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Coping strategies: mediators of long-term effects in victims of bullying?

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ABSTRACT

Concerning the growing interest arising from bullying related issues, one of the most appealing aspects which is drawing more attention is the study of the effects of victimization experiences. In this study we will analyse, using a retrospective methodology, long-term effects of the participation as a victim of bullying episodes, specially stress manifestations in adult life. Likewise, the mediating role of coping strategies used against bullying in such manifestations is studied. For such purpose, a modified version of the Retrospective Bullying Questionnaire (RBQ; Schäfer *et al.*, 2004), that includes a stress scale (Rivers, 1999), was applied to 219 college students between 18 and 40 years who were then evaluated. Results suggest that, adult life stress levels are more likely to be conditioned by conflict appraisal than by coping strategies. The strategies perceived as being more efficient are also highlighted. Possible explanations are discussed.

Keywords: coping strategies, long-term effects, bullying, victimization

INTRODUCTION

In the last years, school violence or bullying related issues have become increasingly relevant within the school community and the general society. The presence in the media of news related to this phenomenon has increased significantly, because of a greater social awareness and interest, but also, undoubtedly, because of the occurrence of extreme victimisation cases that unfortunately have ended with the suicide of several adolescents. Even if it is true that the bullying issues affect all the students of the school in which they arise (Janson and Hazler, 2004; Ortega, 1998), it is also valid that the harassed victims suffer the most serious effects. (Hawker and Boulton, 2000).

Consistently, studies purporting to explore, which are the immediate and long-term consequences of the school victimization experiences have been carried out, because, as from the first manifestations, the welfare and correct development of the involved parties are clearly affected. Thus, Slee (1995) found that the students, who are frequently victimized by other scholars, used to play alone, considered themselves as being the unhappiest, and felt unsure during playtime. Those results agree with the findings of other studies on the problems of the victims within the school environment: unhappiness at school (Boulton and Smith, 1994), the development of less

favourable attitudes towards school and the wish to avoid the school context (Kochenderfer and Ladd, 1996). Likewise, several authors (Hésela, Menesini, Morita, O'Moore, Mora-Merchán *et al.*, 2004; Smith, 1989) point out that among the consequences of being a victim we can identify the lack of friends and the loss of confidence and self-esteem, even long after the occurrence of bullying episodes.

It has also been consistently found a causal relationship between victimization experiences and the occurrence of personality related problems such as loneliness (Newman, Holden and Delville, 2005), anxiety and insecurity (Cammack-Barry, 2005), depression (Roland, 2002) or low self-esteem (Alsaker and Olweus, 1993). Sato, Ito, Morita, Akaboshi *et al.* (1987), in a study carried out in Japanese children and adolescents identified as victims, several manifestations of neuroses were found as well as, rejection to school, transient symptoms of hysteria, and troubled interpersonal relationships. Also Callaghan and Joseph (1995) found in bullying victims serious depressive traits, together with extremely low scores in global self-concept, self-perception of academic performance, conduct and physical appearance. Hoover, Oliver and Hazler (1992), by means of the interview to 200 American High School students, found that 14.15% of the males and 14.43% of females identified as victims self-assessed the effects of the intimidation they suffered as severe in the social, emotional, academic, somatic, and family dimensions. At the same time, important evidences were also found that the condition of victim is associated to psychosomatic

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disorders and suicidal ideation. (Kaltiala-Heino, Rimpela, Marttunen, Rimpela and Rantanen, 1999; Mills, Guerin, Lynch, Daly and Fitzpatrick, 2004).

All these effects are even worse, because of the stability of the relationships of intimidation-victimization and for the continuation of the status of the involved parties throughout their educational history (Olweus, 1978). Besides, all these manifestations imply, in certain students, an exaggeration of the traits that make them the object of the attacks of their fellows, which circumstance undoubtedly establishes a vicious circle which is very difficult to break without external help.

Nevertheless, generally, these studies do not indicate if those traits or disorders suffered by the victims are a cause or effect of the abusive experiences they suffer, but there are evidences from a reduced number of longitudinal studies that allow us to think about the influence of the victimization experiences on the outcome of these characteristics. Kochenderfer and Ladd (1996) studied during a year elementary school students in the United States and found that the experiences as victims of their fellows was a cause of isolation and desire of being absent from school. Kochenderfer-Ladd and Wardrop (2001) with 388 elementary school students that were studied until third grade in Elementary School pointed out that the association among victimization and the isolation and satisfaction with social life. Another way that emphasizes the idea that those traits are an effect of the victimization are the information offered retrospectively by the adults that have been victims of their fellow students during their schooling process. An important number of adults experience intense and painful memories about these experiences at school, by their fellow students, and, sometimes by their professors (Smith, 1991). Together with those memories, many adults feel that the experience they lived has caused them consequences that last through the years, such as, for example, the loss of confidence in the relationships they establish with others (Gilmartin, 1987).

Two more arguments are involved in the presence of long-term effects of victimization experiences (Schäfer, Korn, Smith, Hunter, Mora-Merchán et al., 2004). The first one refers to the own nature of violence among fellow students, defined as a social phenomenon (Salmivalli, Lagerspetz, Björkqvist, Österman and Kaukiainen, 1996). Given the importance of the peer relationships, it would be surprising if the continued and prolonged rejection and negative experiences caused by fellows had no effect on the sociocognitive and social development of the individual. The second argument is focused on the evolutionary stage underwent by the students who suffer this kind of problem (Schäfer et al., 2004). One of the main objectives in the males and females at schooling ages is to develop and maintain their self-esteem in the relationship with others, especially with the most significant others. This is a bi-directional process, because the relationships established help to build self-perception, but at the same time, self-perception affects the success of the relationships established. (Cillessen and Bellmore, 1999; Harter, 1998). The development of social expectations, that include the beliefs in the resources that each one possesses within the context of social relationships,

as well as the capacity of the others to offer support and welfare (Bowlby, 1973), is a fundamental tool for the process. In the case of the students victimized by their fellows, the perception of loss of support of their peers, and the development of negative expectations on the conducts that one may expect from the others in the relationship they establish with them, probably stress an internal model of relationships characterized by insecurity, as well as a decreased self-esteem. As social expectations are organized around general interaction styles during adolescence (Bowlby, 1973; Crook, 2000), it would be likely to find different effects caused by the participation in harassment episodes among fellows in function of the moment in which such experiences occur. Specifically, we may expect a negative impact on global self-esteem and friendship relationships, regardless of the moment in which bullying occurs, but a specially intense effect on the relationships with the other sex, as well as on any relationship that requires the establishment of intimate relations, in the cases of bullying experienced during high School, because it is during adolescence that those processes acquire more relevance and importance.

Together with purely longitudinal studies, a second option are the studies based on a retrospective methodology. Up to date, research focused on bullying based on this methodology has been scarce and focused usually on specific populations. Because of these studies, there has been an advance on the long-term effects of victimization experiences suffered at school. Gilmartin (1987) found the possible influence of such experiences at the moment of establishing intimate relationships with other people. In a sample of men having problems when relating to women with the intention of forming a couple, a significantly high number of them (80%) admitted having been bullied at school.

Matsui, Tsuzuki, Kakuyama and Onglatco (1996), with a sample of 134 male students from universities near Tokio, found that the victimization experiences suffered during school were associated to lower levels of self-esteem in College Students. Hugh-Jones and Smith (1999), with a sample of adults with stammering disorders, pointed out that most of them had suffered from a considerable number of violent episodes with their fellows, among which, a very high number of them exhibited long-term effects, specially lack of confidence in others, and in social relationships. Rivers (1999) found the presence of intense imprints caused by the victimization in a sample of homosexual adults. Smith, Singer, Hoel and Cooper (2003), out of a sample of 5,288 adults from different working environments, reported a significant relationship between the experiences and bullying roles that occurred among fellows during school and recent victimization episodes at labour places. Within this collective, those who show a greater risk of suffering victimization episodes are those who, during school adopted the role of aggressors and victims at the same time, followed by those who had only participated as victims.

In order to increase our understanding of the occurrence of the effects in the bullying victims it is necessary to seek for variables that, in a certain way, may mediate in this process, because the

presence of such consequences may vary with the students. One of the variables that are more relevantly appearing within this analysis are the coping strategies that the students use when they attempt to figure out their involvement in bullying situations. (Kristensen and Smith, 2003).

To understand the use of such strategies we will start with the stress coping transactional model proposed by Lazarus and some of his colleagues (Lazarus and Folkman, 1984; Lazarus and Launier, 1978), because, given the characteristics of victimization process we believe that it may be an efficient tool in view of the interpretation and analysis of such situations. This model is focused on the interaction established between the subject and the environment in which they interact, as well as the alterations that these interactions suffer along the time, such aspects, as we have stated mentioned before, would be essential to understand the bullying phenomenon. This theory has proven useful in studies related to the general stress management (for the corresponding review please refer to Frydenberg, 2002).

According to this model, strategies used to cope with stressing situations depend on the perception or appraisal of the subject about any given situation in a double sense (Lazarus and Folkman, 1984): the meaning that oneself gives to the situation (primary evaluation) and on the other hand, the appraisal of the available coping options (secondary evaluation). The first appraisal has, in turn an appraisal of the results that one expects to receive in any given situation. Thus, if an episode was assessed as stressing, this would indicate that negative consequences are expected for personal welfare and that efforts should be directed to cope with the situation well, and the emotions arising from the contact with such situation (Lazarus and Launier, 1978). Within this model, when a situation is considered stressing, it is then classified within one of these three dimensions: damage or loss, threat and challenge (Lazarus and Launier, *Op. cit.*). The first one of these dimensions refers to situations that already happened, and which consequences need to be faced. When the assessment is focused on the category of threat, it is because it is understood that such situation may ultimately cause damage or loss. Finally, when the episode that will be coped is assessed as a challenge, the positive results to be achieved are highlighted, in spite of the existence of the possibility that some negative results may occur.

Hunter and Boyle (2004) analysed in a research with 459 Elementary and High School, which were the evaluations that the students made about the consequences of the involvement in bullying situations, with the object of identifying if such episodes were appraised challenges or threats. Such results exhibit that 44 % of the responses consider that bullying experiences were an opportunity to learn or master any important aspect for interpersonal relationships (19% considers that he will learn to cope better in the future, 13% considers that, at the end, it is a positive experience, and 12% thinks that those experiences will enable them to learn never to bully any fellow) which corresponds to the concept of challenge (Lazarus and Launier, 1978). In this study, also the negative consequences implied

in the participation of bullying situations were studied which point out to the concept of damage or loss, and therefore, the concept of threaten. The following ones are worth mentioning among the most outstanding psychological sequelae (38%) and physical (28%) fear of continuous/continued suffering the problem (15%) isolation (11%) or the possibility of becoming an aggressor for the fellows (4%).

The concept of secondary appraisal involves the assessment of the coping strategies that each one possesses, as well as the success or failure options available when such strategies are applied (Lazarus and Folkman, 1984). In this sense, Folkman (1984) states that the perceived control that any person shows when facing concrete situations are a consequence of secondary appraisal, because it is related to the belief that each one possesses about its own abilities to control a particular episode, and therefore, reflects judgment values that we make about how well do we appraise our resources at the moment of coping with the problems that may arise. With samples of adults, Folkman, Lazarus, Dunkel-Schetter, DeLongis and Gruen (1986) found that when a situation is perceived as transformable, coping strategies directly focused on the problem are more likely to be applied. Nevertheless, when the conflicting situation is appraised as inalterable, that should be accepted without question, avoidance strategies are the most used ones. Similar results were also found in samples from School children (Ingledeu, Hardy y Cooper, 1997; Klierer, Fearnou and Walton, 1998).

In order to finish the outline of this model, specially when referring to long-term effects of the use of coping strategies (Fournet, Wilson y Wallander, 1998), it is necessary to introduce the concepts of adaptation or adjustment level between the appraisal of the situation and the nature of the used strategy, and of coping strategies vs. avoidance strategies. In the case of adjustment, we understand that this is higher when the situation is perceived as manageable and we use strategies directed to change the environment or oneself. On the contrary, it would be lower if we used such strategies in a situation that is appraised as unchangeable. When we refer to the type of strategy, coping or avoiding, the first ones would be directly associated to more adaptational coping competences. (Fournet et al., 1998), whereas the second ones may be correlated to a higher incidence of psychosocial adjustment problems. (Bruder-Mattson and Hovanitz, 1990; Dumont and Provost, 1999).

The study of coping strategies in the case of bullying victims is nowadays an area of increasing interest however, up to this moment, the number of papers developed about this subject are not comparable to the research devoted to this topic is not comparable to the research devoted to other aspects of the bullying problem (as, for example, the intervention and prevention models, for a review consult Smith, Pepler and Rigby, 2004). Nevertheless the information available so far emphasize the need for further studies in this direction.

Studies focused on the victims have adopted several perspectives. The first one that we should mention refers to the differentiated use of

coping strategies when facing different bullying situations. In a study where the different uses of coping strategies by bullying victims were analysed, Hunter and Boyle (2004) found that females were more likely to use used more significantly social support strategies than males, whereas no differences were found between genders in the use of problem-focused strategies, avoidance or naive thinking. Nevertheless, in the same work, Hunter and Boyle (*Op. cit.*) also found that the use of the same social support seeking strategies decreased with the ages (between 9 and 14 years old) when they had to face bullying situations. Finally, they highlighted that the appraisal done by the students about the nature of the conflicting situation, both as a challenge, or as a threaten, influenced on the choice of the coping strategy. The students that appraised the problem as a challenge were likely to choose more frequently problem-focused strategies or social support seeking strategies. Strategies based on the use of naive thoughts were also used on more occasions when the students considered that the victimization experience could offer positive results.

Eslea (2001) studied the problem with a sample of 198 males and females between the ages of 11 and 15 years old. His results show that the main responses of the students to the insults were to confront, resist verbally (31%), doing nothing (21%), ignore the situation (20%) and tell somebody else (16%). Besides, at the moment of threatening, and also within the context of what is considered as verbal aggression, the main strategies used were telling somebody else (22%), ignore the situation (18%), avoid the aggressor (18%), or confronting the aggression verbally (16%) Eslea (*Op. cit.*) also collected the responses from the students upon the episodes of indirect victimization. In the presence of rumours the most common responses were to confront verbally and ignore the situation (both with 27%) tell somebody else (19%) and doing nothing (15%). When the aggression consisted of isolating the victim, the most used strategies were doing nothing (33%), ignore the situation (27%) and telling somebody else (18%). Finally, the responses to direct intimidation forms were observed. Almost one half of the students (49%) told somebody else what happened when any of their belongings were taken, whereas 13% argued with the person who stole them. In the cases of physical aggression, 42% fought with the aggressor, 25% told somebody else, and 11% avoided meeting the aggressors.

Owens, Shute and Slee (2000) also analysed the strategies with which the bullying victims respond to different forms of aggression. In this case a sample of 15-year old 54 Australian females was selected, to which a comic describing a bullying episode (by means of an indirect aggression) was shown. The students answered that the most probable response of the victim would be, in the beginning, to try to deny that the problem occurred and pretending that it did not affect them. After the initial episode, the most probable responses would be directed to escape from the situation, for example to join other groups, avoid going to School and in extreme cases, suicide. Also, he asked them about the effects that they appraised that other strategies would have. When they were asked if they thought that it

was efficient to fight the aggressor, they answered that this strategy would possibly make matters worse. Besides, they appraised that at the time of solving the conflict it would be a good response to talk to the aggressor.

In a third study, Rivers and Smith (1994) found that the students were more likely to resort to telling the problem to an adult in the case of direct aggression episodes (verbal or physical), although this was a more habitual type of aggression among males than females (as we have mentioned before, this is a type of resource more used among female students than males).

A second line of research, is focused on the analysis of psychological effects that the different strategies cause in the students (Cassidy and Taylor, 2001; Kochenderfer-Ladd and Skinner, 2002). Cassidy and Taylor (2001) explored the psychosocial effects of the different coping styles in the adolescents aged between 12 and 16 years old, who had been bullied by their fellows. Therefore, they used a questionnaire that included several dimensions (for example perceived control of the situation, confidence, tendency to approach/avoidance of the problem as a coping strategy) which combined provided a coping style score focused on problem solving. High scores in these scales were associated to low stress levels, therefore some authors suggest that coping strategies based on low scores in helplessness feelings, perception of high control, creative use of strategies, high confidence in their own abilities and the increased use of problem-centered strategies rather than avoiding ones are adaptatives. Nevertheless, the results obtained do not provide much information about the manner in which adolescents face victimization situations.

In the study of Kochenderfer-Ladd and Skinner (2002) results showed some differences between males and females (with a sample of students aged between 9 and 10 years old). Children that used more problem-solving strategies and less social support were likely to be isolated. In the case of the females, however, social isolation was associated to high levels of detachment from the problem. In the case of student females, no relationship was found between coping strategies, depression and anxiety. In the case of student males, however, high levels of detachment and externalisation used as coping strategies were associated to depression and anxiety when the boy suffered severe victimization experiences, but when victimization experiences were not very intense, the same coping style was associated to low intensity depression and anxiety traits. Kochenderfer-Ladd and Skinner (*Op. cit.*) also analysed the evaluations of the professors. Children that used more problem-centered strategies showed, according to the appraisal of the professors, less behavioural problems. Besides, females that suffered from frequent victimization episodes received poorer appraisals from their professors when they internalised their problems and sought little social support as a coping style.

Therefore, the results concerning psychological consequences of the use of different coping styles are not concluding. When long-term results are analysed, there appears to be no direct relationship between the choice of one strategy or

another and the possible effects. If, on the contrary, we refer to short-term results, it seems that more assertive and problem-oriented strategies would be more adjusting, thus enabling a better psychosocial adjustment than those who emphasize in problem-avoiding or the emotional regulation of the situation.

The third line focuses on the analysis of the efficiency of such strategies at the moment of preventing bullying episodes. McLean (1994) evaluated the effectiveness of coping strategies in 200 bullied students, therefore they were asked it, after using each one of the strategies the problem had finished, or, conversely, it continued. The most effective ones appeared to be: doing the same to the bullies (13% used it and it proved to be effective as compared to 5% that used it and the problem continued), become friends with the bullies (19% vs. 9%) and fighting the bullies (29% vs. 25%). The less effective ones were ignore the bullies (33% vs. 61%), threaten them with telling the School authorities (11% vs. 19%), hitting threats (10% vs. 17%), reporting to School (18% vs. 28%), threaten to tell the parents (10% vs. 15%), making new friends (24% vs. 35%), avoid the bullies (47% vs. 64%), tell the friends (42% vs. 54%) and tell the brothers (20% vs. 25%). In addition, other strategies were identified in which no great differences were found with relation to its effectiveness: respond to the bullies (53% vs. 58%), confront the bullies (49% vs. 53%) and showed the bullies that they were not bothered (50% vs. 46%). If we analyse the results of McLean (1994) we may observe that the most effective strategies appear to be those in which the victim actively faces the bullies, even if they are not the most used ones. Besides, the less effective ones are those that are based on threatening to the bully, avoidance and telling somebody what happens. Moreover, we may appreciate that assertive strategies as confronting the bully do not seem to be specially effective.

Following a similar methodology, Eslea (2001) assessed the effectiveness of the strategies used by bullied students between the ages of 11 and 15 years old. Eslea found that in function of the bullying forms that were used there were differences in the magnitude of the strategies. Thus, fighting with the bullies turned out to be rather efficient against name calling and threatens, and also rather efficient against, rumours, taking of personal belongings, and physical aggression. Ignoring the aggressors was the most effective against taking of personal belongings, yet it also proved effective with physical aggressions, insults and rumors. Telling what is happening to somebody else was the best strategy in cases of physical aggression, although it was also effective to prevent taking of personal belongings, threatens, name calling and rumours. Confronting the bully, as in the case of McLean's study (1994) did not prove especially successful.

Similar results were exposed by Salmivalli, Kaukianen and Lagerspetz (1996). In this case, strategies used by bullying victims aged between 12 and 13 years old were grouped in clusters. Owing to this organization three main dimensions were identified: helplessness, that included strategies like doing nothing when being bullied, telling the teacher and running away from school, counterattack, with

strategies such as verbally confronting the bully, bully others or provoke the bullies, and the indifference, where strategies such as staying calm or trying not to be affected by what is happening. Among the males, an elevated use of counterattack was associated to poorer levels of confidence in the end of the aggression. Given that in this dimension assertive and provoking strategies are included, this result, consistently with former research, could be the expected ones. Nevertheless, it would not explain why the same trend did not appear in the case of females. Besides, indifference was associated to higher expectations that the bullying problem would finish, although, this situation again was also significant for males. The explanation is not clear, although it could be partially explained by the most frequent types of aggression among males and females. Thus, the combination of more indifference and less confrontation could turn out to be very effective when facing direct forms of aggression, the most frequent ones among males (Crick y Grotpeter, 1996; Green, Richardson and Lago, 1996), therefore, in this case, males that used this coping style were perceived as more capable to cope with aggressions. Finally, helplessness appears as a set of strategies of limited use only for girls (Salmivalli et al, 1996). It would seem, therefore that they are inefficient conducts mainly when facing verbal and indirect aggressions, which are the most frequently suffered by females (Bijttebier and Vertommen, 1998; Olweus, 1994).

Smith, Talamelli, Cowie, Naylor and Chauhan (2004) in a new research, in this case focused on the self-perceived effectiveness of the strategy used by students aged between 13 and 16 years old, found that the best appraised strategies were telling somebody else what happened and making more or new friends. Both were used mainly by students who had been bullied, but did manage to stop the situation (as compared to those who were still bullied by other students). There were no differences in the use of strategies such as ignoring what happened, confront the situation, or avoiding the bully.

Finally, Wilton, Craig and Pepler (2000), following an observational methodology with 120 students between the first and sixth grade during playtime, found that coping styles used by bullied victims could be grouped in two main categories: problem-solving focused strategies or aggressive strategies. In the first group were included conducts such as: ignoring, avoiding the aggressor, consenting to the aggression or facing the situation instrumentally, that helped to reduce or solve the problem. On the contrary, the second type of strategies, where physical and verbal aggression or allowing the expression of the emotions after the aggression, used to prolong the problem.

In our work, using a retrospective type of proposition, we will try to analyse the influence of coping strategies on the long-term effects of victimization, focusing specially on a variable of psychosocial adjustment that so far has not been conveniently considered in cases associated to bullying: stress manifestation in adult life.

OBJECTIVES AND HYPOTHESIS

The first objective of our research is to evaluate the influence of different type of coping strategies used by the bullied victims on the stress experiences in adult life. In consistence with the studied quoted before, the hypothesis is that those persons who use more assertive strategies, based on problem-focusing, exhibited lower stress levels at the long-term. On the contrary, those who used avoidance strategies showed higher stress levels in adult life.

The second objective is to analyse the adjustment between the assessment of bullying situations and the used strategies, as well as the long-term effects of such combination. Our hypothesis is that the victims that showed high adjustment levels between the appraisal of the situation and the strategy used exhibited lower long-term stress levels than those who did not exhibit that adjustment.

Our third objective is to evaluate the perceptions of the adults' sample, college students, in relation with the efficiency of the coping strategies used to fight bullying situations during elementary and High School. In this case, our hypothesis is that coping strategies used for the conflicting situation will be perceived more effectively that avoiding ones.

METHOD

Participants

219 college students from the University of Seville (73 males and 146 females) of five different schools: Psychology, N=61; Journalism, N=50; Chemistry, N=22; Economics, N=38 and Architecture, N=48). The centres were randomly chosen among those included within the different fields of knowledge. Once the centres were chosen, the choice of classes was equally done at random, with he students present at that moment the classes being surveyed. The ages of the participants were between 18 and 40 years old (M=21.28; SD=2.49).

Instruments

The adaptation of Retrospective Bullying Questionnaire (RBQ, Schäfer et al., 2004) was used. The anonymous questionnaire has 46 questions divided in different sections. In the first place, they were asked about their experiences in bullying situations during primary school: forms of the received aggression, identification of the aggressors, and duration of the experiences. The second section has a structure identical to the first one, but, in this case, centered on the experiences gathered during high school.

The third section explores the experiences during Schooling, especially how the subjects fought bullying situations. Together with the identification of the main coping strategies, a question was added to gather the appraisal of the subjects about the effectiveness of their strategies ("which one of the former strategies was the most effective one to solve the situation?"). The students were allowed to choose more than one strategy for this question. In this section also a question was added to explore how the subjects appraised the bullying situations ("if you were bullied, which consequences did that cause in

your personality), as well as another one to evaluate the appraisal that the students made, including their perception of control I ("If you were bullied, did you feel that you could do something about it?"). The possible responses to these answers were taken from the tool used by Hunter and Boyle (2004) in former studies that exhibited high validation (Hunter and Boyle, 2002; 2004).

In this third section, also appears a question purporting to assess the presence of suicidal ideation associated to bullying situations. Finally, a scale was included to analyse the experiences associated to stress (adapted from Rivers, 1999): anguishing memories, nightmares, flashbacks, feeling of living again similar situations to those who were lived at school, and stress under similar situations. In a last section, the continuation of bullying experiences was explored under working conditions, which aspect had not been considered in this study owing to the low number of students with working experiences.

Most part of the answers were multiple choice among which only one answer may be chosen. In those cases where this is not the procedure it is conveniently explained in the same instrument.

Procedure

The students were administered the test during a session in a class where they were explained about the contents of the research and they were made sure about the confidential nature of their responses. Together with this information they were explained about how to fill the instrument. Those students who did not want to participate abandoned the class, yet in all the classes where the evaluation was performed only 4 students refused to answer the questions, which does not allow us to think in the presence of some undesirable effect on the data. The application of the tool only took 30 minutes.

In the coding process it was considered to eliminate those instruments in which there were no data that enabled us to identify among them with any of the involvement roles in the bullying problem.(observers, aggressors, victims, or bullied victims), but it was not necessary to eliminate anyone from the analysis. In those cases in which any option was left unanswered, that questionnaire was omitted for the joint analysis of this variable, even if that did not affect the main variables of the analysis exhibited in this study.

Data analysis

In the first place, data were analysed from a descriptive proposition in order to know the direct responses given by the students. Later on, regression models and variance analysis were performed to see the weight of different variables in the efficiency of coping strategies. This last analysis is completed with non parametrical tests to complete the analysis of the differences existing among groups. In all the analysis it was accepted, at least one $p < 0.05$ and were performed with the statistical package Spss Win 12.01.

RESULTS

The first task in the analysis of the results was to assign the students within four main

involvement roles in the bullying problem: victims, aggressors, aggressive/bullying victims, and observers (Mora-Merchán, 2001). For the identification of the victims students who were involved with certain frequency in bullying situations were recruited (at least “sometimes”, cut point established in previous studies to consider the situation as real bullying (Whitney and Smith, 1993), both in Elementary and High School, and that had perceived that the participation had “quite serious” effects. The aggressors were those students that bullied their fellows with certain frequency (the same answer choice than the victims had), again, during Elementary or High School, and that had not been chosen as victims. A third part of involved parties was the aggressive victims that fulfilled the requirements to be considered both victims and aggressors. Finally, the observers were those subjects that could not be considered as victims or aggressors in any case.

Once this identification was made, we analysed the distribution of different roles throughout the sample. The most frequent profile of the student was observed (43.69%), followed by victim (30.58%), aggressive victim (15.05%) and aggressor (10.68%). No significant differences were found between the different roles when considering the gender issue on the subjects, neither in victims nor in aggressive victims when considering their distribution in elementary, high or both schools (see table 1).

Profile	Educational Stage		
	Elementary	High	Both
Victims	33	11	19
Aggressive Victims	9	6	16
Total	42	17	35

Table 1. Distribution of the victims based on the educative stage.

Concerning the perceived use and efficiency of the different coping strategies, the two most effective appraised responses were talking to the aggressor or aggressors or ignoring the problem followed by three different ways of seeking help from others. Nevertheless, the strategies appraised as less effective were missing classes, fighting the aggressor, kidding with the situation, and avoiding conflicting situations. No significant differences were found between males and females in the sample in function of the gender when considering the responses to that question. When considering the period in which the victimization occurred (see table 2), at the moment of assessing possible influences caused by age in the use and satisfaction with the different coping strategies, we only considered the responses of those who had been victims during elementary school or high, thus eliminating in this analysis those who had suffered this experience continuously, because it was not possible to by their responses if the strategy was used in a moment, or the other, or in both of them (likewise, it was not possible to measure in those cases

if any kind of change occurred in the satisfaction for the use). In this case, some interesting differences were found (statistic could not be applied in this case owing to the low frequency reported in the cells). Seeking help from the family was considered among the most effective by all the students that used it in high school, although less than a third part of the elementary school victims had the same opinion. Ignoring the problem was appraised by more than half of the elementary school victims as a good strategy to cope with the problem. On the contrary, only 17% of high school victims considered it to be efficient. It is also worth mentioning that the responses from elementary school victims were more scattered, in other words, the students involved in bullying problems in this stage had used more strategies and all of them were considered, in general terms, as equally effective, whereas those in High School tended to appraise as efficient almost exclusively, to seek help from the others, such as friends, family or professors.

A new analysis we wanted to perform was to see if the coping strategies used in the past had any weight on the present stress experiences in our sample. Therefore, we performed a multiple regression standard analysis where we used the mean punctuation in the stress scale as the criterion variable and each one of the coping strategies as predictor variables. Results indicated that even if the use of coping strategies as a whole explained 9.8% of total variance of the criterion variable ($F_{9, 65} = 0.79$; $p > 0.05$), none of them separately behaved as an efficient predictor.

The possible relationship between the appraisal of the subjects about the bullying episodes according to their gender was valued. Square-chi tests did not show any type of significant variation. No significant differences were found when assessing the global appraisal of the situation with the educational stage during which bullying took place. Nevertheless, differences in perception of control experienced by the victims were found. In this case, the victims that were bullied during elementary school perceived higher control or mastering on the bullying episodes than the high school victims ($\chi^2(1, N = 45) = 4.14$; $p < 0.05$). Appraisal of the bullying situation and perception of control was also compared to the stress lived in adult life. Subjects that perceived higher control on bullying episodes exhibited in adult life lower levels of stress than the students with low perception control levels ($t(68, N = 70) = 3.43$; $p < 0.01$). When performing a one tail ANOVA to assess the effect of appraising a bullying situation on the experiences of adult stress also significant results appeared ($F_{2, 73} = 4.80$; $p < 0.05$). Analyses performed using the Tukey HSD test to determine the meaning of this influence, determined that the subjects in which the feeling of threatening prevailed over the challenge showed higher stress levels than those who exhibited an appraisal mainly of challenge than threaten.

A last analysis was focused on the concept of adjustment between the appraisal of the situation and the coping strategy used. The results indicated that both those who showed good adjustment and those who exhibited maladjustment did not differ

significantly in the levels of stress as adults, $t(18, N20) = -0.71; p > 0.05$.

Coping	Educational Stage				Total	
	Elementary		High School			
	Frecuency	% Effectiveness	Frecuency	% Effectiveness	Frecuency	% Effectiveness
Ignor the problem	21	57	6	17	27	48
Avoid the situation	15	27	5	0	20	20
Help from the friends	12	58	5	60	17	59
Kidding	10	20	4	0	14	14
Help from family	7	29	4	100	11	55
Talk to the aggressor	7	43	-	-	7	43
Help form the teachers	2	50	2	50	4	50
Fight the bully	2	0	1	0	3	0
Avoid going to school	1	0	-	-	1	0

Table 2. Use of strategies and valuation of the same ones according to the educative stage.

DISCUSSION AND CONCLUSIONS

The first objective of this study was to examine if the coping strategies used against bullying that the subjects used during elementary and high school had an influence on their stress experiences in adult life. Results indicated that even if as a whole they showed a certain influence, the strategies that were considered in this study did not explain the stress experiences suffered as adults. Our second objective attempted to assess if the adjustment between the evaluation of bullying situations and the strategies used affected stress manifestations in adult life. In this case, significant variations were not appreciated either. Nevertheless an initially unexpected effect was found that related the appraisal of the subjects of bullying situations and stress experiences. Thus, the subjects that perceived more control of the situation exhibited lower stress levels. The same occurred with those who perceived the conflict as a challenge and not as a threaten. Our last objective was focused on the effectiveness perceived in the different strategies. Those who attempted to cope with the problem in an active manner were assessed as the most satisfactory ones, on the contrary those who consisted of aggressive responses or avoidance ones were considered as the less efficient ones.

Contrary to what as expected, none of the measured coping strategies in this research worked as a predictor of the stress levels suffered by the subjects of our sample. This fact suggests that strategies normally used by students when solving bullying problems do not possess a protective nature, at least

concerning stress prevention of stress associated to those experiences. The same result was found by Kochenderfer-Ladd and Skinner (2002), in this case related to the apparition of anxiety and depressive traits. Nevertheless, in the same study, the same coping strategies did behave as effective predictors of psychosocial adjustment (higher social competence and less isolation).

These results are poorly conclusive as regards the design of specific intervention programs, because, even if as a whole they have proved to be effective to predict stress levels, none of the coping strategies examined in our study turned out to be efficient in terms of the protection against the long term effects of victimization. Nevertheless, given the fact that in our study we only analysed the effects on stress experiences, we understand that it is necessary to explore deeply in further studies about the possible influence of those strategies on other possible consequences as it appears on other studies (Cassidy and Taylor, 2001; Kochenderfer-Ladd and Skinner, 2002).

The importance of the adjustment of the assessment of the situation and strategies used to cope with the situation did not behave either as it was expected, because it did not show influence on the stress levels. Those results, nevertheless, should be interpreted carefully because of the small number or students that participated in the analysis. The assessment of the subjects of the bullying episodes in a double sense was relevant. On one hand, when we considered the perception of control, the victims with less perception of control on bullying episodes showed higher stress levels. On the other had,

students who considered the conflict more as a challenge than a threaten experienced lower levels of stress in adult life. Those results are coincidental with those found by Pape and Arias (1995) in women victims of domestic violence where the perception of control predicted lower stress levels associated to abuse experiences. These authors suggested that, even if the perception of control was imaginary, the stress buffering finally reinforces it. Even if the study of Pape and Arias (1995) differs from our study in the nature of the sample, the coincidence of the results invites us to think that the perception of control may be considered an efficient protector in victim populations. A possible explanation for the relationship between situation appraisal and stress levels in adult life, as challenge or threaten, would be related to the emotions of the victims when they are bullied. Hunter, Boyle and Warden (2004) pointed out that the feeling of threaten is accompanied by other emotions associated to a damage to personal image (shame, guilt, etc.), whereas this did not appear in those who perceived bullying as a challenge. It is possible therefore that those negative emotions would be the causes of subsequent stress.

A new aspect that needs to be discussed refers to coping strategies that were appraised as effective by the subjects against bullying situation. Generally, the best-appraised strategies had been those who involve facing the problem rather than avoiding (talking to the bully, seeking help from the peers, family or teachers) which reinforces the hypothesis that we stated at the beginning of the research. Nevertheless among the most valued strategies also were found ignoring the situation, an avoidance strategy. For some authors (Roth and Cohen, 1986) this type of strategy avoiding may be understood, nevertheless as an active manner of facing the problems because it supposes involves, moreover mainly in the cases of verbal aggression, so as to show the bully that bullying had little effect on him, hoping that it would stop. In the group of less appraised strategies we may also find a confronting strategy such as fighting with the aggressor. Nevertheless, this strategy is at the same time an aggressive type strategy which is associated, in the case of continued use, to the creation of more problems, than he could handle at a given time. (Fournet et al., 1998; Olafsen and Viernerö, 2000).

A last aspect that we may highlight are the possible limitations that the retrospective methodology may have caused when exploring bullying experiences it is evident than the memories of conducts and ideas about event that took place between 10 and 20 years ago may not be as precise as we may like desired. Nevertheless there is evidence from previous research (Brewin, Andrews and Gotlieb, 1993; Schäfer et al., 2004) that the retrospective cut studies should not be considered as less reliable. Besides, in absence of longitudinal design studies research as this one are an efficient way to study victimization effects in psychosocial adjustment during adult life.

It seems clear that the results obtained in this research where some variables as for example the assessment of bullying episodes have shown influence on adult life stress, that deserve needs to be continued in this line by enlarging the studied

samples, as well as analysing the influence of the factors included in this study, or other so the same relevance, have on other key aspects for the psychosocial adjustment of bullied victims in adult life such (as for example, friendship relations, affective bonds, self esteem etc.).

REFERENCES

- Alsaker, F.D. y Olweus, D. (1993). Global self-evaluations and perceived instability of self in early adolescence: A cohort longitudinal study. *Scandinavian Journal of Psychology*, 34, 47-63.
- Bijttebier, P. y Vertommen, H., (1998). Coping with peer arguments in school age children with bully/victim problems. *British Journal of Educational Psychology*, 68, 387-394.
- Boulton, M.J. y Smith, P.K. (1994) Bully/victim problems in middle-school children: Stability, self-perceived competence, peer perceptions and peer acceptance. *British Journal of Developmental Psychology*, 12, 315-329.
- Bowlby, J. (1973). *Attachment and loss* (Vol. 2. Separation). New York: Basic Books
- Brewin, C.R., Andrews, B. y Gotlieb, I.H. (1993). Psychopathology and early experience: A reappraisal of retrospective reports. *Psychological Bulletin*, 113, 82-98.
- Bruder-Mattson, S.F. y Hovanitz, C.A. (1990). Coping and attributional styles as predictors of depression. *Journal of Clinical Psychology*, 46, 557-565.
- Callaghan, S. y Joseph, S. (1995). Self-concept and peer victimization among schoolchildren. *Personality and Individual Differences*, 18 (1), 161-163.
- Cammack-Barry, T. (2005). Long-term impact of elementary school bullying victimization on adolescents. *Dissertation Abstracts International: Section B: The Sciences and Engineering*, 65(9-B), 4819.
- Cassidy, T. y Taylor, L. (2001). *Bullying, coping and psychological distress in older children*. Poster session presented at the British Psychological Society Centenary annual conference, SECC, Glasgow, UK.
- Cillessen, A. H. N. y Bellmore, A. D. (1999). Accuracy of social self-perceptions and peer competence in middle childhood. *Merrill-Palmer Quarterly*, 45, 650-676.
- Crick, N.R. y Grotpeter, J.K. (1996). Children's treatment by peers: Victims of relational and overt aggression. *Development and Psychopathology*, 8, 367-380.
- Crook, W.L. (2000). Understanding attachment security in family context. *Journal of Personality and Social Psychology*, 78, 285-294.
- Dumont, M. y Provost, M.A. (1999). Resilience in adolescents: Protective role of social support, coping

- strategies, self-esteem, and social activities on experience of stress and depression. *Journal of Youth and Adolescence*, 28, 343-363.
- Eslea, M. (2001). *School bullying: Severity, distress and coping*. Paper presented at the British Psychological Society Centenary annual conference, SECC, Glasgow, UK.
- Eslea, M., Menesini, E., Morita, Y., O'Moore, M., Mora-Merchán, J.A., Pereira, B., Smith, P.K. y Wenxin, Z. (2004). Friendship and Loneliness Among Bullies And Victims: Data From Seven Countries. *Aggressive Behavior*, 30, 71-83.
- Folkman, S. (1984). Personal control and stress and coping processes: A theoretical analysis. *Journal of Personality and Social Psychology*, 46, 839-852.
- Folkman, S., Lazarus, R.S., Dunkel-Schetter, C., DeLongis, A. y Gruen, R.J. (1986). Dynamic of stressful encounter: Cognitive appraisal, coping, and encounter outcomes. *Journal of Personality and Social Psychology*, 50, 992-1003.
- Fournet, D.L., Wilson, K.L. y Wallander, J.L. (1998). Growing or just getting along? Technical and adaptive competence in coping among adolescents. *Child Development*, 69, 1129-1144.
- Frydenberg, E. (ed.) (2002). *Beyond coping: Meeting goals, visions, and challenges*. New York, NY: Oxford University Press.
- Gilmartin, B. G. (1987). Peer group antecedents of severe love-shyness in males. *Journal of Personality*, 55, 467-488.
- Green, L.R., Richardson, D.R. y Lago, T. (1996). How do friendship, indirect, and direct aggression relate? *Aggressive Behavior*, 22, 81-86.
- Harter, S. (1998). The development of self representations. En W. Damon (Series Ed.) y N. Eisenberg (Vol. Ed.), *Handbook of child psychology: Vol. 3. Social, emotional, and personality development* (5th ed.) (pp 553-617). New York: Wiley.
- Hawker, D. S. J. y Boulton, M. J. (2000) Twenty years research on peer victimization and psychosocial maladjustment: A meta-analytic review of cross-sectional studies. *Journal of Child Psychology and Psychiatry*, 41, 441-455.
- Hoover, J.H., Oliver, R. y Hazler, R.J. (1992). Bullying: Perceptions of adolescent victims in the Midwestern USA. *School Psychology International*, 13, 5-16.
- Hugh-Jones, S. y Smith, P.K. (1999). Self-reports of short- and long-term effects of bullying on children who stammer. *Journal of Educational Psychology*, 69, 141-158.
- Hunter, S.C. y Boyle, J.M.E. (2002). Perceptions of control in the victims of school bullying: The importance of early intervention. *Educational Research*, 44, 323-336.
- Hunter, S.C. y Boyle, J.M.E. (2004). Appraisal and coping strategy use in victims of school bullying. *British Journal of Educational Psychology*, 74, 83-107.
- Hunter, S.C.; Boyle, J.M.E. y Warden, D. (2004). Help seeking amongst child and adolescent victims of peer-aggression and bullying: The influence of school-stage, gender, victimization, appraisal, and emotion. *British Journal of Educational Psychology*, 74, 375-390.
- Ingledeu, D.K., Hardy, L. y Cooper, C.L. (1997). Do resources bolster coping and does coping buffer stress? An organizational study with longitudinal aspect and control for negative affectivity. *Journal of Occupational Health Psychology*, 2, 118-133.
- Janson, G.R. y Hazler, R.J. (2004). Trauma reactions of bystanders and victims to repetitive abuse experiences. *Violence-and-Victims*, 19, 239-255.
- Kaltiala-Heino, R., Rimpela, M., Marttunen, M., Rimpela, A. y Rantanen, P. (1999). Bullying, depression, and suicidal ideation in Finnish adolescents: School survey. *British Medical Journal*, 319, 348-351.
- Kliewer, W., Fearnow, M.D. y Walton, M.N. (1998). Dispositional, environmental, and context-specific predictions of children's threat perceptions in everyday stressful situations. *Journal of Youth and Adolescence*, 27, 83-100.
- Kochenderfer, B.J. y Ladd, G.W. (1996). Peer victimization: Cause or consequence of school maladjustment? *Child Development*, 67, 1305-1317.
- Kochenderfer-Ladd, B.J. y Skinner, K. (2002). Children's coping strategies: Moderators of the effects of peer victimization? *Developmental Psychology*, 38, 267-278.
- Kochenderfer-Ladd, B. y Wardrop, J. L. (2001). Chronicity and instability of children's peer victimisation experiences as predictors of loneliness and social satisfaction trajectories. *Child Development*, 72, 134-151.
- Kristensen, S.M. y Smith, P.K. (2003). The use of coping strategies by Danish children classed as bullies, victims, bully/victims, and not involved, in response to different (hypothetical) types of bullying. *Scandinavian Journal of Psychology*, 44, 479-488.
- Lazarus, R.S. y Folkman, S. (1984). *Stress, appraisal, and coping*. New York: Springer-Verlag.
- Lazarus, R.S. y Launier, R. (1978). Stress-related transactions between person and environment. En L.A. Pervin y M. Lewis (Eds.), *Perspectives in interactional psychology* (pp 287-327). London: Plenum Press.
- Matsui, T., Tsuzuki, Y., Kakuyama, T. y Onglatco, M.L. (1996). Long-term outcomes of early

- victimization by peers among Japanese male university students: Model of a vicious cycle. *Psychological Reports*, 79, 711-720.
- McLean, A.V. (1994). *Bullying survey in Strathclyde Region*. Glasgow North East Psychological Service, Strathclyde Regional Council.
- Mills, C., Guerin, S., Lynch, F., Daly, I. y Fitzpatrick, C. (2004). The relationship between bullying, depression and suicidal thoughts/behaviour in Irish adolescents. *Irish Journal of Psychological Medicine*, 21, 112-116.
- Mora-Merchán, J.A. (2001). *El fenómeno bullying en las escuelas de Sevilla*. Tesis Doctoral no publicada. Universidad de Sevilla
- Newman, M.L.; Holden, G.W. y Delville, Y. (2005). Isolation and the stress of being bullied. *Journal of Adolescence*, 28, 343-357.
- Olafsen, R.N. y Viemerö, V. (2000). Bully/victim problems and coping with stress in school among 10- to 12-year-old pupils in Åland, Finland. *Aggressive Behavior*, 26, 57-65.
- Olweus, D. (1978). *Aggression in the Schools: Bullies and Whipping Boys*. Washington D.C.: Hemisphere.
- Olweus, D. (1994). Annotation: Bullying at school: Basic facts and effects of a school based intervention program. *Journal of Child Psychology and Psychiatry*, 35, 1171-1190.
- Ortega, R. (1998). Violencia, agresión y disciplina. En I. Fernández (ed.): *Prevención de la violencia y resolución de conflictos* (pp 19-29). Madrid: Narcea.
- Owens, L., Shute, R. y Slee, P. (2000). "Guess what I just heard!": Indirect aggression among teenage girls in Australia. *Aggressive-Behavior*, 26, 67-83.
- Pape, K.T. y Arias, I. (1995). Control, coping, and victimization in dating relationships. *Violence and Victims*, 10, 43-54.
- Rivers, I. (1999). *The long-term consequences of peer victimization for gay, lesbian and bisexual adults*. Tesis Doctoral no publicada. Roehampton Institute.
- Rivers, I. y Smith, P. K. (1994). Types of bullying behaviour and their correlates. *Aggressive Behavior*, 20, 359-368.
- Roland, E. (2002). Bullying, depressive symptoms and suicidal thoughts. *Educational Research*, 44, 55-67.
- Roth, S. y Cohen, L.J. (1986). Approach, avoidance, and coping with stress. *American Psychologist*, 41, 813-819.
- Salmivalli, C., Kaukiainen, A. y Lagerspetz, K.M.J. (1996). How do the victims respond to bullying? *Aggressive Behavior*, 22, 99-109.
- Salmivalli, C., Lagerspetz, K.M.J., Björkqvist, K., Österman, K. y Kaukiainen, A. (1996). Bullying as a group process: Participant roles and their relations to social status within the group. *Aggressive Behavior*, 22, 1-15.
- Sato, K., Ito, I., Morita, S., Akaboshi, K. et al. (1987). Neuroses and psychosomatic syndromes of the bullied children. *Japanese Journal of child and Adolescent Psychiatry*, 28, 110-115.
- Schäfer, M., Korn, S., Smith, P.K., Hunter, S.C., Mora-Merchán, J.A., Singer, M.M. y van der Meulen, K. (2004). Lonely in the crowd: Recollections of bullying. *British Journal of Developmental Psychology*, 22, 379-394.
- Slee, P.T. (1995). Bullying in the playground: The impact of inter-personal violence on Australian children's perceptions of their play environment. *Children's Environments*, 12, 320-327.
- Smith, G. (1991). *Safer schools: Safer cities*. Unpublished Report, Wolverhampton Education Department.
- Smith, P.K. (1989). *The Silent Nightmare: Bullying and Victimization in School Peer Groups*. Comunicación presentada en el congreso anual de la British Psychological Society. London.
- Smith, P.K., Pepler, D. y Rigby, K. (eds.) (2004). *Bullying in schools. How successful can interventions be?*. Cambridge: Cambridge University Press.
- Smith, P. K., Singer, M., Hoel, H. y Cooper, C. (2003). Victimization in the school and the workplace: Are there any links? *British Journal of Psychology*, 94, 175-188.
- Smith, P.K., Talamelli, L., Cowie, H., Naylor, P. y Chauhan, P. (2004). Profiles of non-victims, escaped victims, continuing victims and new victims of school bullying. *British Journal of Educational Psychology*, 74, 565-581.
- Whitney, I. y Smith, P.K. (1993). A survey of the nature and extent of bullying in junior/middle and secondary schools. *Educational Research*, 35, 3-25.
- Wilton, M.M.M., Craig, W.M. y Pepler, D.J. (2000). Emotional regulation and display in classroom victims of bullying: Characteristic expressions of affect, coping styles and relevant contextual factors. *Social Development*, 9, 226-245.