ATYPICAL SOCIAL COGNITION IN BULLYING: HOW PRE-ADOLESCENTS MENTALIZE EMOTIONS

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Abstract

Mentalizing is a mental activity that allows perceiving human behavior in terms of mental states like emotions, beliefs, needs, feelings, and goals. A reduced mentalizing ability is a risk factor for a variety of psychological issues in the domain of interpersonal social relationships. Numerous studies indicated deficits in social cognition in bullies and victims and highlighted that, aggressive children are less accurate in identifying emotions compared to control groups. However, only a few studies investigated mentalizing abilities related to anger and happiness in pre-adolescence. Our study tries to fill this gap in the literature, by investigating possible differences in the ability to mentalize anger and happiness in bullies and victims, compared to a control group of peers. To achieve this aim, we interviewed 100 students, aged between 13 to 14 years (M = 13.48; SD=.86), attending Italian lower secondary school, and balanced by gender. We administered the Olweus questionnaires to identify bullies and victims. We also applied a narrative approach to investigate the mental state language referred to anger and happiness. The results indicated a reduced ability to mentalize anger in bullies and victims compared to the control group. The 34.6% of bullies' responses considered anger as a mere behavioral or physical state, compared to controls (26.3%; $\chi2$= 15.97, $\alpha \leq 0.05$) who in turn considered anger as a mental state (38.6%). Also, victims were less likely to refer to anger as a mental state (12.5%) compared to the control group (38.6%; $\chi2$= 30.72, $\alpha \leq 0.05$). These results highlight that both bullies and victims seem to have difficulty in defining anger and happiness as a mental state. The results of our study point to the need to define effective intervention programs to prevent bullying by promoting appropriate mentalization of emotions in pre-adolescents. We also highlight the need to train teachers and parents about the importance of awareness of emotions to be understood as a valuable "ally" of the cognitive and social processes involved in school and family education.

Keywords: Theory of mind, mentalization, bullying, emotional competence, social cognition.

1. Introduction

Mentalizing is the reflective function of the Theory of Mind, which is the ability to think about one's own and others' mental states (Bateman & Fonagy, 2012). This kind of reflection is possible both about epistemic cognitive states and about non-epistemic states such as emotions. The ability to mentalize emotions includes both either the "emotional awareness" and the "ability to use the emotional vocabulary" (Saarni, 1999). Some studies investigated the ability to mentalize emotions in children and adolescents. These studies indicated a developmental transition occurring between 3 years old and 11 years old, from a behavioral understanding of emotions to a more advanced level of mentalization, namely the reflective understanding of emotions. Grazzani Gavazzi et al. (2008) analyzed, in a sample of 14 years old pre-adolescents, the ability to mentalize anger and happiness. This sample has been compared with old adolescents (19 years old). The results indicated that older participants were able to consider anger and happiness in terms of mental states more than pre-adolescents, which in turn tended to use more terms related to behaviors. Few studies analyzed the mentalizing emotions in bullies and victims.

Bullying has been defined as a deliberate and ongoing misuse of power in relationships through verbal, physical, and/or social behavior that intends to cause physical, social, and/or psychological harm (Olweus, 1996). The model of the "Social skills deficit" (Dodge, 1986; Crick & Dodge, 1994) indicates that bullies and victims show an atypical social information processing: they tend to apply some attributional bias when they interpret social information. The selection of the goals of actions is influenced by anger or by a lack of empathy toward the victim (Lemerise & Arsenio, 2000). Several

studies indicated significant differences in the ability to mentalize emotions in bullies, victims, and controls. Aggressive children are less accurate in identifying emotions compared to prosocial and altruistic classmates (Fonzi, 1999). Children with conduct disorders show low levels of mentalization. Hypo-mentalization reflects an inability to consider complex models of mental states, with a consequent limited ability to understand others and the self. Hypo-mentalization might rise from reduced affective sensitivity of parents, due to various reasons like high levels of stress, anxiety, or parental conflict (Davies, et al. 2004). Studies of bully families indicate that domestic violence and family conflict, characterized by high emotional manipulation, coercion, and unpredictability, put children at risk of developing emotional dysregulation and impulsivity (Bowers, et al. 1994; Cook, et al. 2010). Therefore, bullies learn to use anger in an instrumental and maladaptive way to reach their goals. In these situations, happiness might be associated mainly with the satisfaction to win a fight, which may lead to an increased perception of personal power. Victims' families are instead characterized by high levels of overprotection (Bowers, et al. 1994; Cook, et al. 2010) and low levels of conflict. This could contribute to developing high levels of family dependency, fear of the outside world, social isolation, and difficulty relating to peers. Since mentalization is a key ability in successful social interactions, bullies and victims might lack the ability to mentalize emotions like anger and happiness. However, few studies investigated mentalizing abilities related to anger and happiness in bullies and victims.

2. Objectives

Our study aims to fill this gap in the literature, by investigating possible differences between bullies, victims, and controls (students not involved in bullying in any role) in the ability to attribute mental states referred to the emotion of anger and happiness. We hypothesize that as compared to controls, bullies and victims will be less able to mentalize these emotions.

3. Methods

This study involved 100 students, 42% males (N=42) and 58% females (N=58), aged between 13 to 14 years (M = 13.48; SD=.86) attending Italian lower secondary school.

The anonymous questionnaires have been administered in randomly selected classes and the research was conducted according to the APA guidelines for ethical research in psychology.

3.1. Procedure

To identify the bullies, the victims, and the comparison group, we applied The Olweus Bully/Victim Questionnaire (Olweus, 1996). The Olweus Bully/Victim Questionnaire (OBVQ) is an anonymous self-report questionnaire. It starts with two global questions where students could identify themselves as victims or bullies. Children who had been bullied "2 to 3 times a month or more" were classed as victims. Those who had bullied others "2 to 3 times a month or more" were classed as bullies. Whereas those who had responded that they "have not" been bullied/not bullied other students or have been bullied/have bullied other students "only once or twice'' are considered "non-victims or non-bullies" (Solberg, & Olweus, 2003). Those last were often considered as a comparison group (controls) because they are not involved in bullying in any role (Olweus, 1996; Solberg, & Olweus, 2003).

To analyze the narrative episodes linked with the emotions of anger and happiness we applied a narrative approach [55], aimed to collect the description of the episodes associated with the emotions of our participants. The narrative approach used by Grazzani, Antoniotti, Ornaghi (2008) focuses on techniques of the written narration of personal experiences (Atkinson, 1998). The narrative tool of Grazzani Gavazzi, Antoniotti and Ornaghi (2008) included four items:
1) Describe an episode of your life in which you have been angry.
2) Describe what is anger for you.
3) Describe an episode of your life in which you have been happy.
4) Describe what is happiness for you.

We coded the participants' answers according to the method used by Montirosso, Pupino, Borgatti (2004), which allows us to identify the specific terms used by the participants to describe the emotions. In line with this method, we counted the "total number of words used to define happiness", the "total number of words used to define anger", the "mental states predicates related with happiness", "the behavioral predicates related to happiness", "the mental states predicates related to anger" and "the behavioral predicates related with anger". The behavioral predicates also included the physical states. Coding was done by two independent researchers, with an inter-rater agreement (Cohen Kappa coefficient) of 90% in behavioral predicates and 94% in mental predicates. Differences between categories were analyzed by a $\chi 2$ test with a level of significance of 0.05.

4. Results

The results indicated that bullies were the 26% (N=26), victims were 16% (N=16), and students "non-victims or non-bullies" (controls) were the 58% (N=58). Responses to the first question "Describe an episode of your life in which you have been angry" highlighted that, as compared to the control group, far more bullies' responses (37.1% vs. 18.9%) indicated problems with classmates ($\chi2$= 22.67, $\alpha \leq 0.05$). On the contrary, as compared to controls, fewer victims reported having problems with their classmates (7.1% vs. 18.9%; $\alpha \leq 0.05$). It seems that, within the context of the social relationships with classmates, bullies experience more anger compared with victims and controls. Victims tend to feel less angry compared with bullies and with peers not involved in bullying (controls). It might be of interest to explore in detail how the three groups mentalize anger.

4.1. Anger and happiness in bullies and victims
4.1.1. Anger as a mental state in bullies and victims. Here we indicated the definitions of anger in bullies and control groups (Table 1).

Table 1. Percentage of lexicon referred to the definition of anger in bullies, victims, and controls.

Definition of anger	Bullies %	Victims %	Controls %
Feeling or emotion	19.2	12.5	38.6
Behavior or physical state	34.6	37.5	26.3
Thing or moment	30.8	31.3	24.6
Other	15.4	18.3	10.5
Total	100	100	100

Responses to the question "Describe what is anger for you"

Bullies tended to define anger mainly in terms of behavior or physical state (34.6% yes 26.3%; $\alpha \leq 0.05$) and as "thing or moment", compared to controls (30.8% vs. 24.6%; $\alpha \leq 0.05$). As compared to controls, fewer bullies attributed anger to mental states (19.2% vs. 38.6%; $\alpha \leq 0.05$). Similarly, victims also considered anger more in terms of behavior or physical state (37.5% vs 26.3%; $\alpha \leq 0,05$) or as "thing or moment" (31.3% vs 24.6%; $\alpha \leq 0.05$), compared to controls. Like bullies, victims also considered anger less of a mental state than controls (12.5% vs. 38.6%; $\alpha \leq 0.05$). Below are some examples of the definition of anger in bullies:
- "When someone makes me angry, I want to *hit him*" (anger as behavior state).
- "When I'm angry *I feel like bursting*" (anger as a behavioral state).
- "Anger is a moment when I feel like smashing everything when I feel like smashing everything" (anger as a thing or moment).
- "Anger is an emotion that occurs when *I believe* others want to boss me around" (anger as a mental state). Below are some examples of the definition of anger in victims:
- "Anger leads me to distance myself from certain companions" (anger as behavior state).
- "Anger is an ugly thing" (anger as a thing or moment).
- "I think it's not right to feel angry" (anger as a mental state).

Here is now an example of the definition of anger in a student not involved in bullying:
- "Anger is an emotion that makes me believe I am right when *I believe* I am experiencing injustice". These results highlight the difficulty in many bullies and victims in metalizing anger.

4.1.2. Happiness as a mental state in bullies and victims. Here we indicated the definitions of happiness in bullies, victims, and control groups (Table 2).

Table 2. Percentage of lexicon referred to the definition of happiness in bullies, victims, and controls.

Definition of happiness	Bullies %	Victims %	Controls %
Feeling or emotion	15.4	25.0	37.9
Behavior or physical state	34.6	31.3	22.4
Thing or moment	26.9	18.8	19.0
Other	23.1	25.0	20.7
Total	100	100	100

Responses to the question "Describe what is happiness for you"

Bullies tended to refer more to happiness as a "behavior or physical state" (34.6% vs. 22.4%; α ≤ 0.05) and as "thing or moment" (26.9% vs. 19%; α ≤ 0.05) compared to controls. As compared to controls, fewer bullies attributed happiness to mental states (15.4% vs. 37.9%; α ≤ 0.05). Similarly, victims also considered happiness more in terms of behavior or physical state compared to controls (31.3% vs. 22.4%; α ≤ 0,05).

Like bullies, victims also considered happiness less of a mental state than controls (25% vs. 37.9%; α ≤ 0.05). This can be understood as a difficulty of bullies and victims in metalizing happiness. Below are some examples of the definition of happiness in bullies:

• "When I'm happy I feel like *screaming*" (happiness as behavior state).
• "Happiness *is something* that rarely happens to me" (happiness as a thing).
• "I *think* I'm happy when others respect me" (happiness as a mental state).

Below are some examples of the definition of happiness in victims:

• "When I'm happy I want *to tell* everyone" (happiness as behavior state).
• "When I'm happy *I feel light*" (happiness as a physical state).
• "Being happy is a *great thing*!" (happiness as a thing or a moment).
• "When I'm happy, *I think* everything will be fine" (happiness as a mental state).

Here is now an example of the definition of happiness in a student not involved in bullying:

• "Happiness is a beautiful *emotion* that makes me *think* I'm in tune with the world".

These results highlight the difficulty in many bullies and victims in metalizing happiness.

5. Discussion

The results indicated atypical social cognition both in bullies and victims but not in controls. Regarding bullies, Morosan et al. (2020) interpreted this phenomenon by indicating that bullies are not able to mentalize anger and therefore tend to use it in a non-functional and instrumental way with their peers. It is in line with the higher number of behavioral and physical terms that they use to refer to this emotion. Previous studies indicated that the phenomenon of hypo-mentalization might arise from an inability of the bullies' parents to be emotionally attuned to their children, maybe due to higher levels of stress and/or familiar conflicts (Ferreras Picazo, 2021). Our results also showed that victims exhibited the same difficulty as bullies in metalizing anger. They tended to refer to this emotion in terms of a "thing" or a "moment". It is possible that victims learned to avoid anger with their classmates, probably because it is perceived as dangerous outside of their family. Previous studies on the familiar background of the victims (Bowers, et al. 1994; Cook, et al. 2010) showed higher levels of hyper protection compared to the familiar background of bullies. Victims also show a higher tendency of internalizing problems rather than externalizing ones, which in turn are more common in bullies (Copeland et al. 2013; Pedditzi & Lucarelli, 2014). Mentalizing emotions is therefore important for victims to recognize the emotional signals of anger in relationships with bullies and peers and to develop assertiveness. In bullies, instead, is important to promote awareness of anger and teach them how to handle aggressive behavior. In summary, the results of our study integrate the data already present in the literature, which highlights difficulties in mentalizing emotions in adolescence, specifically in individuals with conduct disorders and impulsivity (Ferreras Picazo, et al. 2021). Our results also confirm what was found in previous studies about the development of emotions in adolescence (Grazzani Gavazzi, et al. 2008; Montirosso, et al., 2004) and the theory of mind in bullies and victims. In line with these studies, we found that bullies and victims are characterized by a "behavioral" knowledge of their emotions. On the contrary, the control group showed a mentalistic understanding of emotions. Our study complements the previous ones but is different because extends these results by using a narrative approach. This approach is easy to use in educational settings and it might have important implications for possible intervention at school to promote social-emotional competencies in pre-adolescents. Of course, our study has some limitations. In future research, it will be necessary to obtain additional data about the socioeconomic and family background of bullies and victims to better understand some of the findings. It would also be interesting to use other quantitative tools to explore the role of other important emotions such as fear and shame in victims and guilt in bullies.

6. Conclusions

Our study has practical implications for the prevention of distress in preadolescents and the promotion of well-being at school. It is necessary therefore to apply practical guidelines in terms of addressing the bullies' and victims' limitations of mentalizing emotions, through the socio-affective education at school. We also highlight the need to train teachers and parents about the importance of awareness of emotions to be understood as a valuable "ally" of the cognitive and social processes involved in school and family education.

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