



‘Miss, I got mad today!’ The Anger Diary, a tool to promote emotion regulation

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Effective management of emotions has strong implications in the development of adaptive behaviours during childhood and adolescence. The purpose of this study was to examine the use of a new method of emotion regulation named the ‘aRRabbiadiaro’ (Anger Diary), with primary school children. The participants included 119 children attending 7 classes from three primary schools located in middle-class urban communities in the province of Pavia, Italy. In the first phase, the participants were asked to complete a narrative tool which investigated how they coped with anger in their everyday life and whether the use of narrative applied to episodes of anger and facilitated adaptive ways of coping with negative feelings. Subsequently the study assessed the relationship between effective anger management and social functioning in the peer group. Our findings suggest that the use of diary writing seems to represent a promising instrument to promote the development of emotional and socio-cognitive skills in school children.

Keywords: emotion regulation, anger management, school children, anger diary

Introduction

From pre-school age onwards, children begin a gradual development in their ability to regulate emotions (Blair et al. 2004; Eisenberg 2010). This ability becomes ever more complex with the transition to primary school (Saarni 1990; Fox 1994). The increase in children’s ability to regulate their emotions is a crucial capacity associated with numerous areas of their social functioning (Hessler and Katz 2007). Research has demonstrated a link between emotional regulation and several aspects of a child’s adjustment (Denham et al. 2002; Zeman, Shipman and Suveg 2002; Eisenberg and Sheffield Morris 2003). In particular, it appears that the ability to regulate responses linked to negative emotions is predictive of good social competence and of adaptive coping (Eisenberg et al. 2000; Belsky, Fiedman and Hsieh 2001; Lengua and Long 2002;

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Eisenberg, Valiente and Sulik 2009; Goodman and Southam-Gerow 2010). Thus, emotional regulation serves as a protective factor against maladaptive development (Frick and Ellis 1999); and aids peer group acceptance (Eisenberg et al. 1994).

Regulation competencies are defined by intrinsic and extrinsic processes used in monitoring, evaluating and studying the choice of emotion response aimed at the attainment of individual and/or more general biological and social adjustment (Spinrad 2004). According to Izard (1991), the capacity to utilize emotions (*Emotion Utilization*) adaptively is the result of both the awareness (*Emotion Knowledge*) and the capacity to regulate emotions (*Emotion Regulation*). Emotions, in this theorisation, are the primary forces that promote adaptive behaviours and growth. The use and regulation of emotions are related constructs, but the latter is a necessary prerequisite of the former: emotion regulation functions as a mediator of emotion utilization (Izard et. al. 2008). Acquiring the ability to self-regulate means, on the one hand, learning to utilize specific cognitive strategies, such as problem solving and looking for group support, and knowing how to manage emotional distress constructively and functionally on the other hand.

Negative emotions require a greater coping capacity and have more impact on adjustment and general well-being. Emotions like anger seem difficult to process and manage for both children and adults with specific educational roles (parents, teachers, youth workers) who are not always able to ensure adequate responses (Renati and Zanetti 2009; Hughes 2010). Thus, it is important to investigate children's emotion regulation in relation to negative emotions such as anger.

The regulation of anger

Anger is not an easy emotion to manage or process. This is particularly true for children who, at primary school, find themselves spending more time with their peers, negotiating with them the acquisition and the sharing of behaviour norms in order to be accepted by their peers.

Anger is an emotion that can be traced back to three main aspects (Lewis and Michalson 1983). The first is the emotion in itself, that is the state of activation generated by an experience stemming from a state of frustration and stress. In the classroom, anger can emerge following a dispute over the possession of an object, the violation of personal space by peers, physical or verbal aggression, being refused or ignored during recreation time or when the child is forced to do something s/he does not want to do (Fabes and Eisenberg 1992).

The second aspect to take into account regards the ways in which anger is expressed. Children begin learning regulation strategies and how to express emotions in the family and in the social contexts closest to them (Russel 1989). Later, they acquire different ways of doing this thanks to wider social interactions, exposure to the media and through the reading of stories (Honig and Wittmer 1992). The ways of expressing anger are distinctive to each child. Some children express anger through crying, sulking or by not taking

action to resolve the problem or confront their aggressor. Others actively take a stand to defend their position and objects by employing non-aggressive behaviours, while others manifest anger with acts of revenge, physically or verbally attacking the aggressors or excluding them from games. Finally, some children turn to adults (such as teachers and/or other significant adults) as mediators in problematic situations, looking for comfort, advice or solutions to resolve the problem.

The third aspect is associated with the understanding and interpretation of the emotion. In this case, adults play a central role in the development of these competencies. Children's ability to express their anger appears to be connected to their parents' or teachers' competencies in understanding, initially, the cause of anger and in communicating to the children positive strategies for managing the emotion (Zeman and Shipman 1996). The most effective adults provide responsible management models to anger reactions that include management of the emotion reaction in terms of cause and effect, acceptance of the emotion and the capacity to communicate it in a non-aggressive way (Denham, Zoller, and Couchoud 1994). This competence in children is underpinned by an adequate level of cognitive development, in particular memory and language.

Memories of events in early infancy allow children to recall the causes that generated aggressive responses. It is in this way that children who used inefficient response strategies look for new ways to act. With the support of an adult figure, they avoid those strategies that do not work (Miller and Sperry 1987). A good grasp of linguistic ability also allows the child to attain a greater understanding of his/her emotions, even from pre-school age, particularly in the lexical variety used to express the experienced emotions accurately (Denham, Zoller, and Couchoud 1994; Brown & Dunn 1996).

Anger regulation in the classroom

Various studies have highlighted that an adequate expression of anger through socially constructive behaviours is associated with better classroom adjustment (Lewis et al. 1992, Horn, Pössel and Hautzinger 2011). The most popular children tend to be those with the highest levels of comprehension and emotion regulation, particularly anger management (Hubbard and Coie 1994). These children are judged by their classmates as being more able to understand emotions compared to rejected children, and as having a greater capacity to use constructive strategies in conflict situations rather than employing an avoidance approach, a direct expression of anger, or taking revenge (Vosk, Forehand and Figueroa 1983; Bryant 1992). On the contrary, children who have difficulty in regulating emotions are often rejected by their peer group and tend to display withdrawn or aggressive behaviours towards classmates and teachers. Some studies have shown how anger emotions in children that are labelled as 'aggressive' can produce a sort of 'short circuit' in the capacity to codify and evaluate others' intentions (e.g. Graham, Hudley and Williams 1992). It is precisely this difficulty that appears to be behind the use of hostile and aggressive behavioural responses.

School is a privileged place for learning strategies that are useful in coping with emotional situations in that both formal and informal occasions entail continual reassessments of the emotional experience (Raver

and Zigler 1997; Raver 2002; Raver and Knitzer 2002). At school, the biggest challenge that teachers and youth workers have to deal with is helping children, from an early age, to learn how to recognize and manage positively expressions of anger, above all in children who display aggressive behaviours in resolving conflicts (Cummings 1987; Hennessy et al. 1994). Consequently, the role of the adult becomes fundamental. S/he has to play a supporting role in the development of adaptive responses to anger, raising the children's capacity to recognize and understand emotions (Davis 2010), and ensuring that there is space for active listening in which children can express themselves freely in a supportive and non-judgemental environment (Denham, Zoller, and Couchoud 1994).

Methodology

The present study has two main objectives, namely to contribute to an investigation of emotion regulation in school-age children as well as to propose a new method of emotion regulation, named the 'aRRabbiadiaro' (Anger Diary). We wanted to examine whether the use of a diary in relation to episodes of anger could stimulate in children strategies for regulating their negative emotions. We believe that this tool could play an important role in the structuring of effective interventions in emotional competence. We also wanted to investigate the connection between the functional management of anger and the social functioning of children in a peer group. The term 'emotion regulation' as it is used in this paper, refers to the coping process associated with emotional activation. Consequently, we consider regulatory competence as overlapping with the construct of coping (Fabes and Guthrie 1997; Compas et al. 2001; Eisenberg, Valiente, and Sulik 2009).

Hypotheses

We expected to find a gender difference in anger regulation that could be ascribed to a greater use of externalised modes in males compared to females (Miller, Danaher and Forbes 1986). Further, we expected to identify a developmental trend in which the adopted coping strategies would become more complex (Skinner and Zimmer-Gembeck 2007), varied and flexible as the children got older (Compas et al. 2001). Finally, the strategies were evaluated in relation to the type of subject towards whom the anger emotion was directed. Another hypothesis of the study was that popular, socially well-adapted children would deal with anger in a more functional way, making less use of externalised aggressive responses (Fabes and Eisenberg 1992; Eisenberg et. al. 1997). We also expected to find a significant difference between the control group and the group of children who used the aRRabbiadiario in the ability to resort to better regulation strategies and with regards to emotion comprehension competencies.

Sample

The study involved 119 children attending 7 classes (2 third-year classes, 3 fourth-year classes and 2 fifth-year classes) from three primary schools located in middle-class urban communities in the province of Pavia, Italy. Schools were chosen on the basis of their principals' willingness to participate in the research. Passive consent from parents was obtained before the intervention started. The children were aged between 8 and 11 years and did not present any behavioural or learning problems. They were randomly assigned to an experimental group made up of 62 children (M=33; F=29) and a control group of 57 children (M=23; F=34).

Design

The experimental group participated in a three-month anger management training course. The classroom teachers were trained to promote constructive anger management in the classroom through the compilation of the semi-structured 'aRRabbiadiario'. The training sessions included weekly discussions on episodes of anger displayed by the children. The activity foresaw the co-ordination of the teacher who, through an 'emotion coaching' (Gottman, Katz and Hooven 1997) educational style, put the emphasis on involving all the classroom groups in seeking to find adaptive resolution strategies. To render this educational method functional, it was important for the adult to adopt an approach that placed a value on emotions and encouraged their expression. This ensured that both positive and negative episodes were considered as occasions for learning and sharing.

Each experimental group teacher was trained by the researchers in the use of the aRRabbiadiario and on how to conduct discussions with the class group, with the aim of promoting functional regulation strategies. The training consisted of three two-hour meetings for each teacher (Figure 1).

The classroom group training included the use of the aRRabbiadiario by some of the children. The pencil and paper diary had the appearance of a small book, was manageable and could be personalised by the children using it. Each week the children received a diary and were told to note down every event that provoked anger. They were invited to report the episode by reflecting on the incident that sparked anger, its causes, the persons involved and the coping strategies used. The aRRabbiadiario is an event-based tool and has to be compiled when the event occurs. Its compilation favours the cognitive processing of the event, stimulating awareness of the child's actions through meta-emotional efforts.

During the weekly laboratory workshop, the teacher monitored the coping strategies adopted by the children in different situations. The children were invited to recount individual episodes and to discuss the possible responses adopted and/or any alternative responses. The teacher acted as a mediator, initiating communication and the sharing of strategies with the entire class group without expressing value judgements. Instead, it was the group itself that proposed and identified the most functional strategies, thus ensuring an increase in individual capacity, both meta-emotional and socio-relational. The central role that the class group

assumed in putting into action the skills of negotiation and the resolution of conflicts and problems should be underlined in this process.

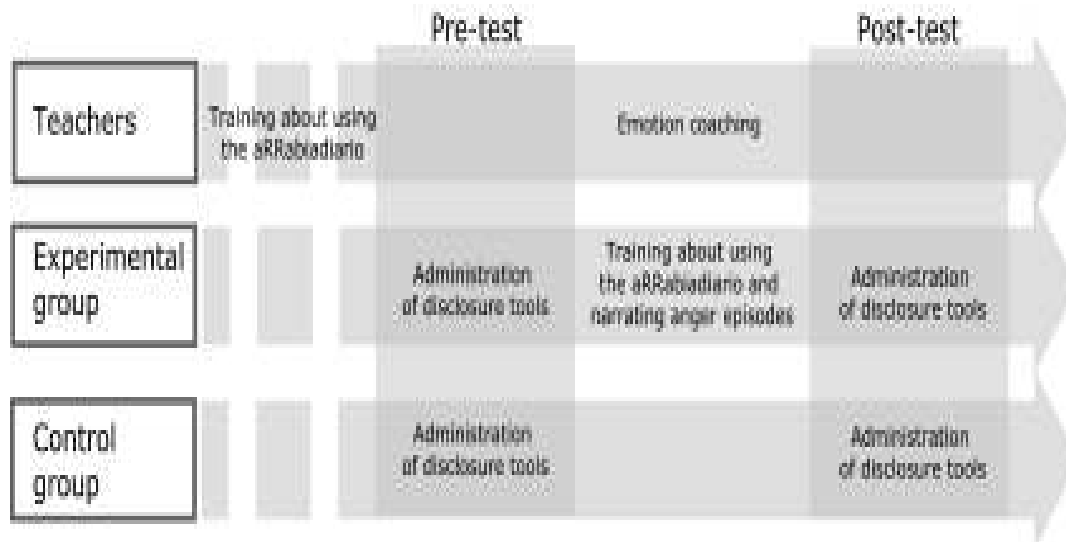


Figure 1 Research Design

The Anger Diary

The diary was divided into various sections (see diary structure in appendix). The first section contained general information about the situation that sparked the emotion. There were questions about the time (*date and time*), place (*where were you when you got angry?*) and those involved (*who did you get angry at?*). The children then proceeded to describe the event (*what happened?*) and the reasons behind the episode of anger (*what made you angry?*). Answers to these questions were open-ended in order to stimulate the narrative process. The causes that elicited anger were codified according to the categories identified by Fabes and Eisenberg (1992), namely:

1. physical reason: the anger was provoked by something suffered by the child, for instance a punch, kick or push;
2. verbal reason: the anger derived from something said to the child, for example teasing;
3. rejection: the anger was provoked by peers because the child was ignored or because the peer group did not include the child in a game;
4. material reasons: the anger was provoked by someone who took or destroyed an object or invaded a space belonging to the child;
5. compliance: the anger was provoked by asking or forcing the child to do something.

If the response did not fall into any of the above categories, the children could opt for the non-specific 'other' category. Next in the diary was a part dedicated to the regulation of anger. The children were asked what they used to do while they were angry; this question was set to provide an insight into which actions the children undertook in order to manage the emotion. This part of the diary was arranged in a series of multiple-choice items constructed in part from the model used in *Anger Response Inventories* (Tangney et al. 1991), but taking only the behavioural and cognitive aspects of anger into consideration. The response behaviours identified referred to the direct behaviours aimed at the target of the anger. This response might be physical (hitting or throwing things), verbal (swearing, teasing) or symbolic (closing a door in a target's face, beating the table). Symbolic responses were not taken into account in our study as they were not deemed very applicable to our sample of primary school age group of children.

Another category taken into consideration was the indirect responses, that is, less explicit actions designed to hurt the persons who had caused the anger, such as speaking badly about the persons, breaking something belonging to them or refusing them a 'reward'. The aggression might also be directed at someone other than the target and might take a physical or verbal form; it could be aimed at an object unconnected to the target or self-inflicted. All of these aspects could be filed under the 'externalisation' macro-category. There were also rumination categories which indicated that the child continued to run through the episode that had provoked the anger.

Alongside these less adaptive strategies were other, more functional ones. These included non-hostile discussions, with the target and actions aimed at finding a resolution ('problem solving' category). Other responses may be linked to attempts by the child to distance him/herself from the elicited emotion by taking part in more pleasant activities through 'distractions' or by 'distancing' behaviour (leaving the scene of the anger, avoiding conversation with the person who had caused the anger) or cognitive (thinking of other things; acting as if nothing happened). An 'internalisation' category was also included in the aRRabbiadiario to cover responses like crying, silence or apathy.

The third part of the diary contained the section dedicated to coping strategies: the child was asked what s/he did to resolve the problematic situation that arose. S/he had a series of options from which s/he had to choose, a list of possible behaviours that matched their own course of action. The list items derived from a collection used in the pilot aRRabbiadiario and from categories in the literature. Special attention was paid to the 'search for support' category, the problem solving category, internalisation, rumination, fleeing/avoidance, impotence and distraction. Furthermore, there was an option for situations in which it was the adult who intervened to resolve the problem ('non-requested adult intervention') rather than the child asking for help. In the final part of the diary, the children had to enter the emotions they felt, selecting from eight 'thermometers' that represented eight different emotions. Five of these were basic (happiness, anger, fear, sadness, surprise) and three moral-based (pride, guilt, shame).

Finally, the children were asked whether the situation was resolved or if it lasted through the compilation of the diary. In this case too, the children had the opportunity to respond by putting a cross in the appropriate place. As well as a simple 'yes' or 'no' answer, a third alternative was considered, that is cases where the child was unable to state whether the problem had been resolved without consequences. In these instances the child was asked in which other way s/he could have approached the event.

Other Tools

Sociometric interview

The sociometric status categories were constructed using the standardised class score for the "Who are your best friends"; "Who are the classmates you like a little less?" items according to the Coie, Dodge and Coppotelli (1982) classification. The popularity index was determined by taking into consideration the frequency of choices and rejections received from classmates (Asher and Dodge, 1986). Children with a preference score of less than -1, a selection score of less than 0 and a rejection score of more than 0, were considered as being 'rejected'. Children with a preference score of more than 1, a selection score of 0 and rejection score of 0, were considered popular. Children with a social impact score of less than -1 were considered as isolated (or neglected), while those with a social impact score greater than 1 and scores of more than 1 for selection and rejection, were considered as 'controversial'. Children with a social preference score greater than -.5 and a social impact score of less than -.5 were classed as 'average'.

Test of Emotion Comprehension (Pons and Harris 2000)

The TEC (Pons and Harris 2000; Italian version: Albanese and Molina 2008) measures the nine components of emotion understanding, namely the recognition of emotions from facial expressions; understanding that external situations may provoke emotion responses; understanding that desires may provoke emotion responses; understanding the role of belief in emotions; the role played by memory; emotion regulation; understanding the control of emotion expression; mixed emotions and morality in emotions. As part of the tool's design, the child, having listened to a brief story, would have to indicate which emotional expression corresponded to the chosen character. S/he would have to select from four facial images representing happiness, sadness, anger or fear.

Coping strategy interviews

This tool was designed specifically for our study and includes 4 stories, adapted from those proposed by Cole, Bruschi and Tamang (2002). The stories describe four frustrating situations with an emotional content in which the characters are either peers or significant adults (Table I). A structured interview was then conducted, individually, based on the areas covered by the aRRabbiadiario. The stories were told one at a

time, modifying the target of the action each time (parent, teacher, peers) and each story was followed by an interview.

Table 1 Frustrating situations with an emotional content

Injustices or unreach objectives
1. You are doing your homework and your <i>mother/a friend</i> is sitting near you drinking a cup of tea. You ask them to look over your homework. Your <i>mother/friend</i> tips over the cup of tea when reaching for your homework. Your <i>mother/friend</i> quickly cleans the table using your homework. Now the homework is ruined and you have to re-do it.
2. You are holding a snack and are about to eat it. Your <i>father/friend</i> is with you and snatches away your snack. You immediately ask for it back but your <i>father/friends</i> eat/s it in one bite.
Public mistakes
1. Your teacher crosses out, in red, a big section of your work in your classbook. After school, your <i>family/all your friends</i> are at your house. Your <i>father/friends</i> pick/s up your workbook, sees the teacher's crossing out and shows it to everyone. He asks for an explanation and everyone is watching you.
2. You are outside your house/school playing with <i>neighbours/school friends</i> . Suddenly, everyone shouts and runs to look at something. You also start running but trip over and are covered in mud. Your <i>parents/friends</i> laugh at you.

Results

Our first set of analysis examined the data for gender and age differences in anger regulation, namely the use of externalised modes in males compared to females, as well the use of more complex coping strategies amongst older children. Strategies were also evaluated in relation to the type of subject towards whom the anger emotion was directed. We examined the frequency distribution of anger activation towards the target, and its observed causes, and found that children became angry mostly at members of the family and at peers (Table 2). More than half of the third-year children stated that they became angry more frequently with adults (parents, relatives and teachers); the percentage was much lower among fifth graders, who identified their peers as their main source of anger. This reverse trend highlights how peers become ever more central in relationships (Table 3).

An examination of the causes that triggered anger indicates that these were generally physical, verbal, like teasing or exchanging insults (when the anger seemed to be associated with a reactive response), and related to ‘compliance’ episodes, that is, when children were prevented from doing something they wanted to (in these cases a response to feeling frustrated) (Table 4). With regards to the perception of injustice, we observed that fifth-year children were more sensitive to behaviours viewed as being unjust than younger subjects (Table 5).

Table 2 Target of anger

Target	%
Parents/Relatives	34,5
Teachers	10
Peer	36,4
Brother/Sister	19,1

Table 3 Class/age difference: target of anger

Target	3 rd year class	4 th year class	5 th year class
Parents/Relatives	41,9%	40%	17,2%
Teachers	12,9%	6%	13,8%
Peer	19,4%	34%	58,6%
Brother/Sister	25,8%	20%	10,3%

Table 4 Cause of anger

Cause	%
Physical	25,7
Verbal	17,6
Material	3,7
Rejection	6,6
Compliance	37,5
Injustice	8,8

Table 5 – Class/age differences: cause of anger

Cause	3 rd year class	4 th year class	5 th year class
Physical	27,5%	29,3%	16,2%
Verbal	25%	13,8%	16,1%
Material	7,5%	4,6%	9,7%
Rejection	2,5%	4,6%	3,2%
Compliance	35%	40%	35,5%
Injustice	2,5%	7,7%	19,4%

The reasons that elicited anger in male and female children also differed, with verbal causes being more often cited by girls than boys. Moreover, rejection was cited as another cause for anger among girls but was never mentioned by boys. More boys reported injustices as a cause of anger compared to their female peers (Table 6). A Chi-square test showed significant gender differences with reference to the causes of anger ($X^2=1.97$; $gdl=5$; $p=.001$), but not with reference to the target (Table 7).

Table 6 – Gender differences: cause of anger

Cause	Boys	Girls
Physical	34,9%	6,8%
Verbal	6,3%	38,4%
Rejection	0%	13,6%
Material	9,5%	4,1%
Compliance	35%	32,9%
Injustice	14,3%	4,1%

Table 7 – Gender differences: target of anger

Target	Boys	Girls
Parents/Relatives	31,1%	36,9%
Teachers	11,1%	9,2%
Peer	37,8%	35,4%
Brother/Sister	20%	18,5%

The analysis of the coping strategies used by the participants, revealed that children generally reported using externalised behaviours more frequently if the target was another child. More than half of participants stated that they had internalised behaviours towards an adult target, but only a tiny proportion had the same reaction towards a peer target. Similar results were found for rumination. Problem-solving strategies were, in contrast, used with greater frequency when the children became angry at other children (Table 8). Although there was no statistically significant difference, as expected, internalisation tended to be used mostly in situations in which children's anger was directed towards an adult. The relation between anger towards an adult and internalised behaviour remained constant in relation to coping strategies used. Inaction was seen to be connected to anger episodes that involved adults in only 5.5% of cases; on the other hand more than half of the children (53%) declared that they had used this strategy with peer targets.

Table 8 Target of anger and main coping strategies

Target	Externalised behaviours	Internalised behaviours	Rumination	Problem Solving
Parents/Relatives	24,6 %	54,5%	48,6%	15,5%
Teachers	14,2 %	20%	27,4%	23,7%
Peer	42,4%	12,9%	11,8%	45,6%
Brother/Sister	18,8 %	12,6%	12,2%	15,2%

To test our hypothesis whether the complexity of coping strategies increased with age, a Chi-square test was conducted. Although it did not reveal a statistically significant difference in relation to the use of more flexible and varied coping strategies with increasing age, it was possible, on a

descriptive level, to observe that functional coping strategies were the most frequently used (41.9%) among third graders, and that the tendency to employ strategies characterized by growing complexity and functionality increased in fifth year children (53.6%). Only 15.6% of the sample used distraction and distancing to manage situations. We tested whether boys' exhibited more frequent externalizing behaviours, but the Chi-square test only showed a tendency among boys to resort to direct physical aggressive behaviour more often than girls. It appeared that males tended to be more aggressive, both physically and verbally, than females.

We tested the hypothesis that children with higher sociometric status would exhibit more functional anger management. The Chi-square test did not indicate more functional strategies among popular children; descriptive analyses, however, suggested that rejected children tended to regulate emotions in more dysfunctional ways. When considering others' emotion recognition, the most popular children (81.8%) reached the highest scores in the scale we used, but similar percentages could be observed within each other sociometric status category (rejected, controversial, average).

Our last hypothesis was that children participating in the aRRabbiadiario training sessions would exhibit better anger management strategies and would score higher than controls in emotion comprehension. The analysis of variance did not show any statistically significant differences between the experimental and the control group in either anger management strategies or emotion comprehension scores. There was, however, a tendency for the experimental group participants to adopt more adaptive strategies in situations that elicited negative emotions.

Discussion and conclusion

To begin with, it is useful to reflect on some of the results which are not in line with those in the extant literature, especially those regarding the relationship between the capacity to regulate emotions and sociometric status. Popular children in our sample are not those who regulate situations best nor those who manage situations most knowingly. It is true that our sample is rather small to allow any type of definitive conclusion to be made and it should not be forgotten that the diary is a self-report tool in which the control of the information is concentrated in the hands of those who compile it. Declaring certain behaviours as being less socially acceptable can be difficult for some; at the same time children, like adults, may lack the capacity to observe and report objectively their own behaviour. However, work could be done outside the research frame through the diary itself. In the laboratory sessions, the diary could become a useful tool to encourage reflections among classmates to improve self-reflective competencies.

In view of these findings, we put forward another hypothesis to analyse the discrepancy between some of our results and those in the literature. The literature suggests that unpopular children do not form a homogeneous group but fall into different sub-categories (Rubin, Bukowski and Parker 1998). Some unpopular children (for example, neglected children) are very aggressive, others withdrawn, and others both

aggressive and withdrawn. Recognizing the non-homogeneous nature of this group is crucially important for researchers interested in clarifying what it means to be unpopular. Very little is known about the behavioural profiles of different types of popular children. In general, popular children are seen as co-operative, sociable, assertive, friendly, sensitive, useful and constructive (Rubin et al. 1998). However, some results from sociological studies and from developmental psychology suggest that a notable proportion of pre-adolescent males are both very popular and anti-social at the same time. Some educational sociologists view male children of primary school (Adler and Adler 1998) or early secondary school age (Eder, Evans and Parker 1995) as rebels and, in some ways, 'Machiavellian' in establishing and maintaining their social position. According to Adler and Adler (1998), popular primary school-age boys possess such characteristics as athletic ability; being 'cool' (having fashionable shoes, clothes or hairstyle); being 'hard', (expressed through physical intimidation); '*savoir-faire*' (possessing sophisticated interpersonal abilities); and average to low-to-average learning. On the contrary, kind children who are sensitive to the needs of others or who have good academic potential are often excluded from the status of being 'popular' (Eder et al. 1995; Adler and Adler 1998). It is clear that this information is based only on a simple sociometric analysis determined quantitatively through classmates' expression of selection or rejection.

This theorisation offers an alternative interpretation of the meaning of popularity and throws new light on the links between popularity and the capacity for emotion regulation. If the basis for popularity is no longer being sociable and being able to maintain good relations with others, then there is no reason why popular children should be better at regulating their emotion or efficiently managing stressful situations. This would explain why our results contrast with those in the literature. This hypothesis is strengthened if we consider the age of the sample involved. Eisenberg's studies (Eisenberg et al. 1997, 2000, 2007), among others, were conducted on preschoolers or on children in the first years of primary school, whereas our sample was drawn from older primary school children, some of them approaching pre-adolescence. At this age, certain factors begin gaining salience, such as being fashionable or possessing certain objects. In the absence of further data, this interpretation remains a hypothesis, albeit an interesting one.

The claims of the existing literature related to a greater use of externalised strategies by boys were confirmed by our findings, as were those related to the difference in the regulation strategy concerning the target (adult or peer) in the emotional situation. Children tend to use passive coping strategies, like distancing or internalisation, more frequently in cases where the target's social status is higher than their own, for instance, adults. On the contrary, active methods, like externalisation or looking for group support, are employed when the anger is directed to individuals with an inferior social status, like peers (Fabes and Eisenberg 1992).

The fact that the aRRabbiadiaro training sessions did not provide significant statistical data, is not discouraging as the results did suggest a tendency for children in the experimental group to use more functional strategies. This means that we will continue this research, re-evaluating the sessions and the

teachers' training. One possible route would be to extend the teacher training and integrate it with periodical supervisory meetings. Furthermore, the class laboratory sessions could be prolonged throughout the whole school year with the possibility of more parental input.

Acknowledgements

We would like to thank Dr Carlo Berrone from the University of Pavia (Italy) for his help in the initial proofreading.

References

- Adler A. and Adler P. 1998 *Peer Power: preadolescent culture and identity*. London: Rutgers University Press
- Albanese O. and Molina P. (2008) *Lo sviluppo della comprensione delle emozioni e la sua valutazione. La standardizzazione italiana del Test di Comprensione delle Emozioni (TEC)*. Unicopli: Milano.
- Asher S. R. and Dodge K. A. 1986 Identifying children who are rejected by their peers. *Developmental Psychology*, 22, 444 - 449.
- Belsky J., Friedman S. L. and Hsieh K, 2001, Testing a Core Emotion-Regulation Prediction: Does Early Attentional Persistence Moderate the Effect of Infant Negative Emotionality on Later Development? *Child Development*, 72 (1), 123 – 133.
- Blair K. A., Denham S. A., Kochanoff A., and Whipple B. 2004 Playing it cool: Temperament, emotion regulation, and social behavior in preschoolers. *Journal of School Psychology*, 42 (6), 419 - 443.
- Bryant B.K. 1992. Conflict resolution strategies in relations to children's peer relations. *Journal of Applied Developmental Psychology*, 13, 35 - 50.
- Brown, J. R. and Dunn, J. 1996. Continuities in emotion understanding from three to six years. *Child Development*, 67 (3), 789 - 802.
- Coie J, Dodge K. and Coppotelli H. 1982 Dimensions and types of social status. *Developmental Psychology*, 18, 557 – 570.
- Cole P. M. , Bruschi C. J., and Tamang B. L. 2002 Cultural Differences in Children's Emotional Reactions to Difficult Situations. *Child Development*, 73 (3), 983 – 996.
- Compas B. E., Connor-Smith J. K., Saltzman H., Thomsen A. H., and Wadsworth, M. E. 2001 Coping with stress during childhood and adolescence: Problems, progress and potential in theory and research. *Psychological Bulletin*, 127, 87 -127.
- Cummings E. 1987. Coping with background anger in early childhood. *Child Development*, 58 (4), 976 – 984.
- Davis E. L.2010, Metacognitive emotion regulation: Children's awareness that changing thoughts and goals can alleviate negative emotions. *Emotion* 10, 498 - 510.
- Denham S. A , Caverly S, Schmidt M., Blair K., DeMulder E., Caal S, Hamada H., and Mason T. 2002

- Preschool understanding of emotions: contributions to classroom anger and aggression. *Journal of Child Psychology and Psychiatry* 43 (7), 901–916.
- Denham S. A., Zoller, D., and Couchoud, E. A. 1994. Socialization of preschoolers' emotion understanding. *Developmental psychology*, 30 (6), 928-937.
- Eder D., Evans C. C, and Parker S. 1995 *School talk: Gender and adolescent culture*. New Brunswick, NJ: Rutgers University Press.
- Eisenberg N. 2010 Emotion-related self-regulation and its relation to children's maladjustment. *Annual review of clinical psychology*, 6, 495 - 525.
- Eisenberg N., Fabes R., A., Nyman M., Bernzweig J., and Pinuelas A. 1994 The Relations of Emotionality and Regulation to Children's Anger-related Reactions. *Child Development*, 65 (1), 109 – 128.
- Eisenberg N., Fabes R.A., and Guthrie I. 1997 Coping with stress: the roles of regulation and development. In J.N. Sandler and S.A. Wolchik (Eds.), *Handbook of children's coping with common stressors: Linking theory, research and intervention* (pp. 41- 70). New York: Plenum.
- Eisenberg N., Fabes, R. A., Guthrie, I. K., Murphy, B. C., Maszk, P., Holmgren, R., and Suh, K. 1996. The relations of regulation and emotionality to problem behavior in elementary school children. *Development and Psychopathology*, 8, 141-162.
- Eisenberg N, Fabes R. A, Guthrie I.K., and Reiser M. 2000 Dispositional emotionality and regulation: their role in predicting quality of social functioning. *Journal of personality and social psychology*, 78 (1), 136 - 57.
- Eisenberg N., and Sheffield Morris A. 2003 Children's emotion-related regulation. *Advances in Child Development and Behavior*, 30, 189 – 229.
- Eisenberg, N., Valiente, C., and Sulik, M. J. 2009 How the study of regulation can inform the study of coping. In E. A. Skinner and M. J. Zimmer-Gembeck (Eds.), *Coping and the development of regulation. New Directions for Child and Adolescent Development* (pp. 75–86). San Francisco: Jossey-Bass.
- Fabes R. A., and Eisenberg N. 1992 Young children's coping with interpersonal anger. *Child Development*, 63 (1), 116 -128.
- Fox, N. 1994. The development of emotion regulation: Biological and behavioral considerations. *Monographs of the Society for Research in Child Development*, 59(2–3, Serial 240).
- Frick P. J., and Ellis M. L. 1999 Callous-unemotional traits and subtypes of conduct disorder. *Clinical Child and Family Psychology Review*, 2, 149 – 168.
- Graham S., Hudley C., and Williams E. 1992. Attributional and emotional determinants of aggression among African-American and Latino young adolescents. *Developmental Psychology*, 28, 731-740.
- Goodman, K. L. and Southam-Gerow M. A. 2010 The regulating role of negative emotions in children's coping with peer rejection. *Child Psychiatry and Human Development*, 41 (5), 515-534.

- Gottman J. M., Katz L. F. and Hooven C. 1997 *Meta-emotion: how families communicate emotionally*. Lawrence Erlbaum Association, USA.
- Hennessy K. D., Rabideau G. J., Cicchetti D., and Cummings E. M. 1994. Responses of physically abused and nonabused children to different forms of inter-adult anger. *Child Development*, 65 (3), 815-828.
- Hessler D.M. and Katz L.F. 2007 Children's emotion regulation: self report and physiological response to peer provocation. *Developmental Psychology*, 43, 27-38.
- Horn, A. B., Pössel, P., and Hautzinger, M. 2011 Promoting adaptive emotion regulation and coping in adolescence: A school-based programme. *Journal of Health Psychology*, 16 (2), 258-273.
- Honig A. and Wittmer D. 1992. *Prosocial development in children: caring, sharing, and cooperation: a bibliographic resource guide*. New York: Garland.
- Hughes E. K. 2010 Parent emotion socialisation practices and their associations with personality and emotion regulation. *Personality and Individual Differences*, 49 (7), 694 - 699.
- Hubbard J. A., and Coie J.D. 1994 Emotional correlates of social competence in children's peer relationships. *Merrill-palmer Quarterly*, 40, 1-20.
- Izard C.E. 1991. *The Psychology of emotions*. New York: Plenum Press.
- Izard C. E, King K. A., Trentacosta C. J., Morgan J. K., Laurenceau J., E. Krauthamer-Ewing S., and Finlon K. J. 2008. Accelerating the development of emotion competence in Head Start children: Effects on adaptive and maladaptive behaviour. *Development and Psychopathology*, 20, 369 - 397
- Lengua L. J and Long A. C. 2002. The role of emotionality and self-regulation in the appraisal-coping process. *Journal of Applied Developmental Psychology*, 23 (4), 471 - 493.
- Lewis M. and Michalson L. 1983. *Children's emotions and moods*. New York: Plenum.
- Lewis, M., Sullivan M.W., Ramsay D. and Alessandri S.M. 1992. Individual differences in anger and sad expressions during extinction: antecedents and consequences. *Infant Behavior and Development*, 15, 443-452.
- Miller P. M., Danaher D. L. and Forbes, D. 1986. Sex-related strategies for coping with interpersonal conflict in children aged five and seven. *Developmental Psychology*, 22, 543 -548.
- Miller P. and Sperry L. 1987. The socialization of anger and aggression. *Merrill-palmer Quarterly*, 33 (1), 1 – 31.
- Pons F. and Harris, P. 2000. *Test of Emotion Comprehension – TEC*. Oxford: University of Oxford.
- Raver C. C. 2002. Emotions matter: Making the case for the role of young children's emotional development or early school readiness. *Social policy report*, 16 (3), 3 - 19.
- Raver C. C. Blackburn E. K. and Bancroft M. 1999. Relations between effective emotional self-regulation, attentional control, and low-income preschoolers' social competence with peers. *Early education and Development*, 10, 333 -350.
- Raver, C. and Knitzer, J. 2002. Ready to Enter: What Research Tells Policymakers About Strategies to

Promote Social and Emotional School Readiness Among Three- and Four-Year-Old Children.

Promoting the Emotional Well-Being of Children and Families – Policy Paper #3. National Center for Children in Poverty

- Raver, C. C. and Zigler, E. F. 1997. Social competence: An untapped dimension in evaluating Head Start's success. *Early Childhood Research Quarterly*, 12(4), 363-385.
- Renati, R. and Zanetti, M.A. 2009. Cognizioni ed Emozioni: costruzione del ben-essere attraverso un percorso di didattica metaemotiva a scuola. In O. Albanese and M. Peserico (a cura di), *Educare alle emozioni con le Artiterapie* (pp. 249 – 266). Bergamo: Edizioni Junior.
- Rubin, K., Bukowski, W., and Parker, J. 1998. Peer interaction, relationships and groups. In W. Damon (Series Ed.) and N. Eisenberg, (Vol. Ed.) *Handbook of Child Psychology: Vol. 3. Social, emotional, and personality development* (pp. 619-700). New York: Wiley.
- Russell, J. A. 1989. Culture, scripts, and children's understanding of emotion. In C. Saarni and P. L. Harris (Eds.) *Children's understanding of emotion* (pp. 293-318). Cambridge, England: Cambridge University Press.
- Saarni, C. 1990. Emotional competence: How emotions and relationships become integrated. In RA Thompson (Ed.), *Nebraska Symposium on Motivation: Vol. 36. Socioemotional Development* (pp.115-182). Lincoln: University of Nebraska Press.
- Skinner E., Edge K., Altman J. and Sherwood, H. 2003. Searching for the structure of coping: A review and critique of category systems for classifying ways of coping. *Psychological Bulletin*, 129, 216 – 269.
- Skinner, E. A., and Zimmer-Gembeck, M. J. 2007. The development of coping. *Annual Review of Psychology*, 58, 119-144.
- Spinrad, T.L., Eisenberg, N., Harris, E., Hanish, L., Fabes, R.A., Kupanoff, K., Ringwald, S. and Holmes, J. 2004. The relation of children's everyday non-social peer play behavior to their emotionality, regulation, and social functioning. *Developmental Psychology*, 40 (1), 67-80.
- Tangney, J. P., Wagner, P. E., Marschall, D., and Gramzow, R. 1991. *The Anger Response Inventory (ARI)*. Fairfax, VA: George Mason University.
- Vosk, B. N., Forehand, R., Figueroa R. 1983. Perception of emotions by accepted and rejected children. *Journal of Psychopathology and Behavioral Assessment*, 5 (2), 151-160.
- Zeman, J. and Shipman, K. 1996. Children's expression of negative affect: Reasons and methods. *Developmental Psychology*, 32(5), 842-849.
- Zeman, J., Shipman, K. and Suveg, C. 2002. Anger and Sadness Regulation: Predictions to Internalizing and Externalizing Symptoms in Children. *Journal of Clinical Child & Adolescent Psychology*, 31(3), 393-398.

Appendix

The aRRabbiadiario (Anger Diary)



University of Pavia
Department of Psychology

Emotion literacy project

PRIMARY SCHOOL

aRRabbiadiario

Anger Diary



DIARY Name _____
of Surname _____
Class _____



HELLO,

WHAT YOU HAVE JUST OPENED IS A SPECIAL DIARY. IN IT I WOULD LIKE YOU TO TELL ME WHAT HAPPENS WHEN YOU GET ANGRY AT SOMEONE IN YOUR CLASS (A FRIEND, TEACHER, PARENT ETC.), OR WHEN YOU GET A LOW MARK, SOMEONE TEASES YOU ETC.

IF YOU GET ANGRY THIS WEEK, FILL IN YOUR DIARY STRAIGHT AWAY AND ANSWER THE SIMPLE QUESTIONS ABOUT WHAT HAPPENED. TO REPLY YOU WILL HAVE TO DESCRIBE THE SITUATION AND CHOOSE FROM A FEW REASONS WHY PEOPLE GET ANGRY.

PLEASE PUT A CROSS NEXT TO THE FIRST THING YOU DID WHEN YOU BECAME ANGRY. THERE ARE NO RIGHT OR WRONG REASONS AND IT IS IMPORTANT THAT YOU REPLY HONESTLY.

WHAT YOU WRITE IN YOUR DIARY WILL BE A SECRET.

I WILL COME BACK IN ONE WEEK TO PICK UP THE DIARY. IF YOU GET ANGRY MORE THAN ONCE, YOU CAN ASK YOUR TEACHER FOR ANOTHER DIARY.


















PLEASE WRITE IN CAPITAL LETTERS.

THANKS.

BYE!!

How did you feel about what happened?

Choose the feeling you felt most strongly
and colour in the thermometer to show how intense this feeling was.

	HAPPY	Angry	SCARED	SAD
				
				
	PROUD	Ashamed	GUILTY	SURPRISED
				
				

If you felt something else write about it here.
