Original Papers

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Development of interpersonal trust among children and adolescents

The main purpose of the present article is to introduce a topic related to the development of interpersonal trust among children and adolescents. Although this subject, since the beginnings of psychology considered as an academic discipline, has been regarded as an essential component of human functioning, there are still very few theoretical and empirical studies that approach the issue from a developmental point of view. In this paper the three-dimensional conceptualization of interpersonal trust is provided. Furthermore, the article highlights the past and current theoretical and empirical research on the development of interpersonal trust in infants, preschool and school-age children. Finally, some challenges are presented in the field of interpersonal trust studies.

Interpersonal trust is considered as an important and a highly significant interdisciplinary phenomenon that has been examined in different fields of study (McKnight & Chervany, 2006; Sztompka, 2007; Wiedenfels, 2009), starting from philosophy, theology, anthropology, through psychology, sociology, economics, and ending with communication, marketing, and politics (Righetti & Finkenauer, 2011). In fact, interpersonal trust is essential to our social relations (Talwar & Renaud, 2010) and, as various thinkers and researchers stress, a world without trust would be much more impoverished, barren, painful, empty, and savage (Hollis, 1994; Shultz, 2007; Simmel, 2011). For example, Confucius said, "Death has been with us since time began, but without trust a people cannot stand" (Youlan, 2000, p. 249) and as Graham Greene (1973, p. 35) put it, "It is impossible to go through life without trust: That is to be imprisoned in the worst cell of all, oneself". We not only cannot maintain ourselves without trust in daily life, but according to Niklas Luhmann (1979, p. 4), "A complete absence of trust would prevent [one] from even getting up in the morning". The more complex and multifaceted society is, the stronger the dependence on others. If interpersonal trust decreases, the social order also declines, risking that our society will fall apart (Rotter,

1971). Therefore, interpersonal trust is regarded as the cornerstone of society and the "glue" that preserves its stability (Rotenberg, Fox, Green, Ruderman, Slater, Stevens, & Carlo, 2005).

Although the study of trust, from a psychological perspective, has an extended history (Nowakowski, Vaillancourt & Schmidt, 2010), the topic of interpersonal trust among children and adolescents has been long neglected. In this regard, Ken Rotenberg (2010a) observes that the most current psychological literature on infancy and youth fails to contain any allusion to interpersonal trust at all. While search in the PsychINFO database (July 28, 2011) yielded 17035 entries on the topic of trust in general, the number of publications devoted specifically to the interpersonal trust does not exceed 434, 150 papers relate to children and only 88 concern adolescents, leaving more space to relationships among the adult population. If we do a similar research on the Red de Revistas Científicas de America Latina y El Caribe, España y Portugal (RedALyC), which provides us with academic information about articles in social sciences and humanities available mainly in Spanish and Portuguese (Molloy, 2006), we obtain comparable results in terms of trust (20281 entries), with a slightly higher number probably because of the broadening of research to other social disciplines beyond

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psychology, but we find much lower results when it comes to interpersonal trust on the whole (142 entries), and among children (36 entries) and adolescents (19) in particular.

Three-dimensional concept of interpersonal trust

A dearth of research on the subject of interpersonal trust during childhood and adolescence has activated some psychologists to redress that omission (Rotenberg, 2010a) and to present, in broad outlines, a trajectory of whatever has been done until the present regarding the concept of interpersonal trust and its role in optimal human functioning.

Psychological literature shows that trust, considered as a social reality that allows people to act in situations of interdependence and behavioral doubt (McEvily, Weber, Bicchieri, & Ho, 2006), is a multidimensional notion which incorporates cognitive, emotional and behavioral components (Van de Ven & Smith Ring, 2006). In order to prevent a description of this phenomenon which is too vague, and to present it in a more articulate way, we will approach this topic following the three main perspectives that underline the cognitive, affective and behavioral elements of trust.

The definition of the construct of trust in the cognitive sense, grounded on rational judgments and "good reasons", is strongly affected by the theoretical position of Julian Rotter and characterizes the majority of traditional studies (Petrocchi & Lecciso, 2008; Murayama, Hikage, Fujihara, & Hauser, 2008). In fact, Rotter was one of the first psychologists who defined interpersonal trust within the framework of a social learning theory, as "a generalized expectancy held by an individual or a group that the word, promise, verbal or written statement of another individual or group can be relied upon" (Rotter, 1971, p. 444; 1973, p. 651). In other words, trust means a certain propensity or predisposition to respond with conviction, based on the persons' past experience to some contingencies present in the situation which they face.

Review of psychological literature shows that children develop their trust in other persons when they live repeated early experiences of parental respect of promises made and kept. Only later, through many events in which the behavior of others is reliable and credible are the beliefs in the trustworthiness of parents also extended to other social partners, and are generalized to consider the society at large (Petrocchi & Lecciso, 2008). Trust, therefore, understood from a cognitive point of view, is considered expectation, opinion, belief or accumulated knowledge of someone to rely on the words, promises, and affirmations of another person or group. Although cognitive trust is strongly knowledge-driven, it leaves space for uncertainty and risk. Moreover, Rotter, referring himself to the previous theory of Fritz

Redl and David Wineman (1951), based on a therapeutic work among aggressive children and adolescents, noticed that their incapacity to trust others, especially those who undertake important social roles as parents, teachers or leaders, may eventually lead them to failure in different spheres of life. On the contrary, interpersonal trust may be one of the most powerful factors that positively influence relationships and the physical well-being of the young, contributing to their learning and scholastic achievement as well (Rotter, 1973).

An example of the empirical research investigating the cognitive aspects of interpersonal trust refers to the studies of Jaeanette Doster and June Chance (1976) on trustworthiness in preadolescents. Both Authors examined different relationships between children's generalized expectancies about how trustworthy others are and their own trustworthiness, demonstrated in a series of resistance to temptation tasks. Using the Children's Interpersonal Trust Scale (CIPT), modelled on the development of Rotter's Interpersonal Trust Scale for Adults, researchers had found that preadolescents, with a high degree of generalized expectancy that other people are reliable and honest, are also inclined to tell the truth themselves. Moreover, they revealed that high trusters are more likely, than moderately and low trusting children, to keep promises and make considerably fewer transgressions in tempting situations where cheating might increase personal rewards.

More recent definitions of trust have begun to incorporate affective components, called in a number of studies also emotional or benevolent, that distance themselves from exclusively cognitive perspective (Lewicki, Wiethoff, & Tomlinson, 2005; Murayama, Hikage, Fujihara, & Hauser, 2008; Riegelsberger & Sasse, 2003). This approach considers trust as a phenomenon which derives from an emotional bond connecting those who participate in the relationship. According to different Authors (Castaldo, 2007; Rowe & Calnan, 2006), the emotional component of trust is usually identified as the mutual feeling upon which rapport between different parts is based. It is grounded on relationships and affective ties generated through contact, empathy, identification with others and concern for their welfare, emotional investment in interaction, genuine care and belief that these feelings are shared (Kuhlmann, 2008). It is also characterized by the level of concern showed mutually within a relationship. Therefore, people trust others because they feel relational connectedness within their rapport even if there is no rational foundation for such trust attributions (Riegelsberger, Sasse, & McCarthy, 2007).

Among different psychologists who studied trust in line with the affective dimension were Michael Bernath and Norma Feshbach (1995). Both Authors considered trust as a capacity of being confident in oneself, in others and in the world built by the child, thanks to the sense of love,

coherence and security learned during relationship with a significant other. It is important to recall that this kind of trust does not require a logical approach of the children, but is based on the emotional quality of bond created with parents or other main persons in their lives. This experience becomes crucial for trust development in later years because reliance is influenced by perception and value placed on the relationships with others.

Besides the cognitive dimension of trust (beliefs, intentions, motivations, expectations and suppositions) and its emotional aspect (emotions, feelings) trust regards also a multifaceted range of actions, called behavioral dimension of trust. In line with such an understanding, trust includes concrete forms of behavior and actual risk taking in order to deal with complex, uncertain, and difficult events. If a person really trusts another, she or he not only thinks that someone else is worthy of being trusted, but must rely in a tangible way on another's words or behavior. Otherwise, without the actual and concrete acceptance of being vulnerable to the actions of someone else, a person remains on the cognitive level of trust making it concrete through action. (Lee, 2007). As researchers underline, knowing others' beliefs (cognitive aspect of trust) helps in comprehending the causes of other people's actions (attributions) and serves as a motivator to act towards others with trust. However, it is not enough to know that someone is worthy of trust. In order to display behavioral trust, a person has to decide to act on the basis of this knowledge (Gummerum, Hanoch, & Keller, 2008).

In this regard Ken Rotenberg (2010b) speaks about "behavior-dependent" and "behavior-enacting" trust. In fact, trust defined as "behavior-dependent", goes beyond the "cognitive-affective" level and demonstrates not only how the truster cognitively and emotionally relies on the characteristics of the trustee, but also on how one behaviorally depends on his or her reliability, emotional trust and honesty. This particular distinction is important because not always people, who declare to trust others (cognitive trust) or feel they can trust others (affective trust), are actually disposed to be behaviorally reliant on their promises, confidentiality, and honesty. On the other hand the dimension named "behavior-enacting", comprises individuals engaging themselves in acting reliably, emotionally, and honestly. This dimension indicates a disposition of the truster to behave himself or herself in a trustworthy manner, fulfilling promises, maintaining confidentiality, and being honest (McGuire et al., 2010).

There is a number of empirical studies that illustrate a direct kind of relationship between cognitive and behavioral trust (Yamagishi, 2011). For example, Morton Deutsch (1960) was the first psychologist who experimentally investigated the concept of trust in a game theory which predicted how rational confidence leads to real trusting behavior. Deutsch's definition, probably the most popular and well-known among psychologists, says that a trusting behavior takes place when individuals face ambiguous situation that can lead them to an event perceived to be beneficial or to an event perceived to be harmful. If these persons choose the ambiguous path, according to Deutsch (1960), they make a trusting choice through concrete conduct because they believe that the other person can do the actions leading to a good result. Instead, if they do not choose the ambiguous path (they do not undertake the risk which is required), they lack confidence and make a distrustful choice, based on the assumption that the actions of another individual may lead to bad results.

Contributions presented until now show that although many psychologists studied trust and tried to provide a valid definition, there is no commonly acknowledged explanation for this phenomenon. Moreover there is a small number of empirical investigations among children and adolescents that could confirm the theoretical intuitions elaborated. A reason for the lack of consistent and coherent research on this topic may be linked to the fact that trust is a complex construct difficult for operationalization, measurement and interpretation (Simpson, 2007). We still have relatively little knowledge about what this kind of relationship is, how and why it develops, in what manner it is preserved and why it terminates when betrayed. Most descriptions, however, do concur that interpersonal trust is a dyadic phenomenon, requires a positive expectation toward another person (cognitive aspect), can be based on an emotional bond (affective aspect) and expresses itself through concrete action (behavioral aspect) that generally involves three conditions: interdependence, risk, and free choice (Righetti & Finkenauer, 2011).

Analysis of the concept of trust, which helps one to comprehend the meaning of self-confidence or reliance on others, leads to another important area of study that regards trust from a developmental point of view. Such an approach allows one to discover how trust is built up, what kind of conditions it requires and what stages it includes. The core research, both theoretical and empirical, involves studies predominantly within Eriksonian and Bowlbian frameworks that illustrate a fundamental role of the first relationships between toddlers and the significant others leading to trust development.

Theoretical and empirical evidence on development of interpersonal trust in infants

Consistently with recent studies, Ken Rotenberg and other academics concur (Nowakowski, Vaillancourt & Schmidt, 2010; McGuire, Segal, Gill, Whitlow, & Clausen, 2010; Rotenberg, 2010b; Rotenberg et al., 2005; Sakai, 2010) that Erik Erikson was one of the first psychologists who placed development of trust during infancy and

viewed it as a crucial element throughout the human life-span (Sakai, 2010).

According to his psychosocial theory, made known in 1963 in the book entitled *Childhood and society* (Erikson, 2008a; 2008b), during the first stage of human development infants learn to trust in the surrounding environment and in themselves if their basic needs are met by their parents or other significant persons. In contrast, if the primary caregivers do not express concern for their well-being, infants learn to distrust in an exaggerated manner and create in their minds a representation of the world as an untrustworthy place for them to live. In the first case, children begin to develop healthy self-esteem and adequate relationships. Trust in reliable caretakers contributes to the child feeling protected, enduring momentary separations, and interrelating with others independently of the parents' presence. Instead, in the second case, children have considerable difficulty to build up their social competence and this behavior is a sign of Eriksonian mistrust, which emerges in a higher proportion than trust. It is important to mention that all children develop mistrust because there are no perfect parents who always respond in an appropriate way to their needs. In this sense, a certain degree of distrust is healthy for each individual. If children do not develop the awareness that others can hurt them, they become more vulnerable to those who try to let them down. For this reason, an ideal human development consists in the simultaneous presence of both, trust and distrust, but with the much higher level of trust (Reevy, Malamud Ozer, & Ito, 2010).

In accordance with the theory of Erikson, trust does not depend simply on the amount of food delivered to the infants or to the external manifestations of affection that they receive, but rather on the quality of their relationship with their mother or another meaningful person. When the children begin to gradually acquire the ability to trust others, this achievement finds its expression at the psychosomatic level as well, for example through the undisturbed sleep and proper functioning of internal organs (intestine). Furthermore, the children, as a result of this gained security, begin to consider themselves as sufficiently trustworthy, and this allows them to deal with different unexpected situations with a certain hope and confidence. Therefore, even in the future, when these children meet with the experiences of deprivation, division or separation, this acquired trust will strengthen them to face challenges with courage and persistence, because they are aware of their inner potential (Erikson, 2008a; 2000b).

Theoretical foundations of generalised interpersonal trust and distrust elaborated by Erikson find their verification in different empirical studies. For example, surveys realized among the citizens of some western countries (*World Values Survey*; *Eurobarometro*) showed that there is a positive correlation between the belief that "most people

can be trusted" (general trust) and self-trust. Therefore, results of the investigations illustrate that the people who trust in themselves and are optimistic about their own lives, "project" their self-trust on others, also on those whom they do not know. This relationship may be explained by the fact that respondents who have been educated by confident parents, open both towards family members and strangers (Mutti, 2007; Wuthnow, 2004), are more likely to trust that people are generally trustworthy and to act on the basis of the conviction *a priori* that most people will behave in a way that is beneficial for them (Sztompka, 1999).

Another, important, theoretical contribution explaining development of trust was given by John Bowlby (1969; 1973) and Mary Ainsworth (1967) who argued that a sense of trust is strongly interrelated with the early attachment relationships in terms of the internal working model (IWM). During these relationships the infants stay physically close to principal caregivers who, in turn, guard them from different kinds of physical, emotional and psychological harm. According to both researchers, when the interactions between the infants and their caregivers are characterized by affection and bonds' security, toddlers receive information that they are important, process this knowledge, and learn that they can rely on others when needed. Hereafter, they develop an expectation that the future conduct of their significant others will be reliable and responsive, and, as a result, they build up a "secure base" and a general sense of trust toward people they do not know. Otherwise, when children experience negative response or rejection, they discover that they cannot count on close others and, therefore, their expectations about the prospective behavior of others in general are negative and doubting. As Ainsworth (1967) underlined, when infants lack basic trust in the accessibility of their attachment figures, it is less likely that they in the future will undertake enterprise into the unknown world outside the family. This is because they do not have a mental representation or an internal working model of trusting experience that could guide them towards other meaningful kinds of relationships.

Theoretical approaches, conveyed by Bowlby and Ainsworth led other psychologists to empirical assessment of their hypothetical assumptions. Meta-analysis research demonstrates that the attachment history of children has a crucial role in their trust development and there is some evidence that confident and warm relationships, experienced in a young age, are correlated with a high degree of trust in adolescence and adulthood. For example, Cindy Hazan and Philip Shaver (1987) reported that secure adult respondents differed significantly from avoidant and anxious subjects in four dimensions of romantic love: happiness, friendship, trust and fear of closeness. In fact, love in the insecure group was marked by fear of intimacy, lack of trust, jealousy, and emotional instability. More recent investigations also support the hypothesis that security of attachment predict

the child's later trust in close relational partners. Jeanine M. Vivona (2000), through her research among late adolescent students, found that those with a secure style of attachment characterized themselves by trust, respect and sufficient autonomy. Those participants, instead, who were identified as avoiding, demonstrated low trust, feelings of anger and alienation.

Also Grazyna Kochanska with her collaborators (Kochanska, Aksan, Penney & Boldt, 2007), using the ecological approach, obtained interesting results about trust and early family relationships. Focusing their attention not only on the mother-child dyad relation, but also on the father-child relationships, the authors noticed that parents who had troubled memories of their own childhood, were more pessimistic, alienated, and mistrustful, and displayed less affectively positive parenting skills themselves. These outcomes may indicate that persons with unstable and unhappy recollections of their home and school life, are less optimistic and trusting, and therefore have less constructive interactions with their own toddlers. Similar results were described by David W. Shwalb and collaborators (2010) who reported the study of Hanashima (2007). The Author, comparing the stories of Japanese *hikikomori* male youth and their socially integrated counterparts, obtained the results which revealed that adolescents with a form of chronic social withdrawal (*hikikomori*) reported that the relationships with fathers during their infancy were characterized by strictness, harshness, lack of intimacy, understanding, respect and trust. It seems that, independently of cultural factors, an affirmative family environment influences the growth of trust in children, adolescents and adults.

Interpersonal trust in preschool children

Although interpersonal trust was usually examined in the context of infancy and early relationships with mother or other significant persons, there are some studies that describe trust development in successive stages of human growth.

One of the first theoretical perspectives which considered trust development among older children (preschoolers) was elaborated by William Emet Blatz who analyzed trust within "security framework". In fact, Blatz defined security as "the state of mind which accompanies the willingness to accept the consequences of one's act – without equivocation of any sort" (Blatz, 1966, p. 13). Mary J. Wright (2010a; 2010b), who accurately analyzed Blatz' works, explains readiness of children to assume the outcomes of their actions as a sign of trust in themselves and the tendency to avoid responsibility as an indication of insecurity. Therefore, the most important element in the process of security achievement by the child is trust which develops both in home and in the kindergarten environment.

In regard to the family habitat, trust formation depends prevalently on the behavior of the parents who care for young children. Because children in their early years totally rely on the presence and actions of others, they display a kind of immature dependent security which gradually leads to a secure and healthy dependence on their caretakers. In order to reach mature dependent security children need a consistent, predictable and dependable environment created by their parents. If the adults are not capable of creating such an environment, characterized by the positive quality of immature reliant security, the children cannot develop their trust in their parents and, consequently, have difficulty achieving the stage of growing independent security and, finally, mature dependent security. Blatz (1966) stresses that the trust learned by children in this crucial stage of life is of great significance for them because it becomes the prototype of their confidence in the future, both in themselves and in others. Otherwise the lack of possibilities to build up their trust will be reproduced in their later relationships with others.

The same way of interaction should distinguish relationships between kindergarteners and their teachers. Blatz believed that collaboration between parents and educators promotes mental health of preschool children and creates a safe environment characterized by serenity which expresses itself through one's conviction about ones own ability to effectively deal with forthcoming future events. Because according to Blatz "learning can never be mechanical" (Blatz, 1944, p. 47), he stressed the role of the child as an active and exploratory agent who not only is modified by the world but is capable of modifying it as well. Such an anthropological perspective of the children's capacities requires from the teachers an adequate approach to the pupils which consists in creating for each of them a kind of learning situation that stimulates them to be protagonists of their own development. To do so, the teacher should try to comprehend children's motivation and their past experience, collaborating in this manner to the development of their trust. Giving children the opportunity to discover their potentialities and, at the same time, providing a challenging environment with growth-producing activities, the teacher creates the conditions to shape the confidence of preschoolers, both in themselves and in others. In fact, the children learn about the consequences of their choice, obtain knowledge about how to accept and deal with problems without avoiding them, and develop the courage to make decisions based on the trust they have in themselves. As Blatz underlined, a high level of confidence grows between people only gradually and over a long period of time (Wright, 2010a; 2010b).

In recent years the topic of trust among preschoolers has been investigated also in some empirical studies. In the 1980s and 1990s, Ken Rotenberg with collaborators (Rotenberg, 1980; Rotenberg & Morgan, 1995) found that

children decide who they trust considering solely overt behavior of others (consequences of the act itself) or taking into account the consistency between others' promises (stated intentions to act) and overt behavior. Although the Author did not mention the third aspect, that regards believing others on the bases only of their word it can be presumed that this lack was dictated by the study objectives. Consequently, the pattern of experimental findings identified by Rotenberg suggests that younger children trust others much more if they take into consideration whether or not they *did* pleasant things, than whether or not they *said* and *did* pleasant things. This result may be related to the fact that some of the participants were not yet ready, from a developmental point of view, to grasp the coherence or discrepancy between words and deeds of other persons interacting with them.

The concept of interpersonal trust among kindergartens was studied also by Paul Harris (2007; Harris & Koenig, 2006). The new input that Harris made to the topic of children's interpersonal trust regards the element of relying on the word of other persons, called accurate or inaccurate informants. In fact, a Harvard scientist was interested to know whether preschool children, during contact with others, rely on their own immediate observation or, instead, trust whatever other people tell them, particularly when they deal with an area of knowledge in which firsthand scrutiny is difficult as, for example, on scientific or religious matters (Harris & Koenig, 2006). Interpersonal trust, in this case, means a confidence or uncertainty in the testimony of others dependently on correct information provided consistently by the informants or their constantly conflicting information. It consists in making decision on the basis of the assumption that another person is reliable.

Interpersonal trust in the school environment

Development of trust continues in the school environment and regards especially parent-child, parent-teacher, student-teacher and peer relationships. A constellation of the above mentioned four types of interaction is not casual because as children develop, the importance of the meaning of each of the relationships changes overtime.

For example, although during the first stages of children's life a focus shifts from family attachment to extra-familiar bonds, parents still play an important role in their trust development, particularly during the initial years of the elementary school. In fact, the youngest continue to develop their self-concept within a healthy rapport with their parents, based on love, trust, and reliability. Empirical research shows that early school students' trust in their parents and parents' trust in them are positively related to different aspects of children's adaptation to school and negatively related to isolated demeanor, antisocial behavior,

disobedience, and anxiety (Shwalb, Nakazawa, Yamamoto, & Hyun, 2010).

In the first years of schooling the relationship between parent-teacher is also crucial because the children are still very much dependent on the adults. As some researchers report (Clarke, Sheridan, & Woods, 2009), the reinforcement of children's trust is strongly connected to parent-teacher trust. Results of the quantitative studies illustrate that confidence between parents and teachers correlates with students' credits earned in school and their high achievements. It is not surprising to think that parents with an elevated level of trust toward the school professionals demonstrate a more positive attitude in their own involvement in school activities and a stronger engagement in their children's learning. Commitment to children's activities gives them a message that they are important to their parents who believe in what they do and how they are maturing.

In other studies, Anthony S. Bryk and Barbara L. Schneider (2002) reveal that interpersonal trust is built on the interplay of four components: respect, competence, personal regard for others, and integrity. Respect implies recognition of the significant role that each person, especially parents and teachers, plays in a child's education and requires an authentic sense of listening to others' perspective. Competence consists in accomplishing one's role responsibly. In the parents' case this involves whatever they can do in order to support schoolwork at home, to dedicate time and to give their children the help they need. In teachers' case, instead, it means to teach the children not only to know contents, but also "how to be" in life. This approach integrates instruction with education. Relational trust necessitates a personal regard for others that expresses itself in the awareness that others care for the children although they have a sense of their own vulnerability and limits. For example, teachers demonstrate their respect towards parents when they are willing to meet with them after school in order to clarify some difficult issues. Parents show their respect when they display their interest for the children's progress, behavior or work. Finally, integrity consists in the consistency between a person's word (what they say) and conduct (what they do), and finds its foundation on a moral-ethical perspective that guides one's choices. Such relationships, based on reciprocal esteem, helps children to strengthen their self-trust and trust in others because they experience a secure environment in which they feel protected and confident.

With the passage of time, the trust built between parents and teachers must be transferred gradually to the student-teacher relations (Bryk & Schneider, 2002). In fact, as students progress through the grades and become more responsible for their own learning, the mutual obligations for learning become more explicit between

students and teachers. During this time teachers may reinforce the children's trust, using different ways of interaction. Because the teachers share their knowledge and competence, they impart valuable education and promote the students' personal and intellectual safety. Children who feel respected by their educators, respond in the same way. In this regard Charles R. Snyder (1994), a psychologist who studied extensively the topic of hope, stresses that in the context of educational relationship trust is built on students' perception that teachers are trying to do what is best for them. Therefore, children must sense that they can talk with their educators and can be truly heard. Teenagers especially appreciate those teachers who let them know that they trust them. On the contrary, if teachers are inconsistent or demonstrate ironic behavior towards their students, students lose their trust in their teachers because they feel their dignity is at risk.

There is some empirical evidence that reveals the importance of teacher-students relationship for reciprocal trust development. For instance, several correlational analysis show that regular contact with a professor, especially if this is done informally outside the classroom, was linked to the higher trust of the students and to elevated motivation to be successful in the subject (Jaasma & Koper, 1999). Another example confirming theoretical intuitions about teachers' trust in students regards a study realized by Roger D. Goddard and collaborators (2001) among elementary school children and their tutors. It revealed that instructors' confidence in their pupils positively predicted their academic success; a result that demonstrates that confidence in others may increase the pupils own self-confidence and, therefore, make them work with greater security and passion.

In addition to the three above mentioned "trust contexts" that foster the development of confidence in school children, the psychologists identified another powerful dimension that has impact on children's trust. For example, Judith Rich Harris (1995) proposed her group socialization theory according to which children's and adolescents' experience with groups of peers is the relevant and outside-the-home factor responsible for development of their personality and enhancement of their socialization. A great deal of empirical studies confirm Harris' theory and demonstrates that the peer group experience is frequently listed as a significant source of interpersonal trust among children, preadolescents and adolescents. As researchers reveal, relationships with friends are crucial for trust growth especially in middle and high school students. In this regard Stephanie M. Jones with collaborators (2008) found that positive peer relationships help children to develop trust and connectedness. Instead, other psychologists, using Prisoner's Dilemma Game, discovered a positive correlation between elementary school children's trust beliefs in peers and the number of peer friendships they have and the willingness to disclose

personal information to others (Betts & Rotenberg, 2008; Rotenberg, Michalik, Eisenberg, & Betts, 2008).

At this point it is interesting to notice that Ken Rotenberg (2010a) made an empirical synthesis of the four factors that have an influence on children's trust development and elaborated a Cross-Cultural Children's Trust Beliefs. The CCCTB scale assesses children's trust beliefs in four target categories: mothers, fathers, teachers, and peers, referring to the theoretical premises presented above. Through a measure of 36 items, children are invited to provide their own ratings of the characters described in the brief stories, and the results obtained offer a profile of children's trust level in significant others.

Challenges in children's and adolescents' interpersonal trust studies

Because the psychological approach to interpersonal trust among children and adolescents is still a relatively new branch of studies, the challenges that researchers have to meet are numerous. First of all, there is a need for further longitudinal investigations of the development of trust beliefs across different periods of children's and adolescents' lives since only repeated observations of the same variables over long intervals of time may provide us with empirical and clearer evidence of early experience's influence on trust growth. Moreover, previous theoretical and quantitative research has been mostly concentrated on the effect of relational factors on children development, taking into consideration Bowlby's theory of attachment. It seems, therefore, that it is essential to further explore a range of topics and studies that could verify how other dimensions predict propensity to trust, such as temperamental characteristics in children or personality traits in adolescents, genetic and environmental factors that until now have revealed some contradictory results (Sakai, 2010), differences between trust and other phenomena which are sometimes considered, in common understanding, as synonyms (dependence, credibility, naivety). It is also necessary to introduce experimental studies that move beyond the Prisoner's Dilemma Game and are based on interactive design and are run in the true-to-life scenarios.

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