

## 15 Stimulating Positive Social Interaction: What Can we Learn from TIGER (Kanjertraining)?

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Social interactions are important from birth on. People long for social contact and support. It is one of the first necessities of life. When people have difficulties in social interactions, they can tend to show roughly two forms of behavior. They can show depressive, socially anxious-like symptoms and social withdrawal (internalizing behavior) and they can show aggressive, overactive or impulsive behavior (externalizing behavior). These behaviors can cause conflicts with others and cause low social acceptance by others. This in turn increases the problematic behavior. Five to 10% of primary school children have problems being socially accepted by peers and hence show developmental problems (Boivin, 2005). In adolescents, this percentage seems to be even higher, between 10% and 20% (Scholte & Engels, 2005). Many studies have shown that children who show problem behavior early in life have a high chance of maintaining these problems during puberty and young adulthood (e.g., Van Lier, 2002). This makes it important that children learn at a young age how to interact socially in neutral and stressful situations. Indeed, many studies prove that preventive intervention at a young age, when problem behaviors are not yet present, is effective in breaking through this developmental process (see for a review Nation et al., 2003).

T.I.G.E.R (Training I Go for Emotional well-being and Respect; “Kanjertraining” in the Netherlands) is used in the Netherlands as a preventive intervention in primary and secondary schools to stimulate constructive social interaction, well-being, and a positive climate in the classroom. The training is also used in child mental health care centers with children who have problems in social interaction, have depressive feelings, are too aggressive and/or have a low self-esteem. Many of the starting-points of TIGER are theory-driven, but some of the starting-points have their origin in practice. The founder of TIGER, Gerard Weide, based the training on both scientific knowledge and many years’ experience with children in primary and secondary school classes. Insights and methods from TIGER may be a good starting-point for future studies on effective ways of stimulating positive social interaction.

At the beginning of this chapter, scientific knowledge about factors influencing social behavior will be discussed. These will be reformulated in recommendations for starting-points for preventive interventions in Box 15.1. Thereafter, the main theoretical insights from TIGER will be discussed. This will be followed by a description of TIGER method. At the end of this chapter, results of the first study on the effectiveness of TIGER will be discussed. These may give an indication of the fruitfulness of the theoretical visions and the methods of TIGER.

## Risk and Protective Factors

Children and their environment are in a continuous interaction with each other. Child behavior will influence reactions of the environment, which in turn will trigger certain child reactions. This may result in a vicious circle of positive or negative behavior by child and environment (see Rutter, 2006). Thus, the child can create an environment that increases the problem behavior of the child, and the environment contributes to the development of a child who makes the environment more problematic, while both the child and the environment do not intend to do so. Although there is this complex contribution of interacting factors, for clarity, in the following, these factors are discussed separately.

While reading, keep in mind that these factors do not have to be causal factors. Both the factors and the behavior of the child can be the result of a third (maybe unknown) factor. Moreover, each factor that will be discussed has very little predictive value by itself. Only the combined action of these factors indicates an increased risk. Since problems in social interaction can imply socially anxious, depressed behavior but also aggressive, overactive behavior, research on both internalizing and externalizing behavior is combined. This list of factors is certainly not complete, but gives an overview of the main influences on the child's behavior.

### *Child*

Intelligence, gender and temperament have been found to be risk factors in the development of problem behavior. High intelligence is found to be a protective factor in the development of problem behavior (Farrington, 1995). Gender is found to be correlated to the direction of the problem behavior. Boys tend to show more direct physical aggression, while girls show more relational aggression (e.g., gossiping). During childhood, boys and girls have the same chance to get depressed, while in adolescence, girls feel depressed twice as often as boys do (Birmaher, Ryan, Williamson, Brent & Kaufman, 1996). Temperament is also found to influence behavior problems. A difficult temperament is associated with aggression, while behavioral inhibition is associated with internalizing problems. Behavioral inhibition is assumed to be a biologically-determined temperament factor that is characterized by the tendency to react with shyness, anxiety and withdrawal in social and non-social situations that are new or unknown (see Muris, 2008). Additionally, sensitivity to stress is a risk factor that can make children vulnerable to developing behavioral problems (see Rutter, 2006).

### *Environment*

*Parents.* When parents show emotional involvement, affection and support, children show more prosocial behavior and have higher self-esteem in social contacts (Rudolph and Asher, 2000). A secure attachment has an important role in this, since this lays the basis for the development of relationships further on in life. Sensitive and responsive rearing have a large influence on the optimal functioning of the child (Propper & Moore, 2006). The more parents respond properly to the temperament of the child, the more positive the emotional regulation of the child.

Besides these protective factors, some risk factors have been identified that are associated with externalizing or internalizing behavior of the child. Precursors for aggressive behavior are strong and physical punishment, inconsistent use of rules, and the absence of monitoring (see Rutter, 2006). Reactive aggression (impulsive reactions to perceived threat, with high emotional arousal) is specifically associated with neglectful rearing. Proactive aggression

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(well-considered and well-directed aggressive behavior) is associated with aggressive role models in the family who use aggression as a way of achieving their personal goals (see Rutter, 2006). Anxious behavior of the child is associated with anxious rearing, parental control and rejection. Thus anxious children often have parents who warn them of all possible dangers, give the child little autonomy and show a negative rejecting attitude toward the child (Muris, Meesters, & Van Brakel, 2003).

Since there is a continuous interaction between parents and children, these child-rearing styles are developed in interaction with characteristics of the child. Parents and children do not show these behaviors randomly. For example, when a child is very active or cries a lot, this requires more energy from these parents than less demanding children might require. These parents become more vulnerable to stress and inconsequent reactions. This, in turn, may contribute to aberrant behavior of the child. In such transactions, it is often not possible to distinguish between the cause and the consequences.

The main family characteristics that increase the risk for behavioral problems in children are conflicts between parents (especially in front of the children), divorce (except when this causes a decrease of conflicts), low income and low education, psychosocial problems of parents, delinquency of parents and a small social network around the family (see Rutter, 2006).

*Friends.* Friends have a big impact on children's behavior and even more impact on adolescents' behavior. For children with many risk factors, having friends turns out to be a protective factor against showing aggressive behavior and being aggressed against. The quality of the friendship is important in this. Friendship is not a protective factor when friends have problems in social interactions among themselves (which is often the case) (Hodges, Boivin, Vitaro, & Bukowski, 1999). A friend who is caring, warm and intimate forms a protective factor against bullying when many risk factors are present (Bollmer, Milich, Harris, & Maras, 2005).

In the development of aggressive behavior, two peer relationship processes occur at the same time: being expelled by socially competent children and being attracted to peers with similar problems. This results in two separate groups of children with behavioral problems (see Rutter, 2006). In adolescence, when peer groups and conformation to the group become more important, "deviancy training" is a common phenomenon. Deviancy training holds that in a group of adolescents with aberrant norms and ideas, others in the group adopt these ideas and will show an increase in problem behavior, strengthened by others in the group (Deater-Deckard, 2001).

*Teacher.* A risk factor in school for aggression is the social climate in the classroom. This includes bullying, negative relationships with teachers and a negative climate (see Rutter, 2006). The teacher is mainly responsible for the climate in the classroom. Because teachers are models for their students, those who model positive traits contribute to positive behaviors of children in class. Teachers who are willing to question themselves and who are straightforward, honest, skilled and knowledgeable are modeling the best behaviors for children to imitate (Goldstein, 1995). Teachers' expectations have been proven to affect children's level of achievement. Lowered expectations result in lowered interest and effort by the teacher and therefore negatively impact the child's behavior and performance (Good & Brophy, 1978). Teachers who are effective in managing the classroom express their expectations concerning behavior, establish clear rules, and enforce those rules systematically and consistently (Emmer, Evertson, & Anderson, 1980). Teachers rated positively by students generally are reported to possess more positive views of others and to be less critical or attacking. They are perceived as being friendly and helpful and as handling problems in a democratic fashion

(Sabatino, 1983). These characteristics will improve the relationship of the teacher with the students, which will have a positive impact on child behavior.

### **Mechanisms in the Relationship Between Risk Factors and Behavior**

Which mechanisms function as mediators between environmental factors and the behavior of the child? Mechanisms that will be discussed are social learning, social information processing, regulation of emotions, self-esteem and respect for others, and social skills.

#### ***Social Learning***

Social learning perspectives suggest that people learn behavior by watching other people (e.g., Bandura, 1986). For example, when many people in the child's environment show aggressive behavior, the child will easily imitate this behavior. This phenomenon is called modeling. Besides imitation, people also learn by experiencing the consequences of their behavior: in general, when behavior is followed by a reward, this behavior will be repeated. When behavior is followed by punishment, people will tend to reduce this behavior. This is called operant conditioning. These mechanisms explain part of the relationship between environmental factors and the behavior of the child. When a child is less sensitive to punishment or rewards, this relationship will be weaker.

#### ***Social Information Processing***

According to theories of social information processing (Crick & Dodge, 1994), behavior of people in similar situations differs because people process social information differently. People can pay attention to different information than others and can interpret this selective information in a different way. This causes emotions and reactions to differ between people. According to Crick and Dodge (1994), social information processing contains six steps: encoding of information, interpretation of this information, development of an emotion, generation of a reaction or several reactions, selection of the reaction with the highest expected benefit, and execution of the reaction. Problem behavior develops, according to Dodge, when one or more steps are performed atypically. In many studies, it is indeed found that certain types of social information processing are related to specific forms of aggressive behavior (see Dodge, 2006; Orobio de Castro, Merk, Kooops, Veerman, & Bosch, 2005). Aggressive children are often found to perceive information as threatening and to interpret reactions of others as hostile. Moreover, they believe that an aggressive reaction would be beneficial. Children who feel shy and depressed have also been found to interpret reactions of others in a hostile way. However, these children do not generate aggressive reactions but instead act out withdrawal reactions (Quiggle, Garber, Panak, & Dodge, 1992).

As part of the fifth step (response evaluation), self-efficacy is thought to play an important role. Self-efficacy refers to one's own judgment of being able to perform the behavior (Bandura, 1994). It has been found that aggressive and shy children think that they are not able to perform the more socially adequate behavior. They realize that aggression and shyness are not the best reactions, but they expect only to be able to show aggressive or shy behavior.

#### ***Vicious Circles, Social Skills***

In general, problem behavior strengthens itself. This makes it difficult to change one's behavior. For example, children who are socially anxious, often try to avoid social situations. This,

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in turn, causes more anxiety since children do not have the opportunity to learn social skills. Children who have depressed feelings often show angry, jealous and shy behavior. This causes others to reject these children, which in turn increases their depressed feelings and the corresponding behavior (Stark & Smith, 1995). Aggression is intensified by group forming and deviancy training, as discussed earlier. These vicious circles of problem behavior are often driven by a deficiency of social skills and can be broken by teaching social problem-solving skills to these children, and by promoting positive social interaction with more socially skilled peers. Children reduced their aggressive and rebellious behavior when they learned other socially accepted behaviors through which to reach their goals. Teaching effective coping strategies also contributed to a decline in anxious behavior in children (Kazdin, 2003).

### ***Emotion Regulation***

Emotion regulation influences many competencies that allow children to modulate and cope with strong emotional states. Relevant competencies are internalized coping mechanisms (e.g., calming self-talk, cognitive strategies to reframe upsetting events), attentional control (e.g., shifting attention from provocative stimuli), and instrumental behavioral strategies (e.g., behaviors that alter emotion-provoking situations). Research has consistently shown that deficits in emotion regulation are predictive of reactive aggression, rejection, exclusion and bullying by peers (Eisenberg, Fabes, Murphy, Maszk, Smith, & Karbon, 1995; Pope & Bierman, 1999; Shields & Cicchetti, 1998).

### ***Self-Esteem and Respect for Others***

For a long time, the relationship between self-esteem and behavior was unclear. Many researchers assumed that aggressive people had low self-esteem, but a long history of research and theories does not support that notion. Salmivalli (2001) discusses the relationship between self-esteem and behavior and concludes that “high” or “low” self-esteem is not enough to describe this relationship. Instead, the “narcissistic” or “defensive” self view is found to be associated with problem behavior. Narcissism is a personality trait in which people strive to feel superior over others. (It does not refer to the personality disorder.) A defensive self-view refers to “not being open for criticism.” Salmivalli and colleagues (1999) showed that adolescents could be divided into three groups. The group with high self-esteem in combination with high narcissism often bullied; the group with low self-esteem and low narcissism was often bullied; and the group with high self-esteem and low narcissism showed mostly prosocial behavior (Salmivalli, Kaukiainen, Kaistaniemi, & Lagerspetz, 1999). Similar findings were found for children between 10 and 13 years old. Thomaes (2007) studied the reaction of narcissistic and not-narcissistic children in shameful situations. The results showed that most aggression was shown by narcissistic children with high self-esteem. A low self-esteem proved to be a protective factor for the development of aggression in narcissistic children.

Kernis (2003) wrote an interesting article about optimal self-esteem. She gives a definition of optimal self-esteem in which making choices by the authentic self contributes to an optimal self-esteem. She states: “Optimal self-esteem involves favorable feelings of self-worth that arise naturally from successfully dealing with life challenges; the operation of one’s core, true authentic self as a source of input to behavioral choices; and relationships in which one is valued for who one is and not for what one achieves.” (p.13). This theory was recently supported by Thomaes, Reijntjes, Orobio de Castro and Bushman (under review). Children with

realistic self-views were least vulnerable to social rejection, whereas children with overly positive or overly negative self-views suffered most emotional distress in response to social rejection. Thus, optimal self-worth appears to be a combination of knowing and accepting one's strengths and weaknesses.

#### **Box 15.1**

#### **Recommendable Factors to Incorporate in Preventive Interventions to Stimulate Positive Social Interaction**

##### **Focus on risk and protective factors**

1. Train parents in their way of interacting with the child. It seems useful to promote emotional involvement, affection, support, consistent use of rules and to discourage physical and strong punishment, aggressive behavior of the parent, anxious rearing, control and rejection.
2. Involve peers in the training. A classroom would be a good environment to do this, since children spend a lot of time here, and subgroups will be formed easily. In this way, both the socially competent children, the shy children and the more aggressive children can help to ameliorate the behavior of the group.
3. Teach parents and teachers to set a good example (modeling) and to praise positive behavior and to neglect or restrict negative behavior (operant conditioning).
4. Stimulate positive relationships with teachers and a positive climate in the classroom.

##### **Focus on mechanisms**

5. Train children in interpreting social information
6. Practice with social skills
7. Strengthen self-efficacy
8. Train children in emotion recognition and regulation
9. Stimulate realistic self-esteem and encourage respect for others

##### **Focus on the future**

(recommended and used by TIGER)

10. Remind children of their intent to be a "good" person. Ask them how they want to behave and use this as a guideline in stimulating the child to behave like this.
11. Make children responsible for their behavior, and teach them that they can choose how to behave (at a developmentally appropriate level).

In the upper part of Box 15.1, recommended factors for incorporating into an intervention on positive social interaction are summarized. TIGER uses most of these factors in its intervention and has additional theoretical assumptions about behavior. This makes it useful to take a closer look at TIGER.

### **Training I Go for Emotional well-being and Respect (T.I.G.E.R)**

TIGER ("Kanjertraining" in the Netherlands) is one of the most frequently used training methods for social emotional development in the Netherlands and was first developed in 1996. Currently, TIGER is used in three settings:

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- (1) As a preventive intervention in class delivered by trained teachers in primary and secondary schools.
- (2) When high aggression and anxiety are present in the classroom and the teacher has lost control; the training is delivered by psychologists in the classroom as a crisis intervention.
- (3) In child mental health care centers, the training is delivered by psychologists to children who experience problems in social interaction, show aggression or depressive symptoms, and/or have low self-esteem.

The Dutch word “Kanjer” (in Kanjertraining) does not have a translation in English, but means something like “well done, you are like a tiger, you are a champion/hero!”. People feel proud to be a “Kanjer.” In the training a “Kanjer” is somebody who is authentic, reliable, socially competent and respectful to others and him/herself. A “Kanjer” has a constructive coping strategy: he/she searches for respectful solutions on the basis of equality. The name of the training is translated into TIGER (Training I Go for Emotional well-being and Respect) in order to grasp the broad concept of “Kanjer.”

The goal of TIGER is to stimulate authentic and respectful social behavior and well-being. In schools, an additional goal is to improve the climate in the classroom, which is defined by positive relationships between classmates and between the teacher and children. Age-appropriate manuals have been developed for each age group between four and 16 years old. In each age group, approximately 10 lessons of one and a half hours are given every other week. Each lesson starts with the interactive reading of a story, followed by role plays (with four caps) and the practice of social skills. Thereafter, social dilemmas are discussed in a Socratic way. Five principles hang in front of the classroom on a poster and are behavioral guidelines that are discussed each lesson. A lesson always ends with a physical exercise to increase trust in the group. In each lesson, exercises of former lessons are repeated. Themes of the lessons are, in order: presenting oneself, giving compliments, feelings, conflict situations, showing interest, trust, critics, friendship, is it ok that you exist? and the diploma ceremony. The caps and the principles are easy to use in daily situations, so that generalization is straightforward.

### ***Theoretical Basis of TIGER***

TIGER has an extensive theoretical basis that is described in a book for teachers and parents in the Netherlands (Weide & Vliek, 2007). For the purpose of this chapter, only the most important and most distinctive assumptions are discussed. These are summarized in the lowest part of Box 15.1.

#### ***Authenticity: to Live to One's Desire***

In TIGER, problem behavior (internalizing and externalizing behavior) is seen as not-authentic behavior. To live authentically is defined as: to live according to one's desire, to do what fits you. When people feel authentic, they are in balance with their emotions, thoughts and traditions, physical sensations, and desires. This means, for example, that a boy who discovers that he feels attracted to other boys may come into conflict with his physical sensations, desires and traditions (e.g., in his family, being gay is not accepted). As a consequence, this boy may show shy, depressed behavior when he is with his family. To be able to live authentically, he has to talk with his family to come into balance with his feelings, traditions and desires.

TIGER sees authentic behavior as crucial to the development of the self, and thereby to the development of well-being and self-esteem. When a person manages to live to his or her desire, personal goals will be reached, which will make the person happy. Moreover, making authentic choices in one's life will increase the feeling of being an unique person, independent of the desires of others, which will improve self-esteem.

What does TIGER mean by living according to one's desire? People can long for desires such as a big house, a nice car, status and fame. When these are fulfilled, this will most likely not contribute to an optimal (authentic) self-esteem. By "desire," TIGER means a more fundamental desire. Irrespective of origin, culture, religion and experiences, most people have the universal desire to be a good mother or father, a good student, a good friend, a good son or daughter. Children have this desire too. They want to feel accepted as a good son or daughter, a good friend and a good student. They want to be seen, heard and understood. Unfortunately, this is often not the case. Many children feel bad, stupid or mean. Some children react to this by withdrawal, shyness and anxiety; others show aggression; and others give up, become careless or indifferent, and do not take themselves or others seriously. In all these cases, children do not live to their desire: they do not really want to behave like this. This desire to behave authentically as a "good" person is used as a starting-point in the training.

### ***Responsibility***

Another theoretical basis of the training lies in taking responsibility. TIGER is of the opinion that people are responsible for their behavior. This also holds for children (at a developmental appropriate level). TIGER assumes that children can choose how they behave. Children are not the product of their environment, but have control over their lives and can make autonomous choices. In a practical sense this means that parents cannot come up with an alibi like: "My child misbehaves in school, but this is because my child is dyslectic, has ADHD or has a father in jail." These factors may indeed have effects on the child, but may not be used as an alibi for rule-breaking behavior. This means that it is not so important to know how many problems a child has, how bad the child's environment is, or which stressful life-events have been taking place. For children, what they want to do about the situation is more important. How does the child want to deal with difficulties in life?

The training assumes that stress and problems are part of life. People must not expect a Disneyland in their life. They have to learn to deal with the challenges in life. They should realize that the challenges are the things that teach them the most. A clarifying metaphor is used: "When I sail in nice weather, I do not really know whether I can sail well or not. Only the storm will teach me how to sail very well." The same holds for challenges in life.

Remarkably, in the developmental psychology literature, the roles of the desire of the child and responsibility of the child are underexamined. Theoretically, Piaget and Vygotsky have already emphasized the active constructive role of children in their own development. Still, most theoretical models are conducted as if children do not have choices in their behavior, as if children's behavior is the sum of external factors that determine how they behave. The authentic preferences and choices of the child are understated. In interventions, these elements are therefore also peripheral. Only two studies have recently measured the influence of focusing youth on their personal values. The first study was published in *Science* (Cohen, Garcia, Apfel, & Master, 2006). African American seventh-graders completed a 15-minute assignment to reaffirm their sense of self-integrity: seeing oneself as good, virtuous, and efficacious. Students indicated their two or three most important values and wrote a paragraph about why these values were important to them. The goal of this

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intervention was to examine whether self-affirmation would enhance academic performance of negatively stereotyped minority students. Results were positive: adolescents who wrote the values paragraph had higher grades in the next periods than controls. The main question remains: Does this assignment, in which students focus on their personal values, also influence behavior? Yes, this seems to be the case. Recently, the same results were found for aggression. In narcissistic adolescents who completed the same 15-minute assignment, aggression was reduced for a one-week period (Thomaes, Bushman, Orobio de Castro, & Cohen, under review). These results demonstrate that making adolescents aware of their own values (their real desires) can improve school performance and can even reduce aggression.

### ***Self-Esteem and Respect for Others***

According to TIGER (Weide & Vliek, 2007), self-esteem in combination with respect for others is important in the development of social behavior. Since social behavior is about the interaction between the self and the other, it is important that the child hold respect for both parties. TIGER assumes that a low self-esteem in combination with high respect for others will lead to feelings of inferiority and will contribute to internalizing behavior. On the other hand, a high self-esteem (or sometimes an inflated ego) in combination with low respect for others will often lead to feelings of superiority and power and can easily result in aggressive behavior towards others (who are “worthless”). Children who have a balance in self-esteem and respect for others will tend to show respectful social behavior in which both parties (self and other) are respected for who they are. These assumptions are in accordance with the studies of Salmivalli and colleagues (1999) and Thomaes (2007), wherein an imbalance between regard for self and regard for others is highly problematic.

### ***Parents, School Policy and Teacher***

TIGER acknowledges that parents, teachers, and school policy have an important impact on the child’s behavior and development. These people around the child can stimulate positive social interaction in two ways: by functioning as role models, and by supporting the child’s adequate social behavior through giving feedback, behaving authoritatively, and setting and maintaining limits. Parents and teachers have to learn to fulfill this “authentic” role. In school, the teacher and the parents have a shared responsibility for the behavior of the child in class. This implies that parents should be invited to school when a child misbehaves or has the intention of doing so. It is very important that the school makes clear policy about rules and procedures in school. In fact, the school has to fulfill its authentic role too: make policy so that children can learn in a safe climate.

### **Method of TIGER**

The TIGER intervention takes into account most of the influencing factors and mechanisms that are summarized in Box 15.1: parents, teachers and peers, interpretation of social information, social skills, emotion recognition, self-esteem and respect for others. In addition to these influences on the child’s behavior, TIGER uses two future-focused elements (described in the lowest part of Box 1.15). The training strategies are discussed below after a description of the above-mentioned elements that are important in TIGER.

### ***How to Stimulate Authentic Behavior?***

TIGER states that for showing authentic socially competent behavior it is important that the child is acquainted with this behavior, is skilled enough to perform it, wants to show this behavior (desire) and chooses to show it in everyday life (responsibility).

### ***Practicing Skills***

In order for a child to learn socially competent behavior, the child has to be acquainted with this behavior. When children grow up in a very hostile environments where they are often shouted at, they may not know that there is a more positive form of social interaction. Therefore, children have to see the socially competent behavior of others to realize that there are alternative ways of responding.

Only knowing or observing this behavior is not enough to demonstrate it oneself. Children have to learn these behavioral skills. Practicing in training is a first step, practicing in everyday life is the second. The environment plays an important role in forming the behavior of a child. To make it easier for the child to show the new behavior, the environment (parents, peers, teachers) must also be trained. In addition to being skilled in behavior, the child must also learn new ways of thinking. Since hostile attributions of children are correlated with aggression and anxiety, it is important that the child learns to attribute social information in a friendly way.

The main method that is used to foster children's understanding and skill in social behavior is demonstrating four types of behaviors or coping strategies. Four colored caps are used to illustrate these behaviors. Children learn to recognize, become conscious of, and become skilled in these four types of behavior. The black cap (called the Bully-bird) stands for aggressive and dominating behavior; the yellow cap (called the Rabbit) stands for shy, anxious and depressed behavior; the red cap (called the Monkey) stands for funny-making, careless and hanger-on behavior; and the white cap (called the Tiger) stands for authentic social behavior with respect for the self and the other. The last one is called Tiger behavior and includes constructive socially competent behavior, daring to give one's opinion in a respectful way, sharing one's feelings, helping and being trustworthy. A key point is that children behave like a cap but are not identified as a cap. Social (Tiger) skills (e.g., presenting oneself, talking about feelings, giving and receiving feedback) are practiced and are repeated during each lesson to automate these skills. Difficult situations are played in role-plays of, for example, bully situations that have taken place in reality. These caps can also be used outside the training sessions: children, teachers and parents can ask children "Which cap are you wearing?" to make children conscious of their behavior. Subsequently, they can ask the child whether he/she wants to put on the white cap. Children learn that the four types of behaviors often go together with thoughts about the self and the other. These thoughts and other themes are discussed (like "What is friendship?", "Whom do you want to belong to?") so that children learn to change their cognitions about social interactions, which is assumed to change their way of processing social information.

Besides the caps, five TIGER principles are used as guidelines for behavior and are posted in front of the classroom on a poster. These are: We trust each other; We help each other; Nobody plays the boss; Nobody laughs at another; and Nobody acts pitiful.

### ***Live to One's Desire, Authenticity***

As mentioned before, TIGER uses its view of people's universal desire (I want to be a good child, son, student) as a starting-point in the training. Since it is assumed that most children

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do not want to behave shy, anxious or aggressive, but prefer to behave authentically and prosocially, this intrinsic motivation of children is used. For example, when children show aggressive behavior, the trainer or teacher asks: “Is it your intention to hurt that child?” “When it is not your intention, that is fine, then you will stop behaving like this.” “When this is your intention, I decide that you have to stop this now, because this is not allowed in school.” The trainer or teacher shows his or her authority (but only after making the child conscious and responsible for his decision and behavior).

While using the caps, the child is never forced to put on the white cap (figuratively). The consequences of this behavior are shown in role-plays so that children experience that the Tiger behavior has the highest benefit. The advantage of this approach is that the behavior of the child is intrinsically motivated. In the first lesson, children are asked whether they want to be trusted. Since not wanting to be trusted is a predictor for aberrant behavior, this is an important starting-point for the training. When children state that they do not want to be trusted, this is a reason to invite their parents to school, and to discuss this with the teacher and the head teacher of the school.

### **Responsibility**

Children learn to give up their feelings of being a victim. Many children who are bullied, shy and anxious have these feelings of helplessness. They think: “I don’t have influence, this always happens to me.” Remarkably, many aggressive children also have these feelings: “Why do they always blame me? I am a victim of the rules.” Both groups of children have to learn to take responsibility for their behavior. The lessons are sequenced so that children gradually learn that they can choose their own behavior. This is illustrated by the use of the caps: one can choose to wear another cap; a child is not a cap, but behaves like a cap. Moreover, the trainer or teacher always lets children choose whether they want to participate in an exercise, so that children develop feelings of control in these situations. The last Tiger principle, We are not helpless, means that despite bad circumstances, people can always choose how to deal with situations.

An example: *Some children have the feeling that nobody wants to play with them and that they are victims. In a TIGER workbook, this type of child is exemplified by a boy named Julian. He believes that everybody must get along with each other. He likes some “cool” children in his class and wants to be friends with them. These children just don’t like him. Julian chooses to go to the movies at the same time as the “cool” children do. They say to him that they don’t like him to be with them, but Julian places himself next to them. The boys get angry and Julian is hit. Julian goes home and complains to his mother. He and his mother think he is a poor victim. The next day, the “cool” boys go swimming. Julian wants to play with them, so he goes to the same swimming pool. He is shouted at and beaten again by the same boys, and history repeats itself. This story teaches children that apart from the “cool” group, Julian also has something to learn. He has to learn that not everybody likes him and that this is fine. Julian should not stalk children who do not like him. He has to look for other children in class to play with. Therefore, he has influence over his situation and is not a victim.*

### **Self-Esteem and Respect for Others**

Positive self-esteem is achieved when a person receives enough social support and feels competent in the fields that are important for the person (Harter, 1999). In TIGER, children become skilled in social interaction by practicing skills, and the environment around the child

is involved in the training and is stimulated to see, hear and understand the child and to give more social support to the child. One of the lessons concerns the theme “Is it ok that you exist?” Children learn that it is ok that they exist, not because of their achievements, but because they are loved by people around them. This is comparable to the view of Kernis (2003): “Optimal self-esteem involves [...] relationships in which one is valued for who one is and not for what one achieves” (p.13). Moreover, TIGER stimulates children to make authentic choices: to live according to their desire. This will increase their feeling of being unique people, independent of the desires of others, which will increase their self-esteem. This is comparable to the view of Kernis (2003): “Optimal self-esteem involves [...] the operation of one’s core, true authentic self as a source of input to behavioral choices (p.13).

In addition, children talk with each other in the training and share opinions to stimulate respect for others and for other views. Physical exercises are completed to increase trust in the group and to learn to touch each other in respectful ways instead of hitting and kicking each other.

### ***Parents, School Policy and Teacher***

TIGER acknowledges that parents and teachers have an important impact on the child’s behavior and development. Teachers and parents learn in TIGER to expect that children have the intention to be a good son/daughter, a good student and a good friend. Children do not always behave in accordance with their desire. Therefore, teachers and parents learn to help children to live to their desires.

In both settings where TIGER is given (schools and child mental health centers) parents are actively involved in the training. In child mental health centers, parents are trained in parallel parent groups. This is obligatory: it is not possible to complete the training without parents participating. In schools, a parent evening is held before the training starts. If the training is delivered by a psychologist in a troublesome class, parental involvement is a crucial element of the training. In addition to the lessons that are given to the children in class, the school, the teacher and the psychologist make clear rules about which behaviors are tolerated in school and which behaviors are not. Parents are informed that if their child misbehaves, or has the intention to do so, parents are obliged to come to school. Sanctions must be clear: if the child does not behave according to the rules of the school, the child has to leave the school. This confrontational and clear approach has big impact on the behavior of the children in class. Most of the time, it is not necessary to expel children. The goal is to protect the children who show normal positive behavior and to set clear rules for aggressive children. TIGER encourages head teachers to make such clear policy.

Teachers follow a three-day course to learn to deliver the training in class. In this course, much attention is paid to the behavior of the teachers themselves. Teachers become conscious of their own behavior and of the influence this has on the children (by modeling). The teacher also learns that he/she has to fulfill his/her authentic role as a teacher: dare to behave as an authority, make clear which behavior is expected, make clear rules and maintain these. In general teachers and parents learn to pay more attention to children who behave in a positive way than to children who show aggression or are overactive.

### **Effectiveness of TIGER**

The effectiveness of TIGER was examined in troublesome school classes when the training was delivered by an experienced psychologist. The goal of this study was to establish whether

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the climate in the classroom improved and whether children developed more respectful social behavior, had a decline in depressed thoughts and aggressive behavior, and developed higher well-being and self-esteem.

#### **Method**

Eleven classes (third- to sixth-grade) in 11 primary schools in the Netherlands were trained ( $n = 237$ , mean age 9.9 years, 49% boys). In each school, a control class was selected ( $n = 254$ , mean age 10.4 years, 54% boys), that was not trained but completed the same questionnaires at the same time as the training class did. The ethnicity of the training group was 86% Dutch, 4% western foreigner and 10% non-western foreigner. A child was rated as foreigner when at least one of the parents was born in a foreign country. The ethnicity of the control group was respectively 88%, 4% and 8%. The control group and the training group did not significantly differ in age, gender or ethnicity. Before and after the training children completed part of the school questionnaire (Smits & Vorst, 1990) and the TIGER questionnaire. The Emotional Well-Being subscale of the School questionnaire was used including the Relationship With the Teacher subscale and the Perceived Social Acceptance by Classmates. Validity of these subscales was established in earlier research (Smits & Vorst, 1990) and the reliability of the subscales was respectively .91, .83 and .90 (Cronbach's alpha). The TIGER questionnaire was developed for this study and measures self-esteem (Cronbach's alpha: .79), positive social interaction (alpha: .76), depressed thoughts (alpha: .81) and aggressive behavior (alpha: .78). Each subscale consists of approximately 10 statements for which children chose "totally not true," "not really true," "a little true," or "totally true" using a four-point Likert scale. The validity of the self-esteem scale was demonstrated by correlation ( $r = .67$ ) with the global self-esteem subscale of the Self Perception Profile for Children (Harter, 1988).

Children filled in the questionnaires in class before and after the training. The training had an average of 15 training hours. These were given in class in 10 two-weekly sessions of one and a half hours each, or in three full schooldays spread over three months.

#### **Analyses**

Data were analyzed with regression analyses. The scores on the post-test were entered as dependent variable. Pre-test scores and age were entered in the first step of each analysis to correct for age and pre-test differences between the control and training group. To test the differences in post-test scores between the training and control group, the variable control versus training group was entered in the second step. Results of this second step are reported.

An important question in intervention studies is: for whom does the training work? Since a preventive intervention, such as TIGER, is given to a variety of children with or without problematic behavior, not all children will profit in the same way. When the intervention is effective for children who had mean or high scores at pre-test, but not for children who had low scores (and needed the training the most), it is not a very effective training in a practical sense. The climate in the classroom can already improve when only the children who score the lowest show progress. Therefore, the size of the effects was calculated separately for four quartile groups (lowest 25%, highest 25%, and the two groups in-between). It was hypothesized that children with the lowest pre-scores in the training group would show the largest effect size. Effect sizes were calculated by subtracting the mean post-test score of the control group from the mean post-test score of the training group and dividing this by the pooled standard deviation. The post-test scores were first corrected for pre-test differences. The pooled standard

deviation was calculated as  $SD_{pooled} = \sqrt{[(N_t * SD_t^2) + (N_c * SD_c^2) / (N_t + N_c - 2)]}$  (t stands for training group; c for control group; N for number of subjects and SD for standard deviation). According to Cohen (1988), effect sizes (d) are defined as small if d is between .20 and .50, medium if d is between .50 and .80, and large if d is larger than .80.

### Results

Mean scores before and after the training are shown in Table 15.1 and in Figures 15.1–15.7. All scores are standardized. All differences between the training and control group were significant in the regression analysis after controlling for pre-test differences,  $p$ 's < .01. All were in the expected direction. Effect-sizes are shown in graphs 15.8–15.14. Total effect-sizes can be seen on the left. Additionally, for each quartile group the effect-sizes are plotted. The 0–25 group is always the group with most problems at the beginning of the training. The effect-size of these lowest scorers is the most important since these children needed the training the most and their improvement can cause an improvement in the climate of the whole class. Effect-sizes of this group varied between .33 and .78. The training had the largest effect on depressed thoughts, perceived social acceptance by classmates, self-esteem and trustworthy social behavior. Effect-sizes of these scales were all above .5, which is a medium effect size. This suggests that these findings are not only theoretically meaningful, but also have practical significance: the lowest-scoring children improved in a meaningful way. The training had less, but still positive, impact on aggressive behavior, relationship with the teacher and well-being. Effect sizes were small (between .3 and .5), suggesting that children who need the training the most experienced an increase in well-being, an improvement in the relationship with the teacher and a reduction in aggression. Remarkably, the children who scored just below

Table 15.1 Descriptive Statistics for Outcome Measures of Training and Control Group

Scale	Group	Before			After		Difference	
		N	M	SD	M	SD	MD	Sign.
Trustworthy social behavior	Training	224	−.03	1,02	,35	,96	−.38	**
	Control	253	−.01	1,03	,10	1,01	−.11	
Emotional well-being	Training	236	−.02	,97	,18	,91	−.20	**
	Control	244	,24	,85	,08	,99	,16	
Depressed thoughts	Training	224	−.12	1,08	−.66	,92	,54	**
	Control	253	−.27	,97	−.43	1,05	,14	
Aggressive behavior	Training	223	−.08	,99	−.20	1,05	,12	*
	Control	253	−.04	,90	,01	1,05	−.05	
Perceived social acceptance	Training	237	−.04	,96	,17	,85	−.21	*
	Control	244	,14	,87	,12	,91	,02	
Relationship with the teacher	Training	238	,11	,85	,19	,93	,09	**
	Control	244	,21	,89	−.01	1,20	,22	
Self-esteem	Training	224	−.06	1,13	,50	,89	−.56	**
	Control	253	,15	,97	,24	1,08	−.09	

#### Notes

M = mean. MD = mean difference (pre-test-post-test). N = number of participants. SD = standard deviation. Sign. = significance level of training effect: \* $p$ <.01. \*\* $p$ <.001, indicating that the training group improves more than the control group.

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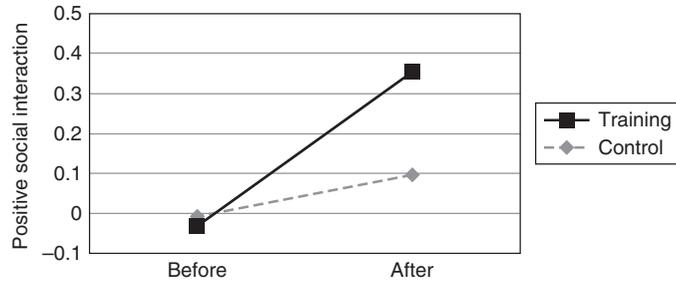


Figure 15.1 Trustworthy Social Behavior

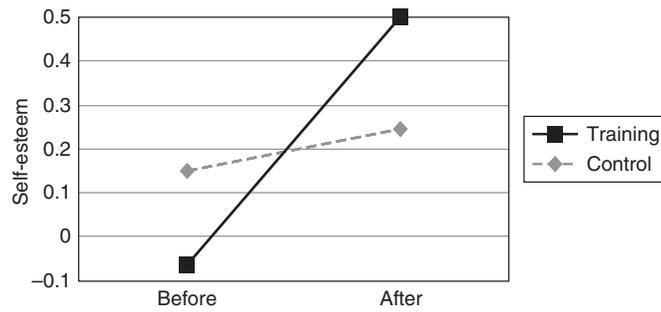


Figure 15.2 Self-Esteem

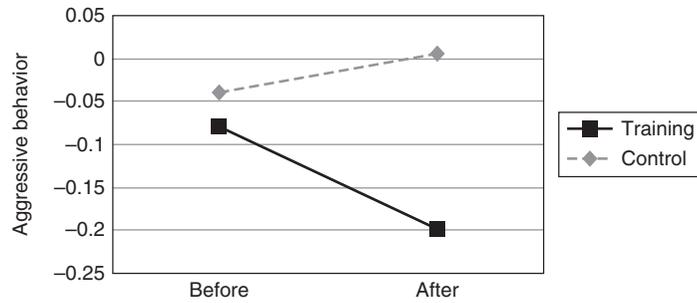


Figure 15.3 Aggressive Behavior

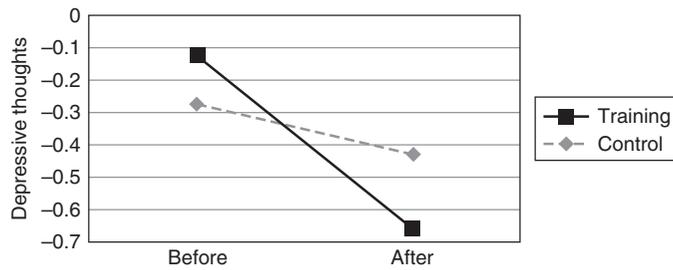


Figure 15.4 Depressive Thoughts

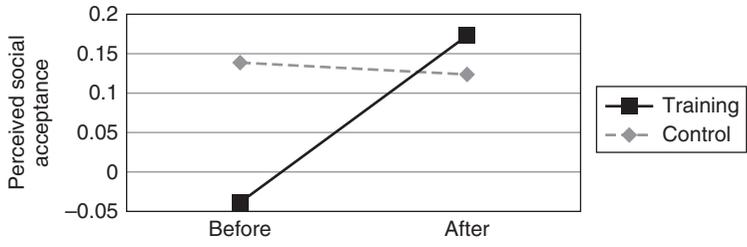


Figure 15.5 Perceived Social Acceptance

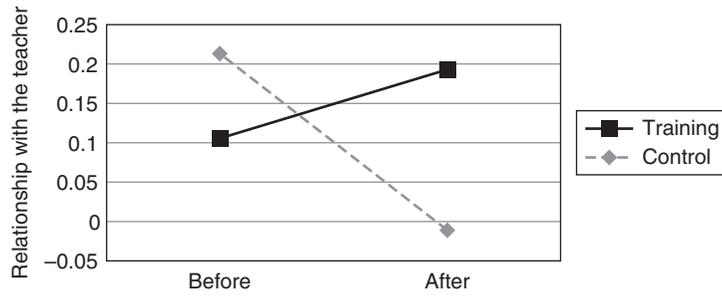


Figure 15.6 Relationship with the Teacher

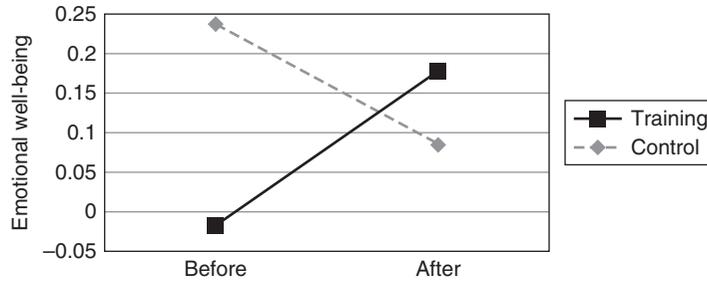


Figure 15.7 Emotional Well-Being

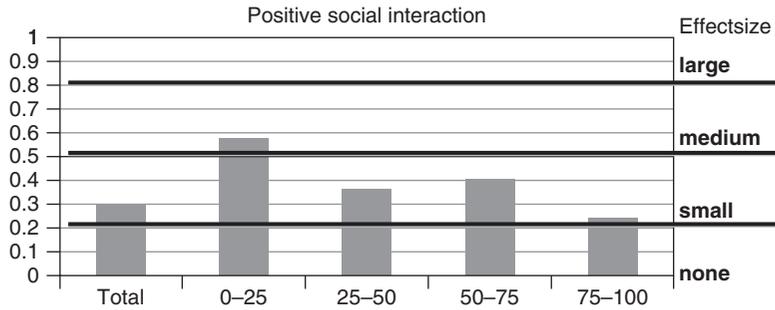


Figure 15.8 Trustworthy Social Behavior

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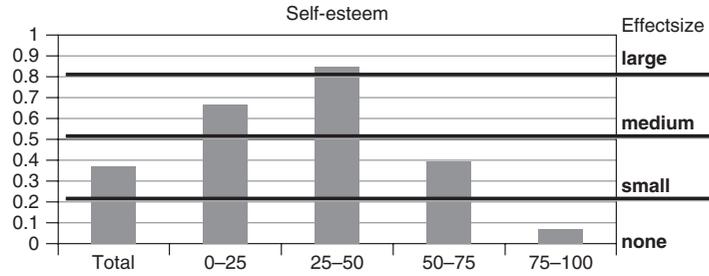


Figure 15.9 Self-Esteem

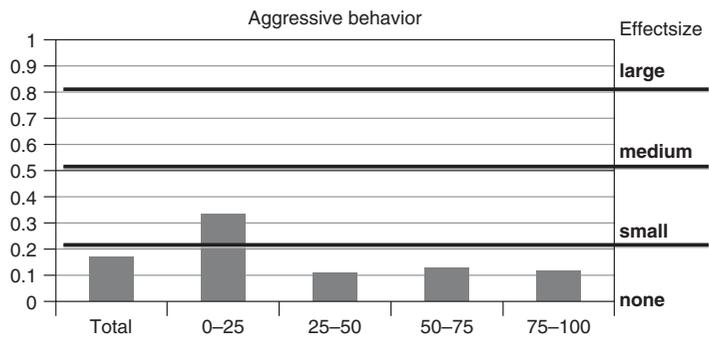


Figure 15.10 Aggressive Behavior

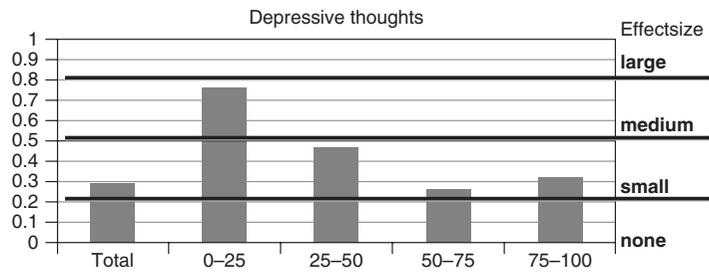


Figure 15.11 Depressive Thoughts

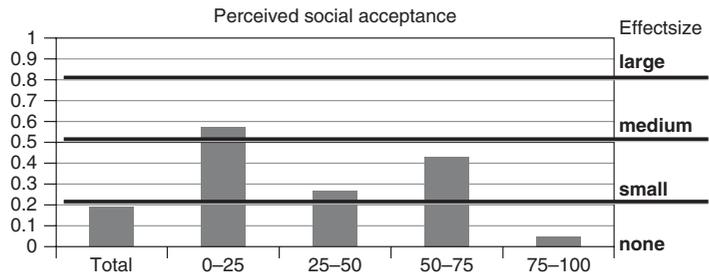


Figure 15.12 Perceived Acceptance by Classmates

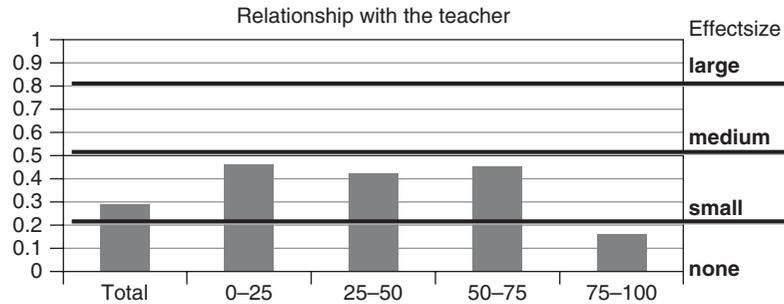


Figure 15.13 Relationship with the Teacher

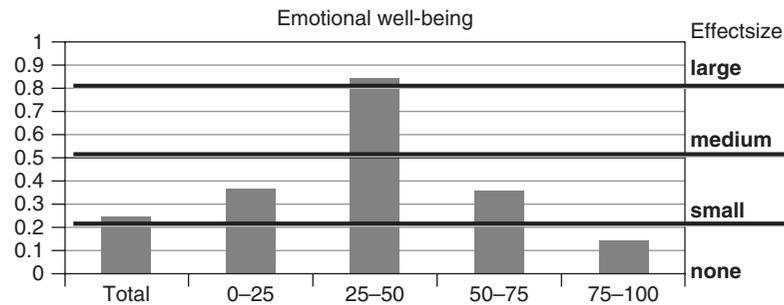


Figure 15.14 Emotional Well-Being

the median of the group (group 25–50) on self-esteem and well-being improved more: their effect-sizes were large,  $>.8$ .

## Discussion

In this chapter, insights from research and practice have been combined to give an overview of knowledge on stimulating positive social interaction in youth. Research has identified many factors that are associated with positive social interaction and problem behavior in children and adolescents. TIGER adds to these factors two fruitful starting points for interventions: the desire of children to be a “good” child, friend or student and the feeling of responsibility for their behavior. TIGER has incorporated these factors into its intervention. The effectiveness of TIGER was studied recently. Results were positive and suggest that reminding and focusing children on their fundamental desires in combination with making them responsible for their behavior is effective in stimulating positive social interaction and self-esteem, and in decreasing depressive symptoms. However, these tentative conclusions need further testing, since it is not possible in the used design to study the exclusive influence of these factors: the effects could also be due to other methods that are used, such as the involvement of parents, the teacher and the head teacher of the school. Even so, other evidence for the importance of making youth conscious of their desires and values has been found in two remarkable studies (Cohen, Garcia, Apfel, & Master, 2006; Thomaes, Bushman, Orobio de Castro, & Cohen, under review). In both studies, an assignment of only 15 minutes had a big impact on

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adolescents. The students had to identify and write about their two or three most important values. This improved their grades (Cohen et al.) and decreased aggression (Thomaes et al.). These results suggest that the desire of children and adolescents is an important factor in the forming of their behavior, and hence is recommendable to incorporate in an intervention for stimulating positive social interaction.

The current study meets most of the criteria of evidence of effectiveness of Flay et al. (2005) that are described by Hughes and Barrios (this volume). In the current study a detailed description of the intervention with goals and population, etc., was available. The study measured those behaviors and outcomes that the training intended to alter and did this with reliable measures. Validity of all measures was established either with correlations with other measures or on the base of face validity. The data were collected by individuals who did not deliver the training. In this study, psychologists delivered the training and teachers collected the data that are filled in by children. The study sample is described, so the “Generalizability of Findings” standard was met. It is necessary to adjust for multiple comparisons when multiple outcomes were assessed. In the current study, seven outcomes were assessed and all were significant at a level of  $p < 0.01$ . This assures that these results cannot be attributed to chance. This study also meets the “Statistically Significant Effects” standard, since on each measured outcome a positive effect was demonstrated, which is far more than the minimum of 50% of the findings in the expected direction. Follow-up measures, half a year after finishing the training, are collected at the time of writing. Results will follow.

Two criteria were not met. The “Clarity of Causal Inference” standard and the standard for “Statistical Analysis.” Both result from doing research in a real-world setting. The control groups were not matched with the training groups because all classes with problematic scores were trained as quickly as possible. It was not ethical to wait to give the training to a problematic class, for the purpose of creating a matched control class. The disadvantage of using these unmatched groups was minimized by correcting for pre-test differences in the analyses. Moreover, in the graphs the uncorrected means are shown and they show that, in most of the subtests, the training group started worse but ended better than the control group (the lines cross). This suggests that the training caused large improvements that are probably not due to pre-test differences. In order to meet the standard for statistical analysis, it is necessary to use multi-level analyses to account for the clustering of students into classroom groups. This analysis was not possible because of the limited sample size.

Flay et al. (2005) also describe criteria for broad dissemination. Although the study on the effectiveness of TIGER has not met all criteria, the training meets all additional criteria for broad dissemination. The comprehensive manual and books are complete and user-friendly. This creates a high chance of implementation fidelity, although this has not been proven yet. The program can easily go to scale. In fact, in the Netherlands this training is already used on a large scale. A network of school psychologists and organizations spread over the country educate teachers and deliver the training in mental health care centers. Cost information is available too. Monitoring and evaluation tools are widely used in the form of web-based questionnaires for children and teachers. When evidence on the effectiveness of TIGER is extended with studies meeting all criteria, the training can easily be distributed on a large scale.

With this chapter, we hope to give a new emphasis to researchers studying factors influencing social behavior, to include two additional factors: the desire of children to behave prosocially and their feeling of responsibility. Since intervention studies are a good method to test causal relationships, researchers and practitioners should find each other and make a combined project on this topic. We hope that future studies on the effectiveness of TIGER will contribute to this knowledge.

## References

- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice-Hall.
- Bandura, A. (1994). Self-efficacy. In V. S. Ramachandran (Ed.), *Encyclopedia of Human Behavior* (Vol. 4, pp. 71–81). New York: Academic Press.
- Birmaher, B., Ryan, N., Williamson, D., Brent, D., & Kaufman, J. (1996). Childhood and adolescent depression: a review of the past 10 years. Part II. *Journal of American Academy of Child and Adolescent Psychiatry, 35*, 1575–1583.
- Boivin, M. (2005). The origin of peer relationship difficulties in early childhood and their impact on children's psychosocial adjustment and development. In R. E. Tremblay, R. G. Barr and R. D. V. Peters (eds.), *Encyclopedia on early childhood development* (pp. 1–7). Montreal: Center of Excellence for Early Childhood Development.
- Bollmer, J. M., Milich, R., Harris, M. J., & Mara, M. A. (2005). A friend in need: the role of friendship quality as a protective factor in peer victimization and bullying. *Journal of Interpersonal Violence, 20*, 701–712.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Cohen, G. L., Garcia, J., Apfel, N., & Master, A. (2006). Reducing the racial achievement gap: a social-psychological intervention. *Science, 313*, 1307–1310.
- Crick, N. C., & Dodge, K. A. (1994). A review and reformulation of social information processing mechanisms in children's social adjustment. *Psychological Bulletin, 115*, 74–101.
- Deater-Deckard, K. (2001). Annotation: recent research examining the role of peer relationships in the development of psychopathology. *Journal of Child Psychology and Psychiatry, 42*, 565–579.
- Dodge, K. A. (2006). Translational science in action: Hostile attributional style and the development of aggressive behavior problems. *Development and Psychopathology, 18*, 791–814.
- Eisenberg, N., Fabes, R. A., Murphy, B., Maszk, P., Smith, M., & Karbon, M. (1995). The role of emotionality and regulation in children's social functioning: A longitudinal study. *Child Development, 66*, 1360–1384.
- Emmer, E. T., Evertson, C. M., & Anderson, L. M. (1980). Effective management at the beginning of the school year. *Elementary School Journal, 80*, 219–231.
- Farrington, D. P. (1995). The challenge of teenage antisocial behavior. In M. Rutter (ed.), *Psychosocial disturbances in young people: challenges for prevention* (pp. 83–130). Cambridge: University Press.
- Flay, B., Biglan, A., Boruch, R., Castro, F., Gottfredson, D., Kellam, S., Mościcki, E., Schinke, S., Valentine, J., & Ji, P. (2005). Standards of evidence: Criteria for efficacy, effectiveness and dissemination. *Prevention Science, 6* (3) 151–175.
- Goldstein, S. (1995). Effective teachers, successful students, optimal environments, and productive consultants. In S. Goldstein, *Understanding and managing children's classroom behavior*. New York: Wiley-Interscience.
- Good, T., & Brophy, J. (1978). *Looking in classrooms*. New York: Harper & Row.
- Harter, S. (1988). *Manual for the self-perception profile for adolescents*. Denver, CO: University of Denver.
- Harter, S. (1999). *The construction of the self: A developmental perspective*. New York: Guilford.
- Hodges, E. V. E., Boivin, M., Vitaro, F., & Bukowski, W. M. (1999). The power of friendship: protection against an escalating cycle of peer victimization. *Developmental Psychology, 75*, 94–101.
- Kazdin, A. E. (2003). Psychotherapy for children and adolescents. *Annual Review of Psychology, 54*, 253–276.
- Kernis, M. H. (2003). Toward a conceptualization of optimal self-esteem. *Psychological Inquiry, 14*(1), 1–16.
- Muris, P. (2008). Angst en angststoornissen. In P. Prins and C. Braet (eds.), *Handboek Ontwikkelingspsychologie* (pp.353–376). Bohn Stafleu van Loghum: Houten.

### 308 *Stimulating Positive Social Interaction*

- Muris, P., Meesters, C., & Brakel, A. van (2003). Assessment of anxious rearing behaviors with a modified version of the "Egna Minnen Beträffande Uppfostran" (EMBU) questionnaire for Children. *Journal of Psychopathology and behavioral assessment*, 25, 229–237.
- Nation, M., Crusto, C., Wandersman, A., Kumpfer, K. L., Seybolt, D., Morrissey-Kane, E., & Davino, K. (2003). What works in prevention. Principles of effective prevention programs. *American Psychologist*, 58, 449–456.
- Orobio de Castro, B., Merk, W., Koops, W., Veerman, J. W., & Bosch, J. D. (2005). Emotions in social information processing and their relations with reactive and proactive aggression in referred aggressive boys. *Journal of Clinical Child and Adolescent Psychology*, 34, 105–116.
- Pope, A. W., & Bierman, K. L. (1999). Predicting adolescent peer problems and anti-social activities: The relative roles of aggression and dysregulation. *Developmental Psychology*, 35, 335–346.
- Propper, C., Moore, G. A. (2006). The influence of parenting on infant emotionality: a multi-level psychobiological perspective. *Developmental Review*, 26, 427–460.
- Quiggle, N. L., Garber, J., Panak, W. F., & Dodge, K. A. (1992). Social information processing in aggressive and depressed children. *Child Development*, 63, 1305–1320.
- Rudolph, K. D., & Asher, S. R. (2000). Adaptation and maladaptation in the peer system. Developmental processes and outcomes. In A. J. Sameroff, M. Lewis & S. M. Miller (eds.), *Handbook of Developmental Psychopathology* (pp.157–175). New York: Kluwer Academic/Plenum Publishers.
- Rutter, M. (2006). *Genes and behavior: nature-nuture interplay explained*. Oxford: Blackwell.
- Sabatino, A. C. (1983). Prevention: Teachers' attitude and adaptive behavior-suggested techniques. In D. A. Sabatino, A. C. Sabatino, & L. Mann (Eds.), *Discipline and behavioral management*. Rockville, MD: Aspen.
- Salmivalli, C., Kaukiainen, A., Kaistaniemi, L., & Lagerspetz, K. (1999). Self-evaluated self-esteem, peer-evaluated self-esteem and defensive egotism as predictors of adolescents' participation in bullying situations. *Personality and Social Psychology Bulletin*, 25, 1268–1278.
- Salmivalli, C. (2001). Feeling good about oneself, being bad to others? Remarks on self-esteem, hostility, and aggressive behavior. *Aggression and Violent Behavior*, 6, 375–393.
- Scholte, D., & Engels, R. (2005). Psychosociale ontwikkeling: de invloed van leeftijdsgenoten. In J. de Wit, W. Slot & M. van Aken (eds.), *Psychologie van de adolescentie* (pp. 94–109). Baarn: HB uitgevers.
- Shields, A., & Cicchetti, D. (1998). Reactive aggression among maltreated children: The contributions of attention and emotion dysregulation. *Journal of Clinical Child Psychology*, 27, 381–395.
- Smits, J. A. E., & Vorst, H. C. M. (1990). *Schoolvragenlijst (SVL)*. Nijmegen/Lisse: Berhout/Swets & Zeitlinger.
- Stark, K. D., & Smith, A. (1995). Cognitive and behavioral treatment of childhood depression. In H. P. J. G. van Bilsen, P. Kendall & J. H. Slavenburg (eds.), *Behavioral approaches for children and adolescents* (pp. 113–143). New York: Plenum Press.
- Thomaes, S. (2007). Externalizing shame responses in children: The role of fragile-positive self-esteem. *British Journal of Developmental Psychology*, 25(4), 559–577.
- Thomaes, S., Bushman, B., Orobio de Castro, B., & Cohen, G. (under review). Reducing narcissistic aggression by buttressing self-esteem: An experimental field study.
- Van Lier, P. A. C. (2002). *Preventing disruptive behavior in early elementary school children*. Rotterdam: Optima Grafische Communicatie.
- Weide, G. & Vlieg, L. (2007). *Kanjerboek voor ouders en leerkrachten*. Almere: Instituut voor Kanjertrainingen.

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# HANDBOOK OF YOUTH PREVENTION SCIENCE

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ROUTLEDGE 