



What makes children behave aggressively? The inner logic of Dutch children in special education

Marieke Visser , Elly Singer , Paul L.C. van Geert & Saskia E. Kunnen

To cite this article: Marieke Visser , Elly Singer , Paul L.C. van Geert & Saskia E. Kunnen (2009) What makes children behave aggressively? The inner logic of Dutch children in special education, European Journal of Special Needs Education, 24:1, 1-20, DOI: [10.1080/08856250802596717](https://doi.org/10.1080/08856250802596717)

To link to this article: <http://dx.doi.org/10.1080/08856250802596717>

 Published online: 22 Jan 2009.

 Submit your article to this journal [↗](#)

 Article views: 200

 View related articles [↗](#)

 Citing articles: 4 View citing articles [↗](#)

What makes children behave aggressively? The inner logic of Dutch children in special education

Marieke Visser^{a*}, Elly Singer^b, Paul L.C. van Geert^a and Saskia E. Kunnen^a

^a*Department of Clinical and Developmental Psychology, University of Groningen, Groningen, the Netherlands;* ^b*Department of Developmental Psychology, University of Utrecht, Utrecht, the Netherlands*

The ambiguous results of existing intervention programmes show the need for new ways in research on aggression among children. The present study focuses on the children's own perspective on their aggressive behaviour. Based on a constructivist approach, the inner logic of narratives about peer conflicts of 64 children in Dutch special education was analysed. Contrary to the much used dichotomy of reactive and proactive aggression, we found a more differentiated picture. Children use aggression: to get understanding for their situation; to escape from the conflict situation; because of inner conflicts; to get revenge; and for the fun of bullying. The study makes clear that, from the perspective of the children, aggressive behaviour is closely related to the peer culture at school. Moreover, some children need individual treatment and support, because of specific concerns related to self-regulation that make them behave aggressively.

Keywords: aggressive behaviour; children; inner logic

Introduction

March 2006, the headlines of the Dutch media report about a video on the internet of two teenage girls severely bullying another girl. The public is shocked. The girls involved, however, are not. The victim admits that she started the fight, but that she was right: 'I only slapped Lisa [perpetrator], because she slammed the door in my face. And the perpetrators declare: "If it had not been filmed nobody would have cared"' (Van der Mee and Veldhuijzen 2006, 6). As to the last remark, these kids may be right. Despite research of aggression at schools and anti-bullying and aggression reduction programmes in the Netherlands, many adults are not aware of the 'normality' of aggression from the perspective of youngsters and children.

In this paper we will discuss the children's perspective on their aggressive behaviour. By studying their perspective we want to get more insight into the question why children behave aggressively, and thus contribute to the improvement of intervention programmes aimed at reducing bullying and aggression.

Theoretical framework

Dynamics of aggressive behaviour

During the past few decades, various intervention programmes have been developed to reduce bullying, based on different theoretical assumptions about aggression in

*Corresponding author. Email: M.Visser@rug.nl

schoolchildren. The older programmes, the so-called single factor programmes, focus on one or more specific aspects of social behaviour: learning adaptive social skills (Bandura 1978); correction of distorted cognitions and lacks in social-information processing (Crick and Dodge 1996); regulation of frustration and negative emotions (Berkowitz 1989); and perspective taking, correction of ‘me-centredness’ and moral reasoning (Gibbs et al. 1996; Selman and Demorest 1984). More recently, eclectic programmes have been developed that cover multiple aspects of behaviour. Despite the fact that many of these programmes have shown promising results, a significant number of programmes have had ambiguous results (Gibbs et al. 1996; Quinn et al. 1999). Some aggressive children do profit from an intervention programme, while others do not (Brezinka 2002; Kazdin 2000; Prins 1995; Stage and Quiroz 1997). There are even programmes that show adverse effects for a subgroup of children (Dishion, McCord, and Poulin 1999; Arnold and Hughes 1999).

The ambiguous results of intervention programmes have challenged researchers to look for new approaches that focus on the dynamics of aggressive behaviour in specific situations and on individual styles (Lemerise and Arsenio 2000). Musher-Eizenman et al. (2004) argue that, by simultaneously considering multiple factors and exploring the ways in which they operate together, a much better understanding of aggressive behaviour can be achieved. In this respect there is also interest in the children’s perspective: how children connect goals, emotions and behaviours during peer conflicts simultaneously (Murphy and Eisenberg 2002).

In our study we have used children’s narratives as sources of information about: the relationships between multiple factors of aggressive behaviour; and individual differences and different patterns of aggressive behaviour.

The child’s inner logic

In our study we have reconstructed the inner – subjective – logic of the child in their narratives of aggressive behaviour (Okma-Rayzner 2005; Singer 2005). Therefore we have interviewed the children about how they view the situation in which they react aggressively; what they do in conflict situations (social actions and emotion regulation); what their goals, concerns and emotions are; how they regulate their emotions; and how they view the emotions and concerns of their opponents.

The concept of inner logic and the interview instrument are based on a theoretical framework that elaborates on constructivist theories on the affective development of children (Miltenburg and Singer 1999) and on current functionalist emotion theories (Cole, Martin, and Dennis 2004; Eisenberg and Spinrad 2004; Hoeksma, Oosterlaan, and Schipper 2004). Constructivists stress the importance of *cognitive-affective structures* or scripts (Huesmann 1998), which are constructed by children in relation with significant others (Fischer et al. 1997). These structures lead to certain expectations, emotional and behavioural patterns, which are self-evident and logical to the child (Fischer et al. 1997; Okma 2005; Miltenburg and Singer 1999). Cognitions, emotions and behaviour are assumed to be a unity (see, for example, Cole, Martin, and Dennis 2004; Eisenberg and Spinrad 2004; Frijda 1986; Hoeksma, Oosterlaan, and Schipper 2004).

Cognitive-affective processes start with the child noticing a change in its outer or inner world (Frijda 1986). On the primary level, the child appraises the change with respect to its concern relevance. This may lead to automatic behaviour and feelings such as a defensive reflex or feelings of arousal. During the secondary appraisal, the

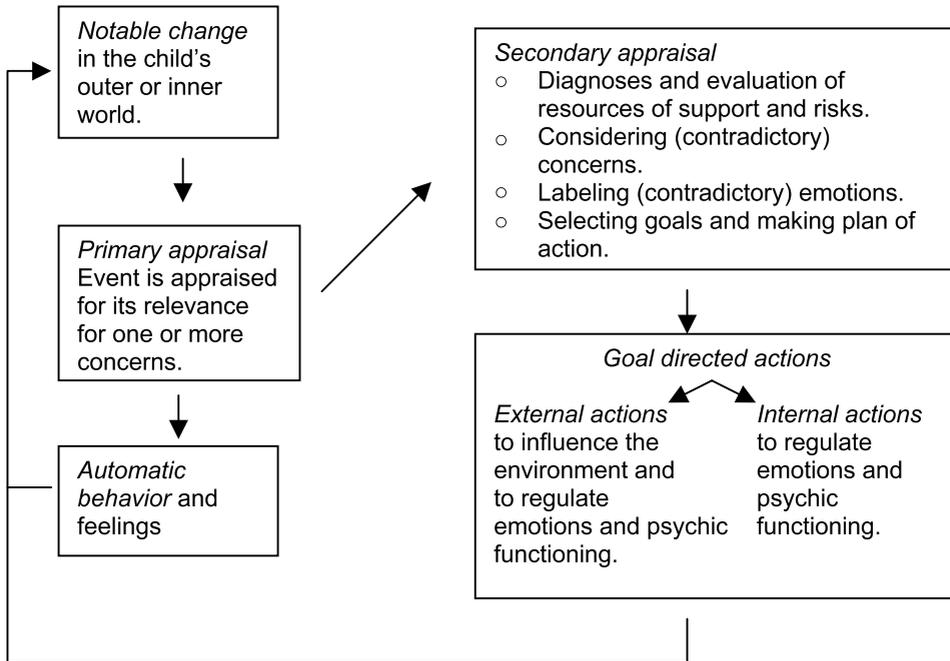


Figure 1. Diagram of a cognitive-affective process.

context, concerns, emotions, goals and plans of action are evaluated. To understand a child's motivation to act aggressively, it is not sufficient to ask only about its emotions (Singer 2005). As a child develops its higher psychological functions, it becomes able to act deliberately in order to achieve a goal or to realise a concern. Therefore we should also focus on the child's goals and underlying concerns. Finally, the secondary appraisal results in goal-directed actions: external by influencing the outer world, and internal by influencing the inner world. The diagram of a cognitive-affective process is presented in Figure 1.

Profiles of inner logic

By analysing and comparing the narratives of different children, we reconstruct profiles of inner logic; that is, coherent patterns of situations that evoke aggression, actions, goals, concerns and emotions. In earlier research based on the information processing theory, two coherent patterns of aggressive behaviour are found: reactive and proactive patterns of aggression (see, for example, Crick and Dodge 1996; Merk 2005; Orobio de Castro 2004). Characteristic of reactive aggression is reacting to provocations or threats in a hot-blooded – angry – way, whereas proactive aggression is motivated in a cold-blooded way, anticipating a certain reward (Kempes et al. 2005). Figure 2 presents the complete profiles of the two distinctive types of aggression.

However, the distinction is also being discussed (Polman et al. 2007) and challenged. Bushman and Anderson (2001) state that the biggest problems with the reactive–proactive dichotomy is that it assumes a clear-cut distinction between the two types of aggression as regards their goals, whereas aggression can be motivated by

<u>Reactive aggression</u>	<u>Proactive aggression</u>
<ul style="list-style-type: none"> - Situation: the child thinks he or she is being threatened or provoked. - Action: impulsive and 'hot-blooded', loss of control. Goal: protection. - Concern: preventing physical or psychological pain and not wanting to be bullied. - Emotion: anger. 	<ul style="list-style-type: none"> - Situation: the child anticipates a certain reward. - Action: bullying, dominating, 'cold-blooded'. Goal: domination or object acquisition. - Concern: position in the group, wanting to be the strongest / most powerful or just getting the desired object. - Emotion: no anger.

Figure 2. Reactive versus proactive aggression.

many different goals. And it assumes anger to be present only with reactive aggression, whereas proactive aggression may be driven by anger as well. In our study we look for the reactive and proactive patterns of aggressive behaviour in the children's narratives, but we do not confine ourselves to these two patterns and also take a critical look at the potential limits of the dichotomy.

Finally, we also explore how the different profiles of inner logic relate to children's actual aggressive behaviour as perceived by their teachers. And we explore the relation between the children's age and the type of profile we find.

Research questions and hypothesis

The questions we want to answer in this paper are:

- (1) What is the inner logic of children's aggressive behaviour: how do they perceive the situation, what are their actions, goals, concerns, emotions, and emotion regulation strategies?
- (2) Can we construct profiles of inner logic from the children's narratives about their aggressive behaviour?
- (3) How do children's profiles of inner logic relate to their aggressive behaviour as perceived by the teachers? And how do the profiles relate to the age of the children?

As regards research question 2, we hypothesise that we will find a more differentiated picture than the two profiles consistent with reactive and proactive aggression. We expect to find additional profiles of inner logic.

Method

Participants

The sample in this study consisted of 64 Dutch children aged eight to 12 years. All of them were in special education for students who meet one or more of the following criteria: they have a psychiatric disorder and there are severe socio-emotional or behavioural problems at school and at home or during their leisure time, causing academic problems. The teachers were asked to select the children: who cause discipline problems because of aggressive behaviour; and who, according to the teacher, would benefit from an aggression reduction programme?

Table 1. Characteristics of the participants ($n = 64$).

Variable	<i>n</i>	%
Sex		
Girls	3	5
Boys	61	95
Age		
8 years	4	6
9 years	12	19
10 years	24	38
11 years	15	23
12 years	9	14
Intelligence Quotient		
<80	4	6
80–100	26	41
>100–120	17	27
>120	2	3
Missing	15	23
Diagnosis		
ADHD or symptoms of ADHD	12	19
PDD-NOS or symptoms of PDD-NOS	12	19
Combination of above	15	23
ADHD or symptoms combined with another diagnosis	3	5
Rest	3	5
No diagnosis	17	26
Missing	2	3
Family composition		
Two-parent family	29	45
Single-parent family	20	31
Two-parent family with one stepparent	10	16
Foster family	1	2
Adoption family	1	2
Missing	3	4

Based on the children's files and the behaviour questionnaires conducted by the teachers, the following profile of the participants arises. As we can see in Table 1, most of the children are boys (95%); most of them are nine, 10 or 11 years of age (19%, 38% and 23%, respectively) and have a normal Intelligence Quotient (just 6% with IQ < 80). Sixty-six per cent of the children have been diagnosed with (symptoms of) attention-deficit hyperactivity disorder (ADHD) and/or Pervasive Developmental Disorder-not otherwise specified (PDD-nos), either combined with other diagnoses or not. Finally, most children come from two-parent families (69%).

The teachers completed a behaviour questionnaire – the Dutch version of the Disruptive Behaviour Disorders rating scale (Oosterlaan et al. 2000). It examines whether and to what extent symptoms of the behavioural disorders ADHD, Oppositional Defiant Disorder (ODD), and Conduct Disorder (CD) (the externalizing behaviour problems)

Table 2. Participants' norm scores on the disruptive behaviour disorders scale ($n = 60$, four missing).

Disruptive behaviour disorder	Clinical range		Subclinical range		Normal range	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Attention problems	21	35	11	18	28	47
Hyperactivity problems	34	57	6	10	20	33
ODD	37	62	10	17	13	22
CD	32	53	9	15	19	32

are present in a child. In Table 2, we see that the children in our study score particularly high on the ODD (62% in the clinical range) and CD scales (53% in the clinical range). ODD and CD are the two behavioural disorders strongly connected with aggressive behaviour.

Interview instrument

We started the interview by discussing a fictitious situation about a conflict between two children: a peer spoils the child's video game. Then we invited the children to tell about a peer conflict they had experienced. To uncover the different components of the cognitive-affective process involved in the conflict, we asked open questions about the situation, the children's actions, goals, concerns and emotions, and the emotions of their opponents. To make the interview comprehensible for children diagnosed with ADHD and PDD-NOS we used pictographs with faces expressing different emotions, an emotion thermometer to rate the severity of the situation, and a *stop sign*, which could be used when children did not want to answer a question or wanted to take a break.

Procedure

The interviews were held at school and lasted about an hour, sometimes more, depending on the story. The transcripts were regularly discussed with the interview trainer, to see whether the interview had been carried out in the right way.

Analysis

To analyse the children's inner logic, we constructed a category system for the main components of the inner logic in a deductive way based on the reactive and proactive aggression distinction and Selman's theory on perspective taking, and in an inductive way for unforeseen answers. The transcribed interviews were coded in different categories with regard to: the situation at the onset of the conflict; the child's actions during the conflict; the emotions and emotion regulation; and support of the teacher or parents.

- *Situation*. Starting points were: (a) a neutral situation with no aggression on the part of the opponent, (b) a situation in which the child considers itself as victimised by the opponent, and (c) a situation in which the child actively bullies or hurts another child.

- *Actions.* (a) Non-aggressive actions, (b) a combination of non-aggressive and aggressive actions, and (c) aggressive actions.
- *Goals and concerns.*¹ Partly based on Selman's theory of perspective taking (Selman and Demorest 1984): (a) one-sided, (b) two-sided (getting understanding + stopping aggression), and (c) no goal (loss of control: 'it just happens and I can not stop it'). For the one-sided category, a distinction was made between children who want to escape; who want to get revenge or settle the power balance; and who want to dominate or bully other children. As for the concerns involved, we distinguished: (a) social concerns (e.g. opponent has to be punished), (b) personal concerns (e.g. avoiding punishment, bullying is fun), and (c) moral concerns (e.g. revenge, it is not fair).
- *Emotions.* We divided the emotions into (a) positive emotions and (b) negative emotions. The negative emotions were divided into aggressor-related emotions such as anger and revenge, and victim-related emotions such as sadness, fear and confusion. We also asked the children how they thought their opponent felt during the conflict, using the same categories.
- *Emotion regulation.* (a) Internal regulation, for instance, distraction by thinking of something else; (b) external regulation by releasing anger and expressing emotions.
- *Support.* Looking for support from the teacher or parents.

Constructing profiles of inner logic

To construct profiles of inner logic we started by analysing differences in the perception of the situation, which resulted in three groups of children. Secondly, within each of these three groups we looked at the children's actions – whether they used aggression and non-aggressive actions (see later Figure 3). Finally, we analysed the children's goals, which resulted in five profiles. From there on we studied the concerns and emotions, and reconstructed the inner logic of the children.

Reliability

Each interview has been coded by two independent reviewers. The inter-rater reliability has been determined concerning the profiles of inner logic. We used Cohen's kappa, because it is a suitable measure for data with a nominal level. The inter-rater reliability in this study can be judged as good (Cohen's kappa = 0.73 for the profiles of inner logic).

Results

Components of inner logic

Perception of the situation

Almost all of the narratives are situated in the playground (59%) or in the classroom (19%). The majority of the children (81%) said that their opponent had started the conflict. They presented themselves as being victimised or provoked by their opponent. They were being pushed into the bushes, called names, kicked or laughed at when they fell to the ground. Just 8% of the children got into a conflict while playing together or by accident ('He kicked me by accident, he did not want to hurt me').

Table 3. Description and frequencies of actions mentioned by the children ($n = 64$).

Action	<i>n</i>	%
Non-aggressive actions	17	27
Asking help from teacher	9	14
Talking	7	11
Walking away or pushing away	5	8
Combination of non-aggressive and aggressive actions	3	5
First talking and asking help from teacher then, when that does not help, kicking or hitting		
Aggressive actions	44	69
Hitting	23	36
Kicking	13	20
Calling names	6	9
Chasing	5	8
Getting somebody (throwing on the ground, blocking, etc.)	4	6
Throwing things	3	5
Pushing	2	3

Note: Some children mentioned more than one action. This means that the number of children in the subcategories do not equal the number of children in the main categories (bold).

Eleven per cent of the children depicted themselves as bullies. They started the conflict by deliberately interpreting a minor ‘mistake’ of their victim as a provocation.

Actions

One-quarter of the children said that they reacted in a non-aggressive way (see Table 3). They said ‘Go away’ or ‘I will get my teacher’, or escaped by running away and getting help from the teacher. Only three children mentioned a combination of non-aggressive and aggressive actions. For instance, Mike reported he first said ‘Stop it’, but his opponent did not stop teasing so he went to his teacher to get help. As this did not work either, he started defending himself by kicking back. Most children exclusively mentioned aggressive reactions (69% of the children). Kicking and hitting were mentioned most frequently. A few children’s quotes are as follows: ‘I hit them on the head’, ‘I grabbed him and banged his head to the wall’, ‘I hit her in the face with my hand.’

Goals

As for the goals, most children reported a one-sided goal (88%) (see Table 4). They wanted to stop the aggressive behaviour of their opponent (77%) to protect themselves: ‘So that I would be able to run away’, ‘So he will not hurt me anymore’, or to get revenge and to maintain their position. They said: ‘I just want to get back at him because he hit me’. Just 12% of the children with a one-sided goal reported they wanted to continue the conflict (‘I like to hit him’, ‘I like it when he gets mad’). Seven per cent of the children had a two-sided goal with their actions; they wanted to stop their opponent and to get understanding for their situation. For instance, Jan explained: ‘They have to stop, they have to know that I do not like to

Table 4. Description and frequencies of goals that were mentioned by the children ($n = 60$).

Goal	<i>n</i>	%
One-sided	53	88
Stopping aggression > escape (protection)	25	42
Stopping aggression > revenge (settling power balance)	21	35
Continuing aggression > domination (bullying)	7	12
Two-sided		
Getting understanding + stopping aggression	4	7
No goal		
Loss of control	3	5

Note: Four children were not able to answer the question of what they wanted to achieve by their actions.

be teased'. Finally, 5% reported not to have a particular goal. For instance, Eric said: 'It just happens, it is like you get a sort of tingling in your head, like I just have to throw that thing back. It is like there is someone with a remote control, pulling my strings'.

Concerns

As we see in Table 5, more than one-half of the children had social concerns. They wanted to stop the aggressive behaviour (same as their goals). One-half of the children also reported a personal concern: 29% wanted to protect themselves because they felt bad ('I do not like fighting'). Furthermore, some children reported concerns involving prevention of punishment or loss of control (14% and 9%, respectively), pleasure (5%), and being invincible (5%). For example, Peter simply states: 'I like to be the

Table 5. Description and frequencies of concerns that were mentioned by the children ($n = 58$).

Concern	<i>n</i>	%
Social	33	57
Stopping aggression	26	45
Getting understanding	6	10
Teacher should punish	5	9
Personal	30	52
Protecting self-worth	17	29
Forestalling punishment	8	14
Prevention of loss of control	5	9
Bullying is fun	3	5
Being invincible	3	5
Moral	9	16
Revenge	6	10
Not fair	3	6

Note: Six children were not able to answer the question why it was important to them to achieve their goal. Some children mentioned more than one concern. This means that the number of children in the subcategories do not equal the number of children in the main categories (bold).

strongest'. Finally, 16% of all concerns mentioned are morally oriented. They wanted to get revenge for moral reasons (10%) or they think it was not fair what their opponent did (6%).

Emotions

One-third of the children selected just one emotion (33%), another one-third two emotions (30%), and 35% of the children three or more emotions. Most children mentioned emotions that are related to the release of aggressive behaviour, such as anger and revenge (aggressor-related). Tom said: 'I am really angry because they hurt me'. Victor wanted to get revenge and was angry as well: 'I think a lot about how I can get revenge'. One-third of the children mentioned emotions that are related to being hurt. They mentioned being sad, scared, confused, ashamed or feeling guilty (victim-related). Only 22% of the children mentioned positive emotions. For instance, Jack said: 'I feel normal, because I run faster and I am happy that she can not catch me'.

When asked about their opponent's feelings, the children attributed more victim-related than aggressor-related emotions; they thought their opponents felt afraid and guilty. But they also thought that their opponents felt happy and proud of what they did: 'He probably feels proud and thinks "Ha ha, there she lies on the ground, we did a good job"'. In general, the children described themselves as being angry and as being sad, while their opponents were described as being happy or as being proud but also feeling guilty and scared because of their aggressive behaviour.

Emotion regulation

Most children freely expressed their anger. As Harry stated: 'I just beat him up'. And Pete said: 'I just blow up, and then I will cool off ...'. And most children tried to hide their sadness because they felt ashamed or were afraid that their opponent would continue. They knew that their crying would please and motivate their opponents. Only a few children felt ashamed that they had been teasing another child. Nico, for instance, said: 'I teased him and I was angry with myself. Then it made me cry and blush'.

Only one-third of the children mentioned some form of internal emotion regulation. Mike reported: 'I just continue playing and put it out of my head'. Or they tried to get involved in another activity. Rafaël let all emotions come out by crying in his room, while Brian tried to invoke a good feeling by thinking that he lives in a happy family. Instead of inner emotion regulation, several children explained how they turn sadness or confusion into anger and aggressive behaviour. They described complicated psychological processes between anger on the one hand and sadness, confusion, fear, shame or guilt on the other hand. They hid emotions by turning them into aggressive behaviour. For instance, Rex stated: 'I do not want them to see me sad, because I am part of a club. You can not be afraid; otherwise you will be kicked out of the club'. And Harry reported that, instead of showing his fear, he expressed his scared feelings by hitting the other boy. Furthermore, Kevin reported a distressing method to deal with his confusion. When someone attacks, he thinks: 'with the first blow [of your opponent] you pep yourself up and with the second you release the energy'. He had grabbed the other boy and thrown him on the ground.

Support

Thirty-nine per cent of the children did not talk with their parents or teachers about the conflicts. Fear of being punished was the most frequent explanation for not talking or asking for help. Only children who were often victimised sought help from an adult. If by any chance the teacher let them down, some children were outraged. Bryan: ‘Then I go to my teacher. And she just says that I have to leave the classroom. Then I am really angry and I slam the door’.

Profiles of inner logic

With the use of the three dividing criteria (perception of the situation, actions, and goals; see Method), we were able to construct five profiles of inner logic of children with aggressive behaviour. In Figure 3, we present the way in which we constructed the profiles.

Table 6 presents the profiles of inner logic and the components with category percentages.

We also tested whether the children with different profiles of inner logic differ as to the extent in which they have behavioural problems according to their teachers (see Table 7). We used the Kruskal–Wallis test, as this test is the best alternative for an analysis of variance when dealing with ordinal data (clinical, subclinical and normal range). The Kruskal–Wallis test revealed only a significant difference between the profiles as far as attention problems are concerned: $\chi^2 (4) = 12.4, p = 0.015$. With the use of a permutation test, differences between the profiles with respect to age were also considered. No significant differences were found (see Table 8). We will go into more detail about these results in a discussion of the separate profiles of inner logic.

The five profiles of inner logic appear as follows.

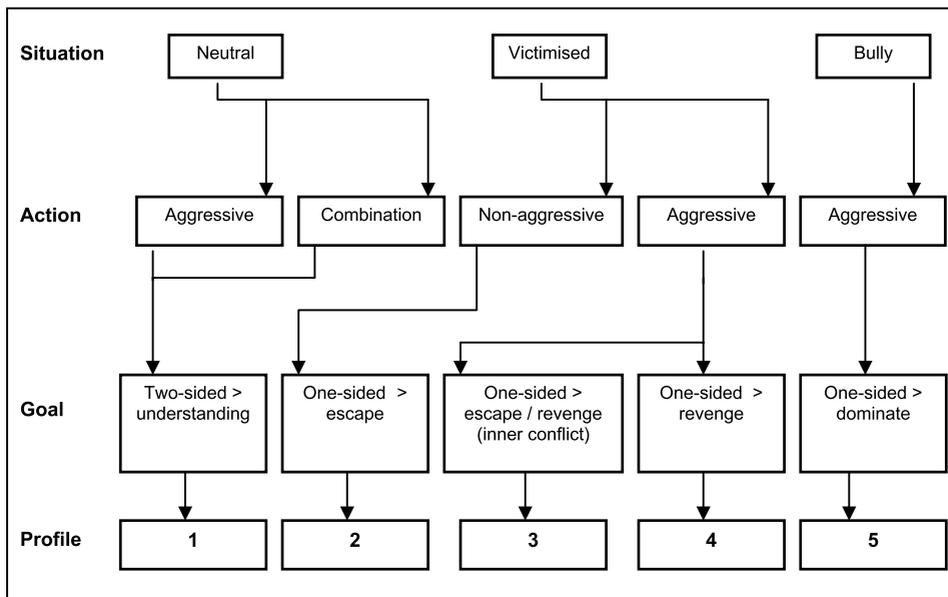


Figure 3. Schema of construction of profiles.

Table 6. Profiles of inner logic with category percentages ($n = 64$).

Situation	Profile 1: understanding ($n = 5$)	Profile 2: escape ($n = 16$)	Profile 3: escape/ revenge (inner conflict) ($n = 18$)	Profile 4: revenge ($n = 18$)	Profile 5: domination ($n = 7$)
Neutral	100	–	–	–	–
Being victimised	–	100	100	100	–
Victimising/bullying	–	–	–	–	100
Actions					
Non-aggressive	–	100	–	–	–
Non-aggressive + aggressive	40	–	–	–	–
Aggressive	60	–	100	100	100
Goals					
One-sided					
Stop aggression > escape	20	88	45	–	–
Stop aggression > revenge	–	12	–	100	–
Stop aggression > escape + revenge	–	–	33	–	–
Continue aggression > dominate	–	–	–	–	100
Two-sided (get understanding)	80	–	–	–	–
No goal (loss of control)	–	–	22	–	–
Support					
Support	80	55	83	52	14
No support	20	44	17	48	86

Table 7. Frequencies and percentages regarding DBD scores within each profile ($n = 60$).

Disruptive behaviour disorder (DBD)	Range	Profile 1 ($n = 5$)		Profile 2 ($n = 14$)		Profile 3 ($n = 16$)		Profile 4 ($n = 18$)		Profile 5 ($n = 7$)	
		<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Attention problems	Normal	3	60	9	64	2	13	12	67	2	29
	Subclinical	1	20	3	22	5	31	2	11	-	-
	Clinical	1	20	2	14	9	56	4	22	5	71
Hyperactivity problems	Normal	2	40	6	43	2	13	9	50	1	14
	Subclinical	1	20	3	21	2	13	-	-	-	-
	Clinical	2	40	5	36	12	75	9	50	6	86
ODD	Normal	-	-	5	36	2	13	6	33	-	-
	Subclinical	3	60	2	14	1	6	4	22	-	-
	Clinical	2	40	7	50	13	81	8	45	7	100
CD	Normal	3	60	7	50	2	13	7	39	-	-
	Subclinical	-	-	1	7	2	13	4	22	2	29
	Clinical	2	40	6	43	12	75	7	39	5	71

Table 8. Mean age of the children per profile ($n = 64$).

Profile	Mean age (years)	Standard deviation
Profile 1: understanding	10.80	0.84
Profile 2: escape	10.38	1.20
Profile 3: escape/revenge	9.65	1.15
Profile 4: revenge	10.37	1.07
Profile 5: domination	10.00	0.82

Profile 1: understanding

'I try to get it right by explaining or fighting, so my opponent will understand and the conflict will be solved'.

A good example of this profile is Arnold's story. Arnold teases his friend a little bit during a Nintendo game, but his friend does not like it and starts playing with another child. This makes Arnold angry and they get into a fight. Arnold says: 'I wanted him to stop hitting, but I also did not want him to play with that other boy. He is my friend'. Arnold also feels ashamed because of his behaviour.

Profile 1 includes 8% of the children in our study. After the conflict is over, the children of this profile say they want to make up again. Contrary to the children in other profiles, none of these children think their opponent will feel proud or happy of what they did. They also mention attempts to regulate their emotions internally, by thinking of or focusing their attention on something else. And they try to find support with their teacher or parents.

As regards the DBD scores, the children in this profile show a mixed picture. According to their teachers, 40% of the children scored within the clinical range of hyperactivity problems, ODD, and CD; 20% of these children scored in the clinical range with regard to attention problems. The mean age of the children in this profile was 10.8 years (standard deviation = 0.84), which was the highest, but not significantly higher.

Profile 2: escape (protection)

'My opponent is bullying me without reason'; 'I try to protect myself by running away or looking for help from the teacher' (non-aggressive actions); and 'I succeed in escaping and putting a stop to being bullied'.

Max fits very well in this profile. He tells how he is being chased by another boy. Max walks away, but the boy keeps on chasing him. Max says: 'I did not do anything else because he is a boy who gets angry very easily and I do not want to get into a fight'.

Profile 2 includes 25% of all the children in our study. The children in this profile report being teased or bullied by other children, but they do not choose to fight back. The fact that these children choose to react in a non-aggressive way makes them distinguishable from the other children. These children feel angry and want to take revenge, but they also feel sad because they do not want to get into a conflict. They regulate their anger internally (e.g. by continuing what they were doing and not thinking about it anymore). Afterwards, one-half of the children in this profile look for support with their teachers and parents.

The children in this profile also show a mixed picture of DBD scores, which is quite similar to the children in Profile 1. The mean age of the children was 10.38 years (standard deviation = 1.20).

Profile 3: escape/vengeance and inner conflict

'My opponent is bullying me without reason'; 'I kick, hit, shout (aggressive actions) to defend myself, to draw the teacher's attention; to make clear that I don't want this; or because I am not able to control my anger and the opponents enjoy that, and I don't want that and I feel confused'.

Erik is a very good example of a child who reacts impulsively to someone else and feels bad about it afterwards. He says: 'Then I get my pill too late, maybe that is why I do it. It just happens spontaneously'. Afterwards he feels afraid, ashamed and confused because of his 'bad' behaviour.

Profile 3 includes 28% of all the children in our study. The children in this profile report being teased or bullied, some of them severely and every day. They react aggressively, but for different reasons, which makes this group quite heterogeneous. What these children have in common is that they feel in conflict with themselves about their behaviour. Some of these children describe themselves as victims of their own impulses: 'it is like there is someone with a remote control pulling my strings'. Their main concern is that they do not like to fight and want the teasing to stop. The children know that other children enjoy their outbursts; they are convinced their opponents feel happy and proud.

They think their opponents feel angry, but also proud of their own behaviour and guilty afterwards. Most children do not want to show their angry feelings, because they are afraid this will make the other one continue. Some children try to do something different in order to forget how they feel ('I try to draw nice paintings and then I will forget'). Some of these children talk to their teacher or parents, while others do not look for support because they are afraid they will be punished.

Compared with the children in the other profiles, these children score considerably high on the DBD questionnaire. Most children score in the clinical range; attention problems 56%, hyperactivity problems 75%, ODD 81%, and CD 75%. The mean age of the children in this profile was the lowest – 9.76 years (standard deviation = 1.15), which was not significant.

Profile 4: revenge (settling the power balance)

'Opponent is provoking me'; 'I call him/her names and fight' (aggressive actions); and 'win or stop my opponent'.

Peter tells how he is being bullied, called names and provoked by another boy. In reaction he hits the other boy. He simply says: 'I wanted to get back at him, because he provoked me'.

Profile 4 includes 28% of all the children in our study. The children in this profile report being teased or bullied. They react in a direct, aggressive way to stop their opponent's aggressive behaviour. Almost all of the children report a one-sided goal; that is, to stop their opponent's aggression in order to get revenge or maintain their position. They think their opponent feels proud, but will also feel guilty and ashamed. Most of these children immediately express their anger without regulating their emotions inside. One-half of the children do not look for support, because they know they are wrong, while the other half look for support because they are convinced they were right by fighting back. A subgroup of children within this profile (20%) developed extreme forms of self-defence. They report at length about being victimised. To protect themselves, they have developed strategies that make them invincible. They blow themselves up, let the anger come out and are extremely strong.

The children in this profile score considerably low on the DBD questionnaire compared with the children in Profile 3. Just 25% of the children score in the clinical range as regards attention problems; 50% as regards hyperactivity problems and ODD; and 40% as regards CD. The mean age in this profile was 10.37 years (standard deviation = 1.07).

Profile 5: domination (bullying)

'My victim makes a minor mistake towards me'; 'I use that as a trigger to bully him or her' (aggressive action). 'That's fun'.

Joost tells a story about another boy who throws a chair at him. In response he grabs the boy and hits his head against the wall. 'If he hurts me, I'll give it back to him ten times more. Why? Because I like it ...'.

Profile 5 includes 11% of all the children in our study. These children differ considerably from the other children. They act aggressively, mainly because they enjoy dominating or hurting other children. They feel happy and proud of what they do, but also angry because of the minor provocation made by their opponent. In contrast to the children in the other profiles, these children do not feel ashamed, guilty or confused. At the same time, they think their opponents are afraid of them and feel confused by the situation. Most children freely release their anger. Finally, most of these children do not seek support, because they know they are in the wrong.

The children in Profile 5 score highest on the DBD questionnaire compared with the children in the other profiles. Within the clinical range are 71% of the children as regards attention problems and CD, 86% as regards hyperactivity problems, and all of the children score in the clinical range as regards ODD. The mean age of the children in this profile was 10.00 years (standard deviation = 0.82).

Reactive versus proactive aggression?

We hypothesised that we would find additional profiles of inner logic besides the two profiles of reactive and proactive aggression (Crick and Dodge 1996; Orobio de Castro 2004). Only 28% of the children meet all five criteria of reactive aggressive behaviour; these are the children of our Profile 3 'escape/revenge and inner conflict'. These children perceive the situation as threatening; their actions are impulsive and hot-blooded or due to loss of control; their main goal is protection; and they are angry. However, our study suggests that the children of Profile 3 have inner conflicts that stem from diverse problems. According to these children, their 'reactive aggression' is related to: 'brain problems'; being teased and bullied frequently; and the ineffectiveness of non-aggressive behaviour when trying to stop their opponent.

None of the children meet all five criteria of proactive aggression. Only when we restrict ourselves to one criterion – anticipating a certain reward – we have found two very different profiles that meet this criterion. These are the narratives of Profile 1, using aggression to get understanding and settle a peer conflict; and Profile 5, using aggression both to overpower the opponent and for the pleasure of bullying children.

Finally, the children with narratives of Profile 4, 'revenge', have characteristics of both reactive and proactive aggression. They use aggression in an instrumental way, but are not cold-blooded; they are angry. They aim at both protection and domination,

but especially at settling the power balance, which is not mentioned in either reactive or proactive aggression.

In conclusion, we are able to confirm our hypothesis that we would find more profiles of inner logic than the two profiles consistent with reactive and proactive aggression. We actually found five different profiles of inner logic of children with aggressive behaviour.

Conclusions

Most children say that they are victimised or bullied (81%). The narratives of the children make it very clear that, from the children's perspective, aggression and bullying happens on a daily basis in schools. Most children report they react aggressively in conflict situations (74%). Most children freely express their anger. They use aggression to escape (protection; 42%); to get revenge (settling power balance; 35%); to dominate (bullying; 12%); or to get understanding (7%). Some children (5%) were not able to report a goal, and reported losing control and acting impulsively.

Profiles of inner logic

We hypothesised that we would find more profiles of inner logic than the two profiles consistent with the distinction between reactive and proactive aggression (Crick and Dodge 1996; Orobio de Castro 2004). On the one hand, we found similarities between the reactive-proactive dichotomy and our data. On the other hand, we found a more diverse picture with five profiles of inner logic, consistent with the critiques on the reactive-proactive dichotomy (Bushman and Anderson 2001).

Relation with teachers' perspective and children's age

In order to confront the children's perspective with their teachers' perspective, we used the children's scores on the DBD rating scale. This scale examines whether behavioural disorders ADHD, ODD, and CD are present in a child according to the teacher.

The children who mentioned a neutral situation as a starting point (Profile 1) and non-aggressive actions (Profile 2) should score lowest on the DBD rating scale. However, the children in these profiles showed a highly differentiated picture; some children scored in the normal range, but a significant number of children scored in the clinical range. The teachers see more behavioural problems related to aggression than is to be expected from these children's narratives. It may very well be that the children in Profiles 1 and 2 actually have more conflicts than they report, and with more aggression actions.

Consistent with the severity of their narratives, the children in Profile 5 – the bullies – scored mostly in the clinical range on all four behavioural disorders, which means that the teachers see them as the most problematic with regard to their behaviour. After that, the children in Profile 3 (inner conflict) scored mostly in the clinical range, which is consistent with the severity of their narratives as well because they report clinical problems (for example loss of control).

No difference was found between the profiles with respect to the age of the children.

Discussion

Before we discuss the meaning of our results, we will point to some limitations of our study. Firstly, we have to bear in mind that our study is based on narratives of children in special education, which means that the children were, to some extent, behaviourally and/or emotionally disturbed. In order to be able to generalise conclusions about children's inner logic related to aggression to broader groups of children, one needs to study the inner logic in other groups as well. Secondly, our study relies on the children's own accounts of a conflict. It is very well possible that the children emphasised their opponent's role in order to put themselves in a more positive light. Thirdly, our analysis relies on one account of a conflict. If we would ask children to reflect on several other conflicts, they might report conflicts with other inner logic profiles as well. The relations between children's narratives and the conflicts they actually have needs to be studied in future research to gain deeper insight into the conflict dynamics of schoolchildren.

The narratives of the children in our study make clear that, from their perspective, aggression and bullying is part of the peer culture at their schools. The children report many aggressive incidents, such as being pushed into the bushes, being kicked and hit, being thrown to the ground, and so forth. We therefore might have to be careful with the assumption that children react aggressively due to distorted cognitions (social information processing theory; Crick and Dodge 1996). The children might very well perceive the situation accurately. In a culture of mutual aggressive behaviour to settle the power balance, children might need aggressive behaviour to stop and impress their opponent. Our finding that the children do not often mention non-aggressive tools to solve peer conflicts might be related to an actual lack of non-aggressive skills, but could also be related to the children's experience that non-aggressive behaviour is ineffective and weakens their status in the peer group.

Some parts in eclectic intervention programmes may be counterproductive for certain children in special education; for instance, the exercises meant to develop the children's ability in perspective taking. During these exercises, the children are invited to open up and tell about their fear, anger or sadness. But bullies are aware of their victims' fear, confusion and anger; they enjoy that. So inviting the children to open up can be very dangerous for victimised children during group sessions.

We have to be careful with children having problems regulating their emotions. They may be impulsive because of brain damage; or traumatised by repeated victimization by peers; or suffer from inner conflicts related to their aggressive behaviour (Profile 3). Some methods to stop impulsive behaviour could even intensify aggressive behaviour in specific children, as in the case of Kevin. He has already developed a method to make himself invincible by using the 'think-time' of the Stop-Think-Do method to blow himself up and explode, instead of using it to cool down. These children probably need individual help and cannot be helped in group sessions.

In short, the proactive-reactive dichotomy seems inadequate when it comes to understanding aggressive behaviour of children in the school context. From the perspective of the children, aggressive behaviour is normal behaviour in order to settle conflicts and the balance of power. This requires an approach at the level of the school system and group dynamics, and a focus on moral learning and social skills. Besides, we need an approach that focuses on cognitive-affective dynamics at the level of the individual child. Some children have very specific problems needing an individualised approach.

Note

1. The difference between a child's goal and concern can be explained as follows: a child's goal is the realisation of his or her concern in a specific context.

References

- Arnold, M.A., and J.N. Hughes. 1999. First do no harm: Adverse effects of grouping deviant youth for skills training. *Journal of School Psychology* 37, no. 1: 99–115.
- Bandura, A. 1978. Social learning theory of aggression. *Journal of Communication* 28, no. 3: 12–29.
- Berkowitz, L. 1989. Frustration–aggression hypothesis: Examination and reformulation. *Psychological Bulletin* 106, no. 1: 59–73.
- Brezinka, V. 2002. Effectonderzoek naar preventieprogramma's voor kinderen met gedragsproblemen [Study of the effects of prevention programmes for children with behavioural problems]. *Kind en Adolescent* 23, no. 1: 4–23.
- Bushman, B.J., and C.A. Anderson. 2001. Is it time to pull the plug on the hostile versus instrumental aggression dichotomy? *Psychological Review* 108, no. 1: 273–9.
- Cole, P.M., S.E. Martin, and T.A. Dennis. 2004. Emotion regulation as a scientific construct: Methodological challenges and directions for child developmental research. *Child Development* 75, no. 2: 317–33.
- Crick, N.R., and K.A. Dodge. 1996. Social information-processing mechanisms in reactive and proactive aggression. *Child Development* 67: 993–1002.
- Dishion, T.J., J. McCord, and F. Poulin. 1999. When interventions harm: Peer groups and problem behaviour. *American Psychologist* 54, no. 9: 755–64.
- Eisenberg, N., and T.L. Spinrad. 2004. Emotion-related regulation: Sharpening the definition. *Child Development* 75, no. 2: 334–9.
- Fischer, K.W., C. Ayoub, J. Singh, G. Noam, A. Maraganore, & P. Raya. 1997. Psychopathology as adaptive development along distinctive pathways. *Development and Psychopathology* 9, no. 4: 729–48.
- Frijda, N.H. 1986. *The emotions*. New York: Cambridge University Press.
- Gibbs, J.C., G.B. Potter, A.Q. Barriga, and A.K. Liau. 1996. Developing helping skills and prosocial motivation of aggressive adolescents in peer group programmes. *Aggression and Violent Behaviour* 1, no. 3: 283–305.
- Hoeksma, J.B., J. Oosterlaan, and E.M. Schipper. 2004. Emotion regulation and the dynamics of feelings: A conceptual and methodological framework. *Child Development* 75, no. 2: 354–60.
- Kazdin, A.E. 2000. Treatments for aggressive and antisocial children. *Juvenile Violence* 9, no. 4: 841–58.
- Kempes, M., W. Matthys, H. de Vries, and H. van Engeland. 2005. Reactive and proactive aggression in children: A review of theory, findings, and the relevance for child and adolescent psychiatry. *European Child and Adolescent Psychiatry* 14, no. 1: 11–19.
- Lemerise, E.A., and W.F. Arsenio. 2000. An integrated model of emotion processes and cognition in social information processing. *Child Development* 71, no. 1: 107–18.
- Merk, W. 2005. Development of reactive and proactive aggression in boys. Unpublished doctoral diss., University of Utrecht, The Netherlands.
- Miltenburg, R., and E. Singer. 1999. Culturally mediated learning and the development of self-regulation by survivors of child abuse: A Vygotskian approach to the support of survivors of child abuse. *Human Development* 42, no. 1: 1–17.
- Murphy, B.C., and N. Eisenberg. 2002. An integrative examination of peer conflict: Children's reported goals, emotions, and behaviours. *Social Development* 11: 534–57.
- Musher-Eizenman, D.R., P. Boxer, S. Danner, E.F. Dubow, S.E. Goldstein, and D.M.L. Heretick. 2004. Social-cognitive mediators of the relation of environmental and emotion regulation factors to children's aggression. *Aggressive Behaviour* 30: 389–408.
- Okma-Rayzner, C.M. 2005. Pleegkinderen in conflictsituaties [Foster children in conflict situations]. Unpublished doctoral diss., University of Utrecht, The Netherlands.
- Oosterlaan, J., A. Scheres, I. Antrop, H. Roeyers, and J.A. Sergeant. 2000. *Vragenlijst voor gedragsproblemen bij kinderen. Handleiding [Disruptive behaviour questionnaire. Manual]*. Lisse: Swets & Zeitlinger.

- Orobio de Castro, B. 2004. The development of social information processing and aggressive behaviour: Current issues. *European Journal of Developmental Psychology* 1, no. 1: 87–102.
- Polman, H., B. Orobio de Castro, W. Koops, H.W. Van Boxtel, and W.W. Merk. 2007. A meta-analysis of the distinction between reactive and proactive aggression in children and adolescents. *Journal of Abnormal Child Psychology* 35: 522–35.
- Prins, P. 1995. Sociale vaardigheidstraining bij kinderen in de basisschoolleeftijd: programma's, effectiviteit en indicatiestelling [Social skills training for children in elementary school: Programmes, effectiveness, and indications]. In *Sociale vaardigheidstrainingen voor kinderen: indicaties, effecten, knelpunten*, ed. A. Collot d'Escury-Koenigs, T. Engelen-Snaterse and E. Mackaay-Cramer, 73–109. Lisse: Swets & Zeitlinger.
- Quinn, M.M., K.A. Kavale, S.R. Mathur, R.B. Rutherford, Jr., and S.R. Forness. 1999. A meta-analysis of social skills interventions for students with emotional or behavioural disorders. *Journal of Emotional and Behavioural Disorders* 7, no. 1: 54–64.
- Selman, R.L., and A.P. Demorest. 1984. Observing troubled children's interpersonal negotiation strategies: Implications of and for a developmental model. *Child Development* 55, no. 1: 288–304.
- Singer, E. 2005. The strategies adopted by Dutch children with dyslexia to maintain their self-esteem when teased at school. *Journal of Learning Disabilities* 38, no. 5: 411–23.
- Stage, S.A., and D.R. Quiroz. 1997. A meta-analysis of interventions to decrease disruptive classroom behaviour in public education settings. *School Psychology Review* 26, no. 3: 333–68.
- Van der Mee, T., and A. Veldhuijzen. 2006. 'GSM-verbod maakt het juist spannend' – School bestuurders vinden duidelijke afspraken beter dan een ban op het mobieltje ['A ban on the use of a GSM makes it even more exciting' – School managers prefer clear rules to a ban on the use of mobile phones]. *Algemeen Dagblad*, March 29, 6.