Abstract: Recent studies showed that children with learning disabilities present significant difficulties in learning as well as in social skills (Siperstein, 2009). Therefore, it was observed how it is difficult for these children to establish adequate relationships, especially to advise coping strategies to face interpersonal conflicts (Oliva & LaGreca, 1988). Accordingly to this argument and with reference to Agaliotis e Kalyva (2004, 2009), this study examines the preferences for strategies to solve an hypothetical conflict on a sample of children with LD in comparison to typical developing peers. They used the method of social story to conduct this research. In fact, researchers asked to the children, after they have listened a short story describing an interpersonal conflict interaction between adult and peers, which strategies they would have chosen if they were in the same situation and the strategies that would be most appropriate to resolve a conflict. Results obtained from the experiment corroborated literature data and demonstrated that children with LD, in comparison to typical developing peers, use and prefer dysfunctional coping strategies, aggressive or passive, also in relation to the partner interaction (adult or peers) to face interpersonal conflict.

Keywords: learning disabilities, social skills, interpersonal conflict resolution, social story.
INTRODUCTION

Social development is an evolutionary process through which individuals adapt to the context their learning skills, behaviour, motivation and value system (Maccoby 2007).

Social expertise made up by these individual acquired components, permit both the social adjustment and the achievement of the individual to the dealing context. This way social development allows to acquire and develop the social expertise, as accomplishment of socialization process. The literature gave different meanings to the social skill idea. The model established by Dodge, Pettit, McClaskey and Brown (1986) defines an individual as a socially practised one if he is capable of resolving a social situation. According to this model, individuals firstly acknowledge a social stimulus, at second stage they process it through codification, interpretation, in search for an answer and evaluation; thirdly they use their social behaviour becoming a new stimulus for observers. Schneider (1996) claims that social skills allow to adequately adapt to the context. Appealing to skills of problem solving and to keep up functional relationships, through empathy and emotional control, individuals achieve specific social objectives (popularity, acceptance), integrating adequately to the social context. Instead, in 2006, Rubin, Bukowski and Parker defined the social skill as the ability to act positively in a selfless way, inhibiting negative behaviour and communicating in a clear and incisive manner. Founding elements of this theory are the attention towards communication and other people requirements, as well as the capacity to prevent the negative consequences of social actions. The range of definitions of social skills, suggested by the scientific literature, encourages to constitute three specific aspects: the necessary abilities (cognitive, emotional, behavioural), intrapersonal and interpersonal aspects (self-esteem, acceptance) and a more structured field (capacity to face social problems). In fact, individuals, use their social competence to evaluate their performances in social tasks while they carry out a specific behaviour, in other words, the ability to perform it at best. (Elksnin e Elksnin, 2003; Barone, 2009). Therefore social skills, as
result of integration between individuals’ actions and purposes, are the means through which individuals achieve an adequate stage of social skills and they are the most important components dealing with individual actions (Matson, 2009). These actions involve different fields, cognitive as well as behavioural: they allow individuals to adapt to the environment and to answer adequately to stimuli it produces, they help individual to effectively resolve interpersonal conflicts, to face stressful situations (Matson e Wilkins, 2009). If these procedures are adequately applied to experimental groups, during social interaction, they make the individual more socially practised, by allowing him to establish positive relations and achieve shared goals. During early years, each individual learns different social skills. In 1998, Rubin, Bukowski and Parker included a range of social skills that, if they are learned in an adequate manner during years, allows individuals to integrate positively in a group. Some of the most important social skills individuals need to acquire since early years are: being able to comprehend thoughts, emotions and others people’s purposes, understanding information about social partners and the context of the interaction, the capacity to know the positive way to break off, carry on and conclude a conversation. The harmonious integration of thoughts and emotions, therefore, enriches the idea of social skill as observable behaviour, as far as it is considered as a fundamental prerequisite for emotional health and psychological individual adjustment (Semrud-Clikeman, 2007). However the process of evolution and affirmation of social development may not be sufficient in some specific cases, For example, some individuals with learning disabilities present deficient social skills. (Siperstein, 2009). The definition of specific learning disabilities (LD) deals with difficulty in exercising important skills as reading, writing and make calculus (APA, 2000). Nevertheless, recent studies showed that learning disabilities involve both learning and social skills. When we discuss about social deficit noticed in LD individual, we mainly refer to either learning or performance deficit: the learning deficit is a lack in social skills, whereas the performance deficit concerns individuals’ failure to perform social skills already held. (Gresham, 1992). In general, children with learning disabilities have more social information–processing deficits (Tur-Kaspa & Bryan, 1994); are less popular and have a higher isolation index compared to peers (Stone & LaGreca, 1990); they have fewer friendships (Wiener & Schneider, 2002); they present high-frequency of destructive and aggressive behaviours (Sale & Carey, 1995); they present lower social positive behaviours (Newcomb, Bukowsky & Pattee, 1993); they present important problems of adjustment
during adolescence (Kupersmidt, Coie & Dodge, 1990). Therefore, we can assume that children with LD present problems both in their interpersonal relationships (Agaliotis & Goudiras, 2004) since they employ destructive ineffective strategies (hostile and avoiding) (Agaliotis & Kalyva, 2009) and they misconduct in the classroom showing inability to cooperate and to establish positive relationships with their classmates. (O'Shaughnessy, Lane, Gresham & Beebe-Frankenberger, 2003). As for the relationship with peers, a study of social strategies of children with LD noticed that the majority of children with typical development prefer positive strategies to resolve conflict interaction, like compromise, while children with LD choose unilateral strategies, less acceptable and positive, avoiding, for example, negotiation. (Carlson, 1987). In order to be included in a network of peers (Winzer, 2000) it is fundamental to start and to maintain positive social interactions (Bauminger, Edelsztein & Morash, 2005) aiming to resolve conflictual social interactions in the best way. In fact this kind of interactions are fundamental in socialization processes and unavoidable in daily interactions. (Ricaud-Droisy & Zouche-Gaudron, 2003). Agaliotis and Goudiras (2004) observing children with LD noticed they have difficulty to understand different components of conflict interaction, to find alternative strategies to resolve a conflictual situation, to foresee consequences of the strategies chosen. Therefore they find it difficult to integrate in the classroom network (Kavale & Forness, 1996; Mishna, 2003). Highlighting that children with LD have problems to identify facial expressions and to decode nonverbal stimuli allows researchers working on the relationship between learning disabilities and social skills to focus their attention on nonverbal and verbal communication. Studies, in fact, pointed out that relational skills of children with LD are compromised by poor communicative ability. Being able to use verbal and nonverbal communication skills is fundamental to start, sustain or answer to social interactions since those elements are the principal means to communicate purposes and emotions (Belinson & Olswang, 2003).

Concerning verbal communication, children with LD seem unable to recognize the rules determining the modality of interaction between speaker and receiver. As far as nonverbal communication is concerned, children do not seem to be able to draw information from nonverbal indicators as voice tone, facial expressions and posture. Children with LD, as speakers, are less assertive, less persuasive and less able to entertain a conversation asking
open and closed questions. Children, as receivers, instead, are passive and they do not ask further information for an equivocal task. (Bryan, 1998). They have observed, moreover, that children with learning disabilities have difficulty to identify emotions, they interpret social interactions in a wrong way and make mistakes foreseeing behavioural consequences. (Kavale & Forness, 1996). In 1991, Feldman, Philippot and Custrini affirmed that nonverbal communication skills are fundamental elements to be achieved in social interactions and emotions are mainly conveyed through this channel. Since children with LD send and receive nonverbal information in a different way in comparison to their peers without LD, they could misinterpret the attempt of a peer to start an interaction, with the consequence of damaging it significantly (Bauminger, 2005). These problems may be caused by the difficulty in developing and employing metacognitive rules and strategies bringing them to utilize rigid or less appropriate coping strategies (Oliva & LaGreca, 1988), from bad social experience (Gresham & Elliott, 1989), and the difficulty in taking other viewpoints (Dickstein & Warren, 1980). Agaliotis and Kalyva (2009) refer to results obtained from studies focused on children with LD that prefer non assertive coping and provided with less functional strategies. They conducted a research to comprehend whether social stories can help children with LD to resolve conflictual social interactions. Social stories aim at teaching appropriate social behaviour (Kuttler, Myles & Carlson, 1998; Norris & Dattilo, 1999), communicative skills (Adams, Gouvousis, Vanlue & Walpron, 2004) and to improve the capability to comprehend underlying rules in each kind of interaction among two or more children. These stories describe a character, integrated in a context, with his social expected behaviour and his motivation, to which a children should be identified (Feinberg, 2002; Rogers & Myles, 2001). Gray defines them as simple descriptions of an individual, an event, a concept or a social situation with the aim of leading the individual through an appropriate rule or answer to a social group situation or another one with difficulties (Gray, 2004). Social stories can be utilised for different reasons: for example to represent sad situations, tell about future events or illustrate a new social skill, comprehend an abstract concept, share very important information or remove a problematic behaviour. Social stories must have some distinctive characteristics regardless of purpose: they have to be short and concrete, have a structure composed by a beginning, a composition and an ending, and have a title (Gray, 2004). Despite this short stories have been utilised to rehabilitate children with autism spectrum disorder (ASD), Agaliotis and
Kalyva tried it out with children with LD. Results produced by this study conducted in 2009 showed that in the base-line phase the majority of children with and without LD preferred hostile strategies to resolve interpersonal conflicts, but after a training program of reading and visualization of social stories, children with LD choose more positive strategies like compromise, while children of control group, not following the same training programme, continued to prefer dysfunctional strategies. This study demonstrated social stories efficacy for improving the capability of children with LD to resolve interpersonal conflicts choosing appropriate coping strategies. However, with reference to the resolution of social problems it has been noticed that the choice of strategies to resolve a conflict is also linked to the partner (adult or children) involved in a relationship (Filippello et al., 2000). By analysing social stories utilised by Agaliotis and Kalyva (2004) we asked whether the strategies chosen by children with LD were based on the fact that partners in relationships were their peers. Therefore, by checking different strategies preferred according to different partners, this study examines whether dysfunctional strategies chosen by children depend on the lack of learning of adequate strategies (acquisition deficit) or on the incapacity to use behaviour managed by rules (performance deficit). According to observations, this study aims at examining problem solving strategies chosen by children with LD when they interact with their peers (friends and classmate), and with adults (teachers and parents). Therefore, we will expect that children with LD would prefer to utilize specific strategies based on the typology of partner with whom they interact.

Method

The participants to the present study were 14 children with LD (9 boys and 5 girls) between 8 and 10 years old and 14 children with typical development who were matched for age, gender and socio-economic status. To select the experimental group, they have been administered the WISC-R (Wechsler, 1994) to 30 children diagnosed with learning disabilities and
only those who had a full-scale QI higher than 80 and obtained the consensus from parents participated to the experiment. The last 15 children were administered the MT reading test (Cornoldi & Colpo, 1981/1995/1998) and the battery for the evaluation writing and orthographic skills in the primary school (Tressoldi & Cornoldi, 2000). The experimental group was composed of children with a result lower than 2 DS in the reading-writing test.

Measures

It was created a specific procedure to assess how children with LD react to hypothetical interpersonal conflicts, dealing with a social story put forward by Agaliotis e Goudiras (2004), who propose an interpersonal conflict that finds a positive solution resorting to coping strategies of compromise. The test has been previously validated by administering to a sample of 300 typically developing children ranging in age from 7 to 9 years (M=8.2 ; SD= 0.64) and its coefficient alpha was good (α= .70). Trial is composed by 16 short stories describing hypothetical interpersonal conflicts occurring with classmates, friends, parents, and teachers. For each story three different strategies to face the interpersonal conflict have been proposed: one coping assertive strategy, one passive and finally coping aggressive strategy. Social stories, described using equivalent clause for words number and length, was previously calibrated on a similar sample. They represented 24 stories to children (six about conflictual interaction child/classmate; six about conflictual interaction child/friend; six about conflictual interaction child/parent; six about conflictual interaction child/teacher), they asked children specific questions to identify main character, situation and the partner of interaction. Moreover, they asked children to show, on a Likert scale from 1 (unlikely) to 5 (very likely), the possibility that the story described could really occur. In the light of results noticed, they selected 16 more understandable episodes related to usual situations of ordinary life to assure an ecological high-value to the trial. Stories have been administered individually to all children included into the experimental group and control group. Each child have been informed that the aim of the trial was to know how he should behave in problematic situations. All participants were reassured about the non existence of right or wrong answers. After each
stories, they asked the child to suggest both the option corresponding to the preferred behavior in that specific activity (used strategy), and the coping strategy considered as more functional to resolve problematic activity proposed (the best strategy).

Results

As far as coping strategies are concerned, in resolving problematic situations with classmate data analysis, a considerable statistical difference between children of the experimental group and children of the control group about use of assertive strategies (F(1,26) =15.9, p< .001) and aggressive strategies (F(1,26) = 18.5, p< .001) was evaluated.

FIG 1: difference between children with and without LD on the use of strategies in resolving problematic situations with classmates.
In fact, observing the figure, children belonging to the control group declared to use assertive strategy more than children with LD.\(t(26) = -3.99, p < .001\). On the contrary, children belonging to the experimental group indicated aggressive strategy as the modality of coping preferred to resolve interpersonal conflicts with classmates.\(t(26) = 4.3, p < .001\). Concerning passive strategy there is no considerable statistical difference among the two groups.\(t(26) = 0.26, p > .05\). As for the best strategy considered to resolve problematic situation with classmates, ANOVA showed a statistical considerable difference between the two groups concerning assertive strategies \(F(1,26) = 4.7, p < .05\) and aggressive strategies \(F(1,26) = 4.6, p < .05\).

![best strategy with classmate](image)

FIG 2: difference between the two groups concerning assertive strategies with classmate

The figure brings out children of control group more than children with learning disabilities, indicating assertive strategy as the more functional modality of coping to resolve interpersonal conflict with classmates \(t(26) = -2.18, p < .05\). While children of the experimental group choose aggressive strategy as more effective to resolve troubles with peers more than children
without LD. ($t(26) = 2.14, p < .05$). There is no statistically significant difference between two groups concerning passive strategies ($t(26) = 0.63, p > .05$). In the matter of interpersonal conflict with friends, trough ANOVA we highlighted a statically significant difference between children of the two groups with reference to the aggressive strategies used ($F(1,26) = 5.1, p < .05$).

![Coping with friends graph](image)

**FIG 3:** difference between children with and without LD on the use of strategies in resolving problematic situations with friends.

Observing the figure, we noticed that between the two groups there is a lack of significant differences as for assertive ($t(26) = -1.93, p > .05$) and passive ($t(26) = 0.00, p > .05$) strategies used. Instead, children of the experimental group indicated more than their peers without learning disabilities aggressive strategy as coping procedure they should resort to resolve troubles with their friends ($t(26) = 2.26, p < .05$). Referring to the interpersonal conflict with friends, they noticed another statistically significant difference between the two groups about the best strategy to adopt (assertive strategy, $F(1,26) = 7.6, p < .05$; aggressive strategy $F(1,26) = 9.2, p < .05$).
The figure clearly brings out that children of the control group indicated more frequently than children with LD assertive strategy as the coping modality more effective to resolve problematic situations ($t(26) = -2.75, p < .05$). On the contrary children with LD group choose more than their peers without learning disabilities aggressive strategy as the best coping procedure to resolve interpersonal conflict with friends. ($t(26) = 3.03, p < .05$). They did not notice any significant difference as for using passive strategy. ($t(26) = 1.43, p > .05$). Referring to problematic situations with parents, data analysis did not bring out any statistically significant difference between children with LD group and children without LD group, both as for strategy used and the best strategy considered. ($p > .05$).
FIG 5: difference between children with and without LD on the use of strategies in resolving problematic situations with parents.
FIG 6: difference between the two groups concerning assertive strategies with parents.

Lastly, referring to problematic situations with teachers, data analysis does not bring out any statically significant difference between children of the two groups about the coping strategy used. (p > .05).
FIG 7: difference between children with and without LD on the use of strategies in resolving problematic situations with teachers. Instead, there are statically significant differences between the two groups about the best strategy to use (assertive strategy, F(1,26) = 8.4, p< .05; passive strategy, F(1,26) = 5.9, p< .05).
FIG 8: difference between the two groups concerning assertive strategies with parents.

In fact, the figure clearly shows that children without LD group indicated more than children with learning disabilities, that assertive strategy is more functional to resolve conflict situations with teachers. (t(26) = -2.89, p< .05). On the contrary, children with LD group choose more than children without LD passive strategy as the best modality of coping to resolve interpersonal conflicts with teachers (t(26) =2.43, p< .05). Referring to aggressive strategy they didn't notice any statically significant difference between the two groups. On the basis of data obtained, we decided to make further investigation resorting to test applied to coupled samples, to highlight possible statically significant differences between the used strategy and the best strategy in the four problematic situations represented. Table 1 shows a statically significant difference in children in the LD group between assertive strategy used and the best one in interpersonal conflict with classmate. (t(11) =-2.54, p< .05). Finally, children in the LD group showed less consistency declaring assertive strategy both as strategy they should use and as strategy more functional, in their opinion, to resolve interpersonal conflict with peers. No statically significant difference about other arguments is shown.
Table 1: difference in children with LD group between assertive strategy used and the best one in interpersonal conflict.

Table 2 shows a comparison between the coping strategy used and those indicated as the best from children in the LD group in interpersonal conflict with friends and classmate. They do not notice statistically significant difference in any of these comparisons, so they gather that children with LD maintain the same behavior both with classmates and friends.
On the contrary, table 3 shows the comparison between the modality of coping to resolve problematic situations with parents and those with teachers. Also in this case there is no statically significant difference. Therefore, children in the LD group behave the same both with parents and with teachers to face problematic situations.

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<td>6</td>
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On the contrary, table 3 shows the comparison between the modality of coping to resolve problematic situations with parents and those with teachers. Also in this case there is no statically significant difference. Therefore, children in the LD group behave the same both with parents and with teachers to face problematic situations.

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TABLE 3: comparison between coping strategy used and these indicated as the best from children with LD in interpersonal conflict with parents and teachers. Lastly, table 4 shows the comparison between the modality of coping indicated and the best strategy considered by children in the LD group to resolve interpersonal conflict with classmates and teachers. As it is shown there is a statically significant difference between the assertive strategy used with classmate and that used with teachers ($t(12) = -3.42, p< .05$). However no statistically significant difference for others comparisons.
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TABLE 4: comparison between coping strategy used and these indicated as the best from children with LD in interpersonal conflict with classmate and teachers.

Discussion

The aim of the present study was to explore the problem solving strategies that children with learning disabilities declare to adopt in different interpersonal contexts. Comparing to the control group, children with LD declared to resort to less assertive and adaptive strategies more than children without LD in order to resolve interpersonal conflict. This result, coherently with the literature dealing with this argument, confirm the difficulties of children with LD facing interpersonal problems, due to the use of dysfunctional strategies. Selman (1980) explains problems experienced by these children by referring to their difficulty to collect other viewpoints. While, Oliva and La Greca (1988) affirm that the problem of these children could be a metacognitive difficulty that do not allow children to have full awareness of suitable strategies to afford the context. Agaliotis and Goudiras (2004) sustain that resorting to ineffective and inadequate strategies could be a result of difficulty to comprehend and identify the components of interpersonal conflict, to devise different options to resolve a problem and to identify consequences of suggested solutions. Making a breakthrough as regards the literature about this argument, the present study identified those interpersonal contexts in which children with LD find greater difficulties handling their own problems. We noticed, in particular, that these children, for handling problematic situations, present the same
behavior both with their friends and their classmates. In fact, in both contexts they resort to aggressive strategies to resolve interpersonal problems more than children without disabilities. Moreover, data brought out a coherence between thought and action since we noticed that children with LD consider aggressive strategies as the most effective to resolve problems with friends and classmate. Instead, we did not notice a significant difference concerning strategies used in conflicts with parents and teachers among the two groups. Also, data brought out that children with LD try to behave in the same way to handle problems with their parents and teachers. This result suggests that probably these children are able to better manage interpersonal conflicts with adults both at school and at home. In fact, it resulted in a statistically significant way, that children with LD are more assertive with teachers than with their classmate. Thus, we can gather that these children find more difficult to handle problems rising with their peers, both at school and outside, since they resort to aggressive strategies. This result affirms that these children use a behavior of overawed and submission to the detriment of healthy behavior allowing to integrate them inside their group of peers. In fact, theses data are coherent with the literature about this argument which sustains that children with LD have less friends (Wiener & Schneider, 2002), are less popular and more rejected (Stone & LaGreca, 1990) than their peers without disabilities (Kupersmidt, Coie & Dodge, 1990). Coherently with the literature about this argument, the present study highlights the difficulties of children with LD to resolve interpersonal conflicts, especially to handle problems with their peers resorting to less assertive strategies.

References


