

**From emotional and cognitive determinants to violence prevention  
amongst young children**

Pascale SALHANI

Professeur de Psychologie Sociale

Groupe de Recherches Sociopsychologiques

Université Louis Pasteur – Strasbourg – France

Our current research study stems from one basic questioning : can children be immunized from violence ? as one would vaccinate a child against a potential illness, is it possible to vaccinate against violence ? In a way to attempt to provide an answer to this question, we will refer back to cognitive theories stressing the cognitive factors which underlie aggressive behaviour.

The purpose of my paper is twofold :

- 1) In a theoretical part I will present recent researches investigated by the social cognitive approach. Amongst these beliefs we find the belief in violence as being legitimate, which seems to play a determining factor in the evolution of any aggressive behaviour.

Childhood aggression (like any social behaviour) is the result of multiple and interactive factors like emotional and cognitive factors. Indeed, aggression is controlled by programs for behaviour that have been learned during an individual's early development. Those programs are described as cognitive scripts that are stored in memory and are used as guide for behaviour and social problem solving. These scripts are learned through observation, reinforcement, and personal experience of situation in which aggression is salient behaviour. These scripts participate to elaborate the norms and beliefs that guide the children behaviour. Emotions (e.g. anger, anxiety) take also a central in determination of children aggressive behaviour.

- 2) In the second part I present violence prevention programs focused on cognitions to give to children prosocial norms and values, and emotions : how helping children to understand, recognize and regulate emotions.

Emotion regulation includes a number of crucial skills and dispositions. Children who are developing competence in the regulation of emotions are able to :

- inhibit inappropriate behaviour related to strong positive or negative emotion,
- soothe themselves or calm themselves down when they become highly emotionally aroused,
- use emotional states to focus or regulate their attention,
- coordinate their feelings, thoughts and actions in the service of important goals,

## **Introduction :**

Aggressive behaviour may be considered one of the most substantial social problems of many societies. The level is especially high during adolescence, but the roots of aggression can largely be traced back to the childhood. Consequently, much attention has been devoted to aggressive behaviour in children and adolescents.

It has become increasingly clear that characteristic patterns of social behaviour, and in particular aggressive behaviour, emerge early in life. Research have shown that, as early as at 12 months of age, children display behavioural styles that are more or less aggressive across a variety of situations (Kagen, 1988). Aggressive behaviour tends to be highly stable from early childhood to adolescence and adulthood and predicts a wide spectrum of adult adjustment problems. By age 8, aggressiveness has become a relatively stable personality characteristic (Eron & Husemann, 1990). Multiple factors contribute to the individual's propensity to behave aggressively (Lindsay & Anderson, 2000). Individual differences in aggressive behaviour seem to be a product of the interaction of early predispositional factors with specific learning experiences. ( Berkowitz, 1993; Huesmann, 1994). Thus, char

ny of these models and studies have focused on the role of specific cognitive information-processing skills or operations in regulation of aggressive behaviour. During the 1970s, the cognitive perspective and the information-processing paradigm within it increasingly became the theoretical framework for empirical psychology for explaining the mechanisms underlying aggressive behaviour among children and adolescents. According to this model, certain deficits in social-cognitive information-processing mechanisms reduce aggressive children's abilities to cope efficiently with everyday social problems; in other words, aggressive behaviour is seen as one way for a child or an adolescent to solve social problems. Consequently, aggression behaviour may be seen as a maladaptive way of solving social problems, and may be scrutinized in terms of aggressively biased information processing or aggressive scripts. Emotional factors are also hypothesized to be involved in social-cognitive information-processing activities, thus influencing to adequacy of social behaviour.

Social cognitive formulations have contended that habitual aggression is regulated by the interplay of two fundamental types of mental process. The first one entails a sequence of biased inferences and judgments made during the presentation of proximal social stimuli, leading to aggression in interpersonal situations of conflict or provocation. The steps in this sequence have been articulated in models of social information processing (Dodge, 1994, Huesmann, o.c.). The second comprises social knowledge mechanisms that link in memory past negative social experiences to one's unique representations of current stimuli. These

mechanisms of influence have been traditionally articulated in models in which latent knowledge structures summarize one's past experiences, offer a model for future action, and can therefore guide one's processing of social cues in any single situation. Two classes of constructs have been implicated in the analysis of development process leading to habitual aggression; namely, social knowledge variables such as child normative beliefs about the social appropriateness of aggression (Huesmann and Guerra, 1997) and processing variables such as a child's tendency to attribute hostile motives in hypothetical interpersonal exchanges, to generate aggressive solutions to the same events, and to foresee meaningful benefits for the self if aggressive solutions were to be enacted (Dodge, 1986).

## **1 – Social information model (Crick & Dodge, 1994)**

Crick and Dodge stipulate that an individual treats a social situation with limited psychological capacities (memory, thinking, social competencies) and with schemas stocked in memory that are directly related to the individual's own history. In other terms, we do not react "ex abrupto" to a social context, but we select schemas, constituted by different cognitive components (perception of cues, interpretation, evaluation and control of goals) and behavioural responses that we construct from our actual experiences and contexts in which we have evolved. When facing a specific situation, we are confronted to a range of cues or signals. The choice of our responses is then determined by the way we treat them. Crick and Dodge's social information model attempt to link sequential social cognitive process with children behaviour. One of the central aims of this model of aggression has been to describe an heuristic model of the specific social information-processing steps through which individuals are considered to regulate their social problem-solving and behaviour in social situations, and to show the differences in these steps between aggressive and non aggressive children and adolescents. Social cognition can be conceptualised as including multiple types of information processing steps and latent cognitive schema, which act together to produce child's behaviour. Thus, a child's behaviour can be influenced by social information-processing variables (e.g., cue recall, attributions, affect labelling, social problem solving), which indicate how the child perceives and responds to social situation, as well as by the child's enduring, cross-situational cognitive schema or beliefs about his expectations for attaining goals and perceived competence and self-worth. This model describes a series of six processing stages that invoked whenever an individual is presented with social cues

- 1) The first involves **encoding of social cues**, in which attentional and perceptual strategies are used to select relevant information from the environment. These cues are then mentally represented and integrated with long-term memory. It has been shown empirically that aggressive adolescents search for fewer facts in the social situation than their non aggressive counterparts; that aggressive children pay more attention to the aggressive social interaction in their environments than non aggressive children (Gouze, 1987).
- 2) The **cue interpretation step**. Individuals start to analyse the social context during the second step. By concentrating on the subjectively relevant information about the situation, individuals define and formulate the particular problem. They apply interpretative processes, such as causal analyses of the events, inferences about the perspectives of others in the situation (e.g., intent), and evaluations of their own role. Studies have shown that aggressive adolescents make their causal analyses of situations less on the basis of the facts, and more by relying on their past experience of

similar situations. Further, it has been found that aggressive children and adolescents make inferences about the perspectives of others in a hostile, biased way (Crick & Dodge, 1996; De Castro, 2002). They are also exaggerate potential hostility directed toward themselves. In other words, they perceive more than their non aggressive counterparts that other people are trying to harm them intentionally. That suggests that aggressive boys carry with them causal beliefs that anticipate others' malevolent motives, that highly accessible hostile configurations or schemes affect inferences at encoding. Experiments with 5 years old children as well with adolescents confirm the existence of an hostile attribution bias.

- 3) The **formulation and clarification of a behavioural goal**. The function of this step is to choose goals for the outcome of the social situation. It has been supported by findings that aggressive adolescents differ from their non aggressive counterparts in the degree to which they are likely to adopt hostile goals, even if they do not show hostile attributions of the situation. Aggressive boys place a higher value on social goals aimed at dominance and revenge, a lower value on those focused on affiliation with peers, than non aggressive boys (Lochman, Wayland & White, 1991). Aggressive children tend to select unappropriated goals and inauspicious to the interpersonal quality. They seem to ignore the long-term consequences of their violent solutions (Taylor & Gabriel, 1989), and choose aggressive goals instead of pro-social ones.
- 4) The fourth step is to **produce** one or more **behavioural strategies** at the cognitive level that are thought **to solve the social problem** at hand. That is, people are likely to generate social problem-solving means that reflect their ideas about possible alternatives for enactment. Studies have shown that aggressive children and adolescents generate fewer behaviour responses and report more aggressive pragmatic or impulsive social problem solving than their non aggressive counterparts. Pro-social children also seem to have a wider range of responses and more developed abilities to elaborate behavioural strategies than aggressive children who show a form of automatic access to limited and rigid scripts which are less appropriate to actual context ( Slaby & Guerra, 1988).
- 5) **The final stage consists of enacting the chosen response**, to find the subjectively best problem-solving strategy. Empirical studies has shown that aggressive children and adolescents evaluate aggressive behaviour more favorably than their non aggressive counterparts. They think that victims deserve aggression and that they do not suffer from it ( Slaby & Guerra, o.c.; expect aggressive behaviour to produce tangible reward, to increase self-esteem and to reduce aversive treatment ( Lochman, Perry and Slaby, 1991); anticipate fewer consequences of aggression, fewer negative emotional reactions..

Dodge (1986) emphasized the importance of initial stages of social information processing to social competence by describing how deficits (e.g. inaccurate cue interpretation or deficient cue utilization ) and biais (e.g. attending only to negative cues overinterpreting hostile intentions) can lead to deviant behaviour.

An essential element in the social cognitive information processing models is the possibility to return before the end of the processing to some earlier information-processing step and make some reconsiderations. If a person considers that he does not have enough information to make interpretations of the social situation, he may return to encode more information, or if

person is not satisfied with the social problem-solving strategy he has produced, he may go back to search for a better response alternative. Whether aggressive and non aggressive children and adolescents differ in their likelihood of making reconsiderations has not been studied directly, but the evidence that the non aggressive encode more information about the social situation and that they generate more social problem-solving strategies than their aggressive counterparts may indicate a higher propensity to use feedback loops as compared to aggressive ones.

Describing the process of social problem-solving as time-related steps and feedback loops not imply that people are dealing with only one processing step a time. On the contrary, Crick and Dodge have argued that social-cognitive information-processing is an on-line brain performance, suggesting that people are involved in a number of social-cognitive information processing activities simultaneously. People may engage in interpreting some cues while they are still encoding others, and keep on with the interpretation processes while starting to select a personal goal. They may also access behavioural responses from their long-term memory while they are still preoccupied with goal clarification, and finally they may evaluate the appropriateness of problem-solving strategies while constructing more response alternatives.

## **2 - Normative beliefs and aggression (Huesmann, 1988, Huesmann & Eron, 1984)**

Huesmann and his colleagues have presented a more integrated view of how latent knowledge structures influence one's social information processing and aggressive behaviour. In their model, "**scripts**" or programs of behaviour, determine what behaviours one ultimately enacts, and self-regulating beliefs directly influence one's active response-decision process at the time of dealing with a certain situation. They argued that habitual aggression arises from learning, using, and increasingly reinforcing aggressive scripts. "**Aggressive scripts**" are stored in person's memory and are used as guide for behavioural and social problem-solving. With this framework, habitually aggressive individuals have encoded in memory more extensive networks of behavioural scripts suggesting aggressive problem solving than do non aggressive individuals. They also have acquired individual beliefs that legitimize aggression (belief that aggression is okay) and that filter the specific aggressive behaviours that may come to mind at the time of dealing with a given situation. (Bandura, 1986; Bandura, Barbaranelli, Capara & Pastorelli, 1996).

According to this model, behaviours suggested by such scripts are filtered through self-regulating beliefs. Huesmann identified a particular type of belief : **the normative belief**, that not only may play an important role in filtering out inappropriate behaviours, but also may affect emotional reactions to others' behaviour and may stimulate the use of appropriate scripts. By the term normative belief, Huesmann means in individual's own cognition about the acceptability or unacceptability of a behaviour. Normative beliefs serve of allowable and prohibited behaviours.

Normative beliefs are a self regulating beliefs about the appropriateness of social behaviours. They are presumed to be related to perceived social norms but need not necessarily be consistent with those norms; Normative beliefs can be viewed as cognitive abstractions of knowledge acquired through observation, experience, and direct tuition and can take an active part in the social cognitive information process. As Crick & Dodge (o.c.) noted, response evaluation is part of an active response decision process that is driven partly by moral rules or values related to beliefs about the acceptability of a behaviour. These mental structures

constitute the database that influences an individual's on-line processing of social cues. Of course, other factors, such as affective states and recent stimulus cues, also may influence how normative beliefs are used in evaluating such a response.

The model of Huesmann emphasized a direct connection between children's cognitions about the appropriateness of behaviour (their normative beliefs) and the information-processing operations that culminate in the child's behaviour. He proposes that these beliefs influence responding in novel situations that require "controlled processing" as well as in familiar situations in which cognitive processing is more automatic. These beliefs serve to regulate behaviour, regardless of whether they are backed by internal or external sanctions, although beliefs that are supported by internalised sanctions should be more stable and more resistant to situational influences.

The normative beliefs about aggression affect behaviour by also influencing the ways one responds to current social situations. For instance, it is easy to conceive that one who believes aggression is appropriate may be more likely to judge an aggressive solution that comes to mind as an appealing route for dealing with a situation at hand (an influence on the processing step of response evaluation). Indeed, the function of filtering behavioural solutions that come to mind is paramount to the self-regulating value that normative beliefs about aggression seemingly have in one's functioning. Their effects, however, may well extend to other steps of mental processing. One who believes aggression is appropriate may perceive aggression as relatively normative and this, in turn, may enhance the chances of perceiving others' behaviours as being motivated by hostile or provocative intent (influence on the processing step of interpretation). Finally, a stronger belief that aggression is a legitimate behaviour may represent a stronger internal cue for the retrieval of aggressive solutions from long-term memory and, thus, enhance how readily aggression comes to mind (influencing the step of response access).

Normative beliefs may or may not be consistent with the prevailing social norms, although there should be considerable overlap between an individual's normative beliefs and the normative beliefs of relevant peers, social groups, and societal institutions. It means that the environment factors and the first child's interactions will have a major role on the elaboration of his normative beliefs.

Early social interactions and aggressiveness. The child's socialisation finds its origin in the familial structure which is defined by the nature (aggressive, safe, warm...) of social interactions established between its members. Since John Bowlby's (1969) famous work, a main importance is granted to the first social relations, generally, between the baby and his mother, which is called attachment. Warmth, closeness and stability of this first bond have a fundamental importance for mental health of the individual and his right psychological, cognitive and social development. Oppenheim and al. (1988) have observed that a safety attachment at 12 months old is correlated with a pro-social behaviour in day nursery or in kindergarten at the age of 3. At 5 years old, it also develops a sense of empathy and autonomy and at the age of 6, an absence from behavioural troubles. The type of attachment would determine the construction of a cognitive representation (Internal Working Model) in long-term memory which would constitute a range of schemas defining the type of the individual's lifetime social relationship (Melhuish, 1993). In consequence, early non-safety relations would predispose an elaboration of antisocial behavioural schemas.

### **Living environments and aggressively biased ways of processing social information**

There is increasing amount of evidence to suggest that aggressive behaviour is related to many demographic variables characterising some children's and adolescents' living environments. For example, aggressive behaviour is more frequent among children and adolescents living in low-income neighbourhoods, or in families of low socio-economic status, parental unemployment, extended family sizes, and with only one parent . However, social-cognitive information-processing models of aggression have particularly focused on the role of previous learning history plays in the development of aggressively biased ways of processing social information that underlie aggressive behaviour; it has been considered that aggressive children and adolescents have not enough opportunities to learn skilful ways of processing social information-processing, and, rather, have accumulated early in life a large number of aggressively biased information-processing patterns in their social-cognitive memory structures to guide their problem-solving and behaviour into an aggressive direction.

Consistent with Bandura's (1973) general social learning principles concerning the development of aggressive behaviour, Huesmann and Eron (o.c.) have suggested from the social-cognitive information-processing point of view that aggressively biased problem-solving patterns may be developed through observational learning ( i.e. modelling the aggressive problem-solving process of an aggressive model) or through enactive learning (trial and error experiences). Learning aggressive ways of processing information through observation is likely to occur in people who have many opportunities to observe the use of aggressive problem-solving strategies, either in real life (e.g. parent's marital aggression) or in fictional situation (e.g. television), or if they are objects of aggression themselves. A child may also be directly instructed and encouraged to behave aggressively. Huesmann & Eron have emphasized, however, that modelling aggressive problem-solving strategies is not a passive receptive process in which people simply absorb the vast array of models they encounter in their daily interactions. On the contrary, it requires an observer to have the motivation to learn aggression, and to actively attend to the aggressive model. Modelling is more likely to occur in situations that are personally important to the observer, and with which he can identify in terms of high status or an attractive model.

Adopting aggressively biased information-processing patterns through enactive learning (as a result of trial and errors) is also possible, although not highly efficient. Huesmann & Eron considered that the most important function of enactive learning is in the process of maintaining aggression. Repeated rehearsals of aggressively biased problem-solving strategies by recalling the aggressive scene, by fantasizing about the aggression, and by playacting, may make aggressive strategies more accessible from the memory and expandable to a variety of situation types.

The feedback that a person receives for his aggressive behaviour plays an important role in the process of learning aggressive problem-solving strategies either through observations or enactments. A person's social environment may accept aggression and directly or vicariously reinforce it. For example, the use of aggressive behaviour as social problem-solving strategy may be praised, or it may increase a child's social status, or it may result in the alleviation of aversive treatment.

According to Bandura (o.c.) people also observe the feedback on aggressive behaviour enacted by other people, and thus may receive reinforcement for their own aggression. Bandura, also suggests that people are likely to self-reinforce behaviours that give them self-satisfaction and a feeling of self-worth, and refrain from behaviours that results in self-criticism and other self-devaluative consequences. Indeed, aggressive children are more likely to evaluate the outcomes of aggression more favourably than their non aggressive counterparts. It has been shown that aggressive children give excuses for the negative effects of aggression, but think that aggressive behaviour increases self-esteem and reduces aversive treatment.

As far as environmental feed-back is concerned, much direct and vicarious reinforcement for the use of aggression as a social problem-solving strategy during childhood is provided by parents and peers. They are also the people who are potential models providing aggressively biased information-processing patterns.

**Parents and aggressively biased processing of social information.** There is much evidence to show that parental aggressiveness, maltreatment, helplessness, indifference and lack of warmth toward their children, and harsh and punitive child-rearing practices, predict children's aggressiveness. Deficiencies in parent's social information-processing patterns may expose them, first, to reinforce maladaptive ways of solving social problems in their children, and second, to serve as models for their children to incorporate aggressively biased and ineffective problem-solving strategies

Dodge and al (1995) found that parental physical abuse may make children hypervigilant for hostile cues and inattentive to relevant non hostile cues, and encourage them to acquire a large repertoire of aggressive problem-solving alternatives and learn that aggressive behaviours can lead to positive consequences for the attacker. It has been shown that the level of maternal, hostile, biased interpretations of situations and endorsement of aggressive problem-solving strategies are related to their preschool-aged children's level of aggressive bias in social problem-solving, as well to their level of actual aggressive behaviour.

**Peers and aggressively biased processing of social information.** The effect of peers is evident in childhood. Peer relationship are likely to influence children's social-cognitive and behavioural development. Although it has been suggested that the origins of aggression can seldom be attributed to the impact of peers, peer relationships help to reinforce existing predispositions. Huesmann & Guerra (o.c.) have proposed that children choose friends whose normative beliefs about the acceptability of aggression considerably overlap the norms they have themselves. Aggressive children are likely to choose other aggressive children as friend. Thus, they seek group encouragement for their aggressive behaviour. So far, there has been no specific investigation into how the aggressiveness of a friendship group influences the development of aggressively biased information-processing patterns; It may be hypothesized, however, that the already aggressive problem-solving strategies of aggressive children are likely to accumulate when they affiliate with other aggressive children.

The association between peer relationships and aggression has been emphasized more in terms of social preference. The underlying hypothesis has been that a child's aggressive



behaviour is an indicator of a lack of social skills, and is not generally accepted by peers. Feedback for inappropriate behaviour is assumed to be given in term of group rejection, while appropriate behaviour is seen to be followed by social acceptance. Supporting this, empirical evidence has shown that, generally speaking, higher aggressive behaviour is related to lower social preference, whereas lower aggressive behaviour is related to higher social preference. This negative feedback for aggressive behaviour (negative social preference and peer experiences) is, in turn, suggested to lead to negative self-perception, incorporating viewing oneself as an aggressive person. It has been shown that a low level of social acceptance is related to a higher level of aggressive problem-solving strategies, and vice-versa.

Social interaction do no only have effects on information processing and believes but also on emotions. For example, victims of chronic mistreatment often present some major difficulties in their emotion regulation, their empathic behaviour elaboration and their capacity to create social relationship. Moreover, emotion and cognition interact in child's personality development. At each stage of processing, interactions with long-term memory and emotional processes are activated.

### **Emotions, social information-processing and aggression**

Representing attempts to explain aggressive behaviour on the basis of social-cognitive information-processing activities, have acknowledged the multilevel role of emotions, although their effects have not been the central focus.

1- It has been suggested that many social situations are emotionally valenced. The effects of other people in the situation may serve as a source of information for a child or an adolescent who is trying to interpret it. Dodge and hid colleagues have shown that anger of a fictional person in hypothetical social situation provokes more hostile attributions among children and adolescents in a neutral situation.

2- Moreover, the emotions of a child or adolescent, particularly the negative effects, are likely to influence the social-cognitive information-processing activities underlying aggressive behaviour.

- First, a person's own emotions may serve as a source of information for making judgments in a situation. It has been found that aggressive adolescents make inferences about a social situation on the basis of their emotional state more than non aggressive adolescents, who rely more on the situational facts
- Second, emotions are suggested to affect attention and the encoding of cues. It has been found that mood- congruent information is generally more often perceived than mood-incongruent information.
- Third, emotions may influence the interpretation of cues: anger increases the likelihood of hostile attributions of others.
- Forth, the role of emotions is critical in goal information (o.c.). Negative emotion have been shown to motive social cognitive information processing that focused on mood repair.

- Fifth, Emotions are likely to affect the search for behavioural response alternatives from the memory. Negative emotions may restrict a person's cognitive capacity and limit the search for social problem-solving alternatives. Anger, for example, has been found to arouse simplified processing of choices. Further, it has been found that mood-congruent memory retrieval is more likely than mood incongruent recall. It is also possible that the content of the retrieval social problem-solving strategy is emotionally valenced, and thus influences the subsequent behaviour regulation process.
- Sixth, the evaluation of social problem-solving alternatives may be affected by a person's emotional state ( Petty, Wegner, & Fabriagar, 1997). Anger and lack of empathy, in particular, may serve as excuses for the employment aggressive behaviour. Deficiency in relating negative emotional consequences to aggressive behaviour may also increase the likelihood of an eventual aggressive problem-solving solution. Guerra & Slaby (1989) have shown that aggressive boys anticipate fewer negative personal emotional reactions than non aggressive boys. On a more general level, Lochman & Dodge (1994) have found that aggressive boys report less fear than non aggressive counterparts. Finally, the consequences of the behaviour with which a person has ended up may provide emotions that thus affect the next cycle of information processing.

To summarize, it seems evident that emotions are highly related to social information-processing activities.

### **3 - Violence prevention programs**

#### **a-- Focused on cognition**

In social cognitive information-processing models, the underlying idea behind the intervention programs is to teach aggressive children to process information in a more effective way. This programs' elaboration can also be used for prevention. Their goal is to modify social information processes, the individual's moral level and social competencies.

This has included :

- Increasing external cues and his emotional states
- defining a social problem in a less hostile way,
- seeking more facts about the situation,
- adopting less hostile goals,
- seeing more alternative problem-solving solutions,
- and anticipating their causes and consequences.

Interventions have also been applied to the beliefs (Salhani, 2003; Derghal & Salhani, 2002) supporting that "use of that aggression is not a legitimate response", that does not increase self-esteem or help to avoid negative self-image, and that it hurts the victim and victims do not deserve aggression].

Intervention programs based on social information-processing models of aggression have been centered mostly on the individual (Fontaine, 2002 ) although empirical evidence about the development of aggressive biased processing of social information would suggest that family and peer-oriented problem-solving interventions could be effective as well. A great many of children's social problem-solving skills are suggested to be learned within their families and to be later practiced in peer relationships. Thus, the family, in particular, could provide an important context for the interventions.

## **b) Focused on emotions :**

### **1- Strategies to encourage emotional understanding.**

- **Emphasizing activities that support understanding.** Dunn and Brown's research (1991) indicates that pretend play is critically important for learning about emotions. Their home observations of toddlers showed that pretend play situations were among the most frequent occasions for children to use emotion language and to act out emotionally vivid scenes. The feelings that are enacted and re-enacted provide rich material for emotional understanding. In addition to pretend play, many other activities and materials will support the development of emotion understanding. Well-chosen books, songs, and videotapes can help children understand their own feelings and those of other people. Creative arts activities allow children to portray emotions in a variety of media and to compare their portrayals with those of other children.
- **Mirroring children's emotion expressions.** Emotions develop within a social context. Expressions are indeed universal and innate, but understanding of his own and others' feelings depends on having those emotions reflected, imitated and amplified. Face-to-face "imitation games" have clear developmental benefits. Through them, children are exposed to many thousands of examples of a wide variety of emotion expressions that reflect and implicitly comment on children's own feelings.
- **Responding to children's feeling.** Emotions can be powerful avenues for communication. These kinds of interactions help children to realize that their emotions can have consequences. Children find out that other people understand something about their inner states if they show their feelings in verbal or non verbal ways.
- **Labelling children's emotions.** Young children have a wide range of feelings but do not come equipped with language to talk about these feelings. Teaching emotions' labels to children can enhance their understanding of their own and others' feelings.
- **Talking about causes of feelings.** Emotion-related conversations help young children to understand their own emotions and those of others. These kinds of conversations go beyond simply providing labels for feelings. Through many such experiences, children begin to understand that different emotions may have different causes, and that different people may feel angry or happy for different reasons. Such conversations, embedded in daily routines, highlight these concepts for children and lead to better abilities to take the perspective of others (Dunn, Brown, & Beardsall, 1991).

Children whose family life provided few opportunities to learn about emotions may need more frequent and more explicit labelling and interpretation of feelings and more focused,

formal interventions to increase emotional understanding. We can see that the early childhood professionals can take advantage of countless ways to develop emotional understanding in children. By labelling, and conversing about feelings, teachers enhance children's ability to comprehend their own emotional responses and those of others. In turn these ability fosters children's social competence, empathy, and perspective- taking ability.

## 2 – Regulation of emotions

Like emotions themselves, emotion regulation has important adaptive functions in children's life. Emotion regulation is far more than the elimination of "bad" feelings, children use emotion regulation to maintain or enhance their positive emotions and to alter their negative emotional states. Children who are in « good moods » are more likely to tune in to others feelings, to be generous to others, and to help those in trouble.

Emotion regulation is a delicate balance that includes a number of important skills and dispositions.. The regulation of emotions is a process by which children come to have increasing control over their own feelings and their effects on others, and by which children increasingly take on the emotional standards or norms of their culture.

Emotion regulation includes a number of crucial skills and dispositions. Children who are developing competence in the regulation of emotions are able to :

- Inhibit inappropriate behaviour related to strong positive or negative emotion
- Soothe themselves or calm themselves down when they become highly emotional aroused
- Use emotional states to focus or regulate their attention
- Coordinate their feelings, thoughts, and actions in the service of important goals
- Use emotions to influence others' feelings and actions

Emotion regulations starts in infancy, the preschool years are critically important in developing emotion regulation and emotional regulation. Children's success or difficulty in emotion regulation has already been shaped by many factors even before two-year-old Maturation of the brain and nervous system helps children to inhibit emotion expressions and to delay gratification of impulses. Children's early family experiences have already affected their regulatory competence. Family violence, and instability of care have made it especially difficult for some children to express their anger and sadness in flexible, adaptive ways. Some children have disabilities that have already caused them to adopt certain strategies for coping with own and others' emotional states.

Many of the strategy presented are relevant to build regulatory skills : creating a secure environment, helping children understand their own feelings and those of others, and serving as model of genuine, appropriate emotion expressions. In addition, research, suggests other **interpersonal features** that will support the development of emotion regulation.

- The **open exchange** has been found to create favourable conditions for the development of empathy and healthy emotion regulation (Eisenberg, Fabes, Carlo & Karbon; 1992). Talking about emotions helps children to understand their own and others feelings. Feeling-talk is equally important in predicting competent patterns of

emotion regulation. Children who do not learn how to use emotion language have difficulties to make connections with their own feelings and accurately identifying how others feel ; this deficit places them increased risk for emotion regulation problem.

- **Adults can create a climate that supports the regulation of emotion** if they help children to change their own negative feelings or to help others to feel better. When Harold was upset because he wanted Eddie's spoon, Denise showed him how he could control his distress and negotiate the situation in a satisfying way. Such experiences build children's feelings of self-efficacy.
- **Peer interactions** give children an especially potent setting to learn about regulating emotions, because other children are often less tolerant than adults of unpleasant emotional display. Often, classmates will simply refuse to play with children who lack emotional control. This is a powerful though painful incentive for children to gain skill at modulating their anger, distress, and excitement.

All children gain from increasing their ability to regulate their own emotions and to influence others' emotional states in positive, flexible, culturally accepted ways. Children become more socially competent. Emotion regulation contributes to peer acceptance and social competence.

## References

- Bandura, A. (1973). *Aggression. A social learning analysis*, Prentice-Hall, Englewood Cliffs, NJ.
- Bandura, A. (1986) *Social foundations of thoughts and actions: A social cognitive theory*. Englewoods Cliffs, NJ: Prentice Hall.
- Bandura, A., Barbaranelli, C., Caprara, G. V., & Pastorelli, C. (1996). Mechanisms of moral disengagement in the exercise of moral agency. *Journal of Personality and Social Psychology*, 71, 364-374.
- Berkowitz, L. (1988). Frustrations, appraisals, and aversively stimulated aggression. *Aggressive Behavior*, 14, 3-12.
- Berkowitz, L. (1993). *Aggression. Its causes, consequences, and control*, McGraw-Hill, New York.
- Bowlby, J. (1969). *Attachment*, New York, Basic Books.
- Crick, N.R., & Dodge, K.A. (1994). A review and reformulation of social-information processing mechanisms in children's social adjustment. *Psychological Bulletin*, 115, 74-101.
- Crick, N.R., & Dodge, K.A. (1996). Social information-processing mechanisms in reactive and proactive aggression. *Child Developmental Psychology*, 26, 993-1002.
- De Castro, B.O., Veerman, J.W., Koops W., Bosh, J.D., Monshouwer, H.J. (2002). Hostile attribution of intent and aggressive behavior : A meta-analysis. *Child Development*, 73, 3, 916-934.
- Derghal, M. & Salhani, P. (2002). Echec scolaire, croyances en la légitimité de la violence et comportements agressifs. 4<sup>ème</sup> Congrès International de Psychologie Sociale en Langue Française, 1-4 septembre.
- Dodge K.A. (1986). A social information processing model of social competence in children. In M. Perlmutter (Ed.), *Minnesota Symposium of Child Psychology* (Vol. 18, pp-77-125). Hillsade, NJ: Erlbaum.
- Dodge, K.A. (1994). Social-Cognitive Processes of Severely Violent, Moderately, Aggressive and Nonaggressive Boys. *Journal of Consulting and Clinical Psychology*, Volume 62, Issue 2, April 1994, 366-374.
- Dodge, K.A., Pettit, G.S., Bates, J.E., & Valente, E. (1995). Social information-processing patterns partially mediate the effect of early physical abuse on later conduct problems. *Journal of Abnormal Psychology*, 104, 632-643.
- Dunn, J., & Brown, J. (1991). Relationships , talk about feelings, and the development of affect regulation in early childhood. In J. Garber & K.A. Dodge (Eds.), *The development of emotion regulation and dysregulation* (pp. 89-108). New York : Cambridge Univeristy Press.

- Dunn, J., Brown, J., & Beardsall, L. (1991). Family talk about feelings states, and children's later understanding of others' emotions. *Development*, 56, 488-455.
- Eisenberg, N., Fabes, R.A., Carlo, G., & Karbon, M. (1992). Emotional responsivity to others : Behavioral correlates and socialization antecedents. In N. Eisenberg & R.A. Fabes (Eds.), *Emotion and its regulation in early development* (pp.57-73). San Francisco : Jossey-Bass.
- Eron, L.D. & Husemann, L.R. (1990). The stability of aggressive behavior – even unto the third generation. IN M. Lewis & S.M. Miller (Eds.), *Handbook of developmental psychopathology* (pp. 147-156). New-York: Plenum.
- Fontaine R. (2002). *La violence scolaire : les faits, leurs causes, les solutions*, in H. Montagner (éd.), *L'Enfant : la vraie question de l'école*, Paris, Odile Jacob.
- Gouze, K.R. (1987). Attention and social problem solving as correlates of aggression in preschool males. *Journal of Abnormal Child Psychology*, 15, 181-197.
- Guerra,N.G., & Slaby, R.G. (1989). Evaluative Factors in Social Problem Solving by Aggressive Boys. *Journal of Abnormal Child Psychology*, 27, 277-289.
- Huesmann, L.R. (1988). An information-processing model for the development of aggression. *Aggressive Behavior*, 14, 13-24.
- Huesmann, L.R. (1994). *Aggressive behavior: Current perspectives*. New York : Plenum.
- Huesmann, L.R. & Eron, L.D. (1984). Cognitive processes and the persistence of aggressive behavior. *Aggressive Behavior*, 10, 243-251.
- Huesmann, L.R., & Guerra, N.G. (1997). Children's normative beliefs about aggression and aggressive behavior. *Journal of Personality and Social Psychology*, 72, 408-419.
- Kagen, J. (1988). Temperamental contributions to social behavior. *American Psychologist*, 44, 668-674.
- Lindsay, J.J. & Anderson, C.A. (2000). From antecedent conditions to violent actions : A general affective aggression model. *Personality and Social Psychology Bulletin*, 26, 533-547.
- Lochman, J.E., & Dodge, K.A. (1994). Social-cognitive processes of severely violent, moderately aggressive, and nonaggressive boys. *Journal of Consulting and Clinical Psychology*, 62, 366-374.
- Lochman, J.E., White, K.J., & Wayland, K.K. (1991). Cognitive behavioral assesments and treatment with aggressive children. IN P. Kendall. (Ed.), *Therapy with children and adolescents : Cognitive behavioral procedures* : New York : Guilford Press.
- Melhuish, E. (1993). A measure of love ? An overview of the assessment of attachment, *ACCP Rewiew and Newsletter*, 15, 269-275.
- Oppenheim, D., Sagi, A., Lamb, M.E. (1988). Infant Adult-attachments on the Kibbutz and their relation to socio-emotional development four years later. *Developmental Psychology*, 24, 427-433.
- Petty, R., Wegner, D. & Fabriagar, L. (1997). Attitudes and attitude change. *Ann RevPsychol*, 48, 609-647.
- Salhani, P. (2003). Des déterminants cognitifs à la prévention de la violence à l'école. 2<sup>ème</sup> conférence mondiale sur la violence à l'école, Québec, 11-14 mai.
- Slaby, R.G. & Guerra, N.G. (1988). Cognitive mediators of aggression in adolescent offenders : Assessment. *Developmental Psychology*, 24, 580-588.