different ages the same stimulus, we used two simple figures representing a white child (in-group) and a black (out-group) child; both little boys were smiling and skating (see Figure 1). This figure was carefully selected because it showed two children who were identical in every way except for their skin color. We know that the choice of representing in-group and out-group by the way of the color of the skin may be controversial. However we also based our choice on the study by Bigler and Liben (2006) who argued that person characteristics that are perceptually discriminable are more likely than other characteristics to become the basis of stereotyping in childhood. In terms of skin color, all our participants were likely to perceive the white boy as more similar to them than the black boy. However, we cannot exclude that the boys would perceive themselves as more similar than the girls to both the children in the figure because of the masculine gender.

The trait attribution to in-group and out-group peers was assessed using 8 items per each figure of peer. The children were asked whether or not they thought the white and the black boy were: a) good; b) clean; c) nice; d) happy; e) sad; f) dirty; g) bad; h) unpleasant. The answers ranged from 1 (Not at all) to 5 (Very). Higher scores mean higher trait attribution.

---

**Figure 1**
Drawing used in the study.
RESULTS

Psychometric characteristics of social equality and trait attribution

To assess the dimensions underlined by the items aimed at investigating social equality and trait attribution to in-group and out-group peers, we used principal component analysis, truncated at the eigenvalue of >1, and whether necessary Varimax rotation. From this analysis we saved the factorial scores and used them as variables in the following analysis. Furthermore, to investigate the reliability of the scales we used Cronbach’s alpha on the original items.

We first analyzed the items referring to social equality and found only one underlying dimension in which all the items saturated positively: eigenvalue 1.74, explained variance 35%. However, the Cronbach’s alpha is rather low: .50.

The next step was to analyze the items aimed at evaluating trait attribution to the white/black child. In both cases we found two dimensions (one negative and one positive). The items sad, dirty, bad, and unpleasant all saturated positively in the first factor. We called the first dimension: negative traits. The items good, clean, nice, and happy saturated positively in the second factor. We called the second dimension: positive traits. The psychometric information about the two components of trait attribution are reasonable similar for both white and black children. Negative traits: eigenvalue 2.46, explained variance 31%; α=.57 for the white child; eigenvalue 2.44, explained variance 30%; α=.71 for the black child. Positive traits: eigenvalue 1.87, explained variance 23%; α=.79 for the white child; eigenvalue 2.18, explained variance 27%; α=.77 for the black child.

Furthermore we replicated these analyses in the sub-samples of girls and boys, younger and older and we did not find any relevant difference in this pattern of findings.

Gender and age differences in mean level of social equality and trait attribution

To assess the study variables for gender and age differences, we used t-tests for independent samples. There were no gender differences in mean levels of social equality, attribution of positive traits to in-group peer, and attribution of negative and positive traits to out-group peer (Table 1). However, boys (M = .27, SD = 1.16) attributed more negative qualities to the in-group child than girls (M = -.28, SD = .71), t(147) = -3.49, p < .001. Compared to the younger children, the older children reported higher levels of social equality (M = .27, SD = .77 for older; M = -.29, SD = 1.13, for younger; t(159)= -3.70, p<.0001). No other age differences were found.
Table 1
Mean and standard deviation of children’s beliefs of social equality and attribution of positive and negative traits to in-group and out-group peers (t-test for independent samples).

<table>
<thead>
<tr>
<th>Group</th>
<th>Girls M (SD)</th>
<th>Boys M (SD)</th>
<th>t-test</th>
<th>d.f.</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social equality</td>
<td>.03 (.93)</td>
<td>-.03 (1.1)</td>
<td>.43</td>
<td>159</td>
<td>.67</td>
</tr>
<tr>
<td>Negative traits</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>in-group peer</td>
<td>-.28 (.71)</td>
<td>.27 (1.16)</td>
<td>-3.49</td>
<td>147</td>
<td>.001</td>
</tr>
<tr>
<td>Positive traits</td>
<td>-.08 (1.0)</td>
<td>.08 (.97)</td>
<td>-.95</td>
<td>147</td>
<td>.35</td>
</tr>
<tr>
<td>out-group peer</td>
<td>-.11 (.99)</td>
<td>.11 (1.0)</td>
<td>-1.39</td>
<td>150</td>
<td>.17</td>
</tr>
<tr>
<td>Positive traits</td>
<td>-.09 (1.15)</td>
<td>.09 (.09)</td>
<td>-1.10</td>
<td>150</td>
<td>.27</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Group</th>
<th>Younger M (SD)</th>
<th>Older M (SD)</th>
<th>t-test</th>
<th>d.f.</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social equality</td>
<td>-.29 (1.13)</td>
<td>.27 (.77)</td>
<td>-3.70</td>
<td>159</td>
<td>.001</td>
</tr>
<tr>
<td>Negative traits</td>
<td>.03 (1.04)</td>
<td>-.03 (.97)</td>
<td>.34</td>
<td>147</td>
<td>.74</td>
</tr>
<tr>
<td>in-group peer</td>
<td>.01 (1.16)</td>
<td>-.01 (.84)</td>
<td>.12</td>
<td>147</td>
<td>.91</td>
</tr>
<tr>
<td>Positive traits</td>
<td>.13 (1.14)</td>
<td>-.11 (.85)</td>
<td>1.49</td>
<td>150</td>
<td>.14</td>
</tr>
<tr>
<td>out-group peer</td>
<td>-.10 (1.22)</td>
<td>.09 (.74)</td>
<td>-1.21</td>
<td>150</td>
<td>.23</td>
</tr>
</tbody>
</table>

Relations between system justification and the evaluation of peers

To investigate the relations between beliefs of social equality, traits attribution to in-group and out-group peers, and the moderating role of gender and age, we used the hierarchical regression approach, as suggested by Holmbeck (1997). To be consistent with our aims, we first entered gender (1= boys) and age (1= older children), second we entered social equality, and finally we entered the interactions between social equality and gender and age.

The final models were significant with respect to the attribution of negative and positive traits to the in-group child [negative traits: $R^2 = .15$, $F(5, 142) = 5.16$, $p<.0001$; positive traits: $R^2 = .07$, $F(5, 142) = 2.26$] and the attribution of negative traits to the out-group peer [$R^2 = .10$, $F(5, 145) = 3.13$, $p<.01$]. The final model for the attribution of positive traits to the out-group child did not reach significance ($R^2 = .03$, $F(5, 145) = 1.86$, $p=.10$).
Regarding the attribution of negative traits to the in-group peer we found a positive relationship between being male and negatively evaluating the in-group peer (Table 2). Boys appeared to be more likely to attribute negative characteristics to the in-group peer. We also found that the coefficient of social equality and that of the interaction between age and social equality were significant and both negatively related to the attribution of negative qualities to the in-group peer. In other words, children who perceived higher social equality were also less likely to attribute negative traits. Furthermore, at the same level of social equality, older children were even less likely than younger children to attribute negative traits to the in-group peer.

As for the attribution of negative traits to the out-group peer, we found that the coefficient of social equality was significant and that of the interaction between age and social equality was near to significance; both were negatively related to the attribution of negative traits to the out-group peer. At the same extent of the in-group child, children who had higher social equality were also less likely to attribute negative characteristics to the out-group peer and this too was particularly true for older children.

With respect to the attribution of positive traits to the in-group peer, we found that the coefficient of social equality was significant and positively related to the attribution of positive characteristics to the in-group peer. We also found a significant and negative interaction between age and social equality. That is at the same level of social equality, older children were less likely than younger children to attribute positive traits to the in-group peer.

As for the attribution of positive traits to the out-group peer, we found that only the coefficient of social equality was significant. At the same extent of the in-group child, the children who had higher social equality were also more likely to attribute positive traits to the out-group peer.

Table 2
Hierarchical regression results predicting attribution of traits to peers.

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Negative traits in-group peer</th>
<th>Positive traits in-group peer</th>
<th>Negative traits out-group peer</th>
<th>Positive traits out-group peer</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$\beta$</td>
<td>$\Delta R^2$</td>
<td>$\beta$</td>
<td>$\Delta R^2$</td>
</tr>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>.27**</td>
<td>.07**</td>
<td>.09</td>
<td>.01</td>
</tr>
<tr>
<td>Age</td>
<td>-.04</td>
<td>.04</td>
<td>-.02</td>
<td>-.12</td>
</tr>
<tr>
<td>Social equality (SE)</td>
<td>-.21</td>
<td>.04*</td>
<td>-.03</td>
<td>.03**</td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender X SE</td>
<td>-.18</td>
<td>-.18+</td>
<td>.09</td>
<td>.09</td>
</tr>
<tr>
<td>Age X SE</td>
<td>-.19*</td>
<td>-.19*</td>
<td>-.09</td>
<td>-.18+</td>
</tr>
</tbody>
</table>

Notes: $+p < .10; *p < .05; **p < .01.$
DISCUSSION

The aims of study presented were: a) to investigate age and gender differences for beliefs of social equality, as a cognitive component of system justification, b) the attribution of positive and negative traits to in-group (represented as a “white” child) and out-group (represented as a “black” child) peers in school-age children. Finally, it examined whether there is some relationship between the beliefs of social equality and the attribution of positive and negative characteristics to in-group and out-group peers.

The expectation that older children would show higher levels of social equality compared to younger children seems to be confirmed by our findings. It is reasonable that the younger children have not yet developed the cognitive skills, including self-decentralization, necessary for showing more mature beliefs about social inequality, seeing it as bad, unfair, undesirable, and even more important avoidable.

However we also expected a similar age-progression with respect to trait attribution with younger children more ease than older in attributing traits to peers. In fact on the basis of a study that compared children to young adults (Aloise, 1993), we expected that as children grow they require a large amount of information for making trait inference. Thus, older children might be less likely to attribute traits to the other children simply on the basis of the stimulus used in this study. However, we did not find any significant age differences for trait attribution. This finding certainly needs to receive further confirmation in wider samples and longitudinal studies. Besides, we have to admit that the figure we used as stimulus might not be the most adequate for eliciting age-related differences for trait attribution at this stage of children development.

Nevertheless, to consider age differences we have to also take into account the findings of the regression analyses. In fact age was showed interacting with social equality in the attribution of negative traits to both in-group and out-group peers and of positive traits to the in-group child. Children who had higher social equality were less likely to attribute negative traits to peers in general and more likely to attribute positive traits to the in-group peer. However, at older ages this pattern of relations seems to be reinforced in the case of the attribution of negative traits and weakened in the case of the attribution of positive traits. Summarizing, there is at least some indication that older children may be in general less easy than younger to judge their peers when information is scarce, as we can expect on the basis of previous studies in adults (Aloise, 1993).

As far as gender is concerned, we only found that boys were more likely than girls to attribute negative traits to the in-group child. Therefore, they appeared a bit more extreme, and probably also more superficial than girls in their attribution of traits to the other people. This finding may be collocated within the general framework of different facets of relations boys and girls pay attention to (Rubin, 1993).
1985; Stein, 1986): usually girls pay great attention at the qualitative aspects of relations while boys at the “quantitative” aspects as number of friends and activities shared together. The attention to different aspects of relations may also influence the processes of social categorization leading boys to be more ease than girls in attributing negative traits to peers. However, our finding might have been influenced by the fact that the figure we presented to children represents a male. We certainly need to confirm this finding in future studies where the figure will be a female. Though we must first explore what happens when the figure presented shows a girl, future research should also investigate whether boys and girls develop differently in terms of their general tendency to attribute negative or positive traits to peers. To our knowledge some studies already investigated gender differences in trait attribution but in adults and with respect to specific kinds of attribution like political ones (see, Alexander & Andersen, 1993).

Two main findings regard the relations between social equality and trait attribution. Firstly, the beliefs of social equality were found always significant and in the expected direction. That is, they were negatively related to the attribution of negative traits and positively related to the attribution of positive traits. Secondly, it is noteworthy that children’ beliefs of social equality seem to work exactly in the same way in the case of both in-group and out-group peers. In both cases higher beliefs of social equality were showed to combat the tendency to easily attribute traits to peers.

In this we think that our findings go a step further what has been already underlined in adult population. People who recur less to the justification and the rationalization of social inequality are also less likely to use negative stereotypes towards the out-group (Jost & Hunyady, 2005). In our study we highlighted that children who have high beliefs of social equality may be more likely to construct not discriminatory peer relations in general, since they are less easy to attribute traits to peers on the basis of scarce information.

A previous study already showed that the beliefs of children that traits are stable predicted a greater tendency to make trait judgments and that these beliefs are associated with an emphasis on the evaluative meanings of behaviors (e.g., whether the person is good or bad). That is, high beliefs that traits are stable are related to focusing on outcomes and behaviors through which traits can be judged (Heyman & Dweck, 1998). We also found that the differences in beliefs of social equality contribute to explain why some school-aged children are less likely than others to begin the process of constructing stereotypes independently from the group membership. Our findings represent an indirect confirmation that in-group identification may be independent of negative attitudes toward out-groups (e.g., Brewer, 2002, and previously Allport, 1954).

Furthermore, beliefs in social equality are something we may address at an educational level, although taking into account the difficulty of this kind of intervention (Bigler, 1999), in order to decrease the perception of difference and
deter problems related to prejudice. Educating a sense of social equality may have an important role in preventing a negative evaluation and promoting a positive evaluation of peers, whether peers belong to the in-group and/or to the out-group. Educating social equality might turn out to be even more important in a society that is rapidly becoming multicultural. This is due to the fact that the perception of the other is the foundation of all out-group processes including the attribution of negative characteristics to the out-group and the over-estimation of the positive characteristics of the in-group (Tajfel & Turner, 1986). Although the path from implicit bias to discriminatory action is not inevitable (Dasgupta, 2004), these complex processes are the basis for both the formation of social stereotypes and the justification of aggression towards others.

Nevertheless, these findings clearly require further confirmation in different and wider samples, especially with longitudinal designs. A longitudinal research design would have allowed us to follow the developmental path of social equality and trait attribution and the possible intertwining between them.

LIMITATIONS AND STRENGTHS

Two key limitations of the present study are the cross-sectional design and the relative weakness of the stimulus and measures used. While the young age of the participants prevented us from using a longer series of items and more complex stimuli, the lack of a longitudinal control make it impossible for us to investigate the direction of the relations found and to apply more complex strategies of analysis, which could have shed more light on the phenomenon under study. The next step in this line of research is to investigate these associations over time, as well as to vary the stimuli and introduce different measures of social equality. The relatively small sample size and the fact that all participants were from one Italian region also make it difficult to generalise results to different populations.

Besides, to avoid potential interference from acquaintance with out-group children we selected classrooms with no immigrant children but this might have introduced another kind of bias. We probably have to look at the patterns of relations between social equality and trait attribution in classes with different proportion of immigrant children. For instance, a previous study showed that in-group favouritism and out-group prejudice were reciprocally correlated in one sample from a racially homogeneous school but not in another sample from a mixed-race school (Aboud, 2003).

Furthermore, we certainly need to take into account other components of system justification, such as the motivational ones (Jost, Burgess, & Mosso, 2001), and the possible sources of information of children’s beliefs and easiness to attributing traits. It seems reasonable that parents and other significant adults fulfil a relevant role in the construction of children’ beliefs of social equality and trait
attribution through the attitude and behaviour they show more or less overtly (Bigler & Liben, 2006).

In spite of its limitations, this study also has some merits.

Firstly, it highlights the importance of investigating both social equality and trait attribution as potential precursors of discrimination and stereotypes in childhood, although they can assume different forms in subsequent phases of development.

Secondly, this study underlined the importance of introducing specific curricula to promote the beliefs of social equality and, therefore, to prevent some of the negative consequences of social stereotypes in childhood and later on.

Finally, it highlighted the potential relevance of social equality in terms of present and future adjustment, not only on an individual level but also for social groups. We feel that the introduction in schools of activities designed to develop a sense of equality and legitimacy could be useful for the promotion of positive social development in children and may, in turn, even have potential consequences for the future adjustment of the society in which these children will live.

ACKNOWLEDGEMENTS

We warmly thank Laura Negri and Renato Miceli (Department of Psychology, Torino, Italy) for their support and suggestions in the realisation of this research. We also thank the MA students in the Department of Psychology, Torino, Italy, who administered the questionnaires. Finally, we thank the children, parents, and teachers who were involved in this study for their enthusiastic participation.

REFERENCES


Available online at [www.unece.org/stats/documents/2008.03.migration.htm](http://www.unece.org/stats/documents/2008.03.migration.htm) [Accessed August 3 2009].


*Cognition, Brain, Behavior. An Interdisciplinary Journal*  
14 (2010) 47-61


