Prevalence of strategies for coping with daily stress in children

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Abstract

Background: The study of coping strategies in children guarantees quality of life from childhood onwards. The present paper aims to determine the prevalence of coping strategies for three everyday problems in children, while examining sociodemographic variables, context variables, and teacher assessment. Method: The sample is composed of 7,058 school children aged between 8 and 13 years old. Results: Results show a higher prevalence of the Active Solution strategy at home and in school contexts compared with the health area, where the Active Solution is the least prevalent strategy, and Concealing the Problem the most widely used, followed by Passivity. Other highly prevalent strategies in the school context include Search for Information, Emotion, and Social Support. In general, regardless of the context, Behavioural Avoidance and Passivity are the least prevalent strategies, whereas Active Solution is the most prevalent one, followed by Emotion. The last two: Active Solution and Emotion - are part of two main coping styles suggested in a number of studies on which these results are based, which will be compared and discussed in this study. Conclusions: The present study allows us to extract relevant epidemiological information on strategies used to cope with everyday problems related to health, family, and school, in a sample of socially well-adapted and psychologically healthy Spanish school children. The data obtained can be useful in an increasing number of situations and contexts, both for diagnostic purposes and for psycho-educational orientation and intervention.

Keywords: Coping, school, coping strategies, children, prevalence, problems.

Coping skills guarantee a healthy lifestyle and quality of life (Goldberger & Breznitz, 1993). Coping is considered to be an effective response to the demands of daily stressors. This study assesses how children cope with daily stress, which is understood in terms of demands and disappointments of everyday life that can negatively affect the emotional development of schoolchildren (Morales-Rodríguez & Trianes, 2012; Morales-Rodríguez et al., 2012; Richaud de Minzi & Iglesias, 2013; Trianes, Blanca, Fernández-Baena, Escobar, & Maldonado, 2011). Previous research shows that daily stress has greater negative effects than chronic stress or negative life events (Lu, 2010; Valentine, Buchanan, & Knibb, 2010; Wagner, Compas, & Howell, 1988). Daily stressors in childhood are grouped into three main areas: school and peers (e.g., getting bad grades, being teased by peers), health (e.g., illness) and family (e.g., fights with siblings) (Morales-Rodríguez & Trianes, 2012; Trianes et al., 2011).

There are several definitions of coping. Lazarus (1966) considers it to be a process that is activated when a threat is perceived, aimed at regulating emotional conflict and eliminating stress or negative life events (Lu, 2010; Valentine, Buchanan, & Knibb, 2010; Wagner, Compas, & Howell, 1988). Daily stressors in childhood are grouped into three main areas: school and peers (e.g., getting bad grades, being teased by peers), health (e.g., illness) and family (e.g., fights with siblings) (Morales-Rodríguez & Trianes, 2012; Trianes et al., 2011).

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such threat. Further studies (Lazarus & Folkman, 1984) suggest that there is a relationship between stress and coping, where the latter is considered to be the appropriate response to stress. Coping is thus defined as “constantly changing cognitive and behavioural efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person” (p.164). Lazarus’ transactional approach is widely accepted by current experts on coping strategies (Frydenberg, 2004; García, 2010; Griffith, Dubow, & Ippolito, 2000; Halpern, 2004).

Coping strategies are defined as conscious and voluntary efforts to regulate emotions, behaviours, cognitions and psychophysiology and environment variables in response to the stress of everyday events (Compas, Connor-Smith, Saltzman, Tombsen, & Wadsworth, 2001; Frydenberg & Lewis, 1993; Trieres, 2002). With regard to the types of coping strategies, Lazarus and Folkman (1984) initially distinguish between coping strategies that focus on the problem (changing or managing the source of the problem by finding an active solution) and coping strategies focused on reducing emotion. In their internationally accepted typology, Frydenberg and Lewis (1996) distinguish three basic styles: (a) To focus on the problem, which includes: solving the problem, working hard to achieve results, focusing on the positive aspects, seeking relaxing diversions and physical recreation; (b) Reference to others, which includes: seeking social support, investing in close friends, seeking to belong, social action, seeking spiritual support and seeking professional help; (c) Non-productive coping, consisting of: worrying, wishful thinking, not dealing with the problem, reducing the tension, ignoring the problem, self-blaming and keeping to oneself. Another currently accepted approach (Brandstädter & Renner, 1990) distinguishes between primary control or assimilation (adjustments to adapt to a stressful situation according to perceived constraints, in an attempt to influence events or objective conditions) and secondary control or accommodating (behaviour aimed at maximizing adjustment to current conditions by adapting or accommodating goals, desires and beliefs in order to conform to the current situation). It is noteworthy that not every child who activates a coping process uses an adaptive strategy (Seiffge-Krenke et al., 2012).

The use of different strategies produces different results of adaptation and mental health. Thus, many authors detect a relationship between the employed strategies, stressful situations and the prediction of psychopathology and maladjustment or, conversely, of mental health in children (Compas, Orosan, & Grant, 1993; Lapointe & Marcotte, 2000; Seiffge-Krenke, 2000). In fact, some of these studies find that the use of productive and effective strategies to cope with problems from school life or deterioration of interpersonal relationships is associated with favourable outcomes of socio-emotional adaptation and a greater adaptation and psychological well-being (Cappa, Moreland, Conger, Dumas, & Conger, 2011; González, Montoya, Casullo, & Bernabeu, 2002), and may reduce the probability of disease and increase the likelihood of achieving and maintaining high standards of health and quality of life (Folkman & Moskowitz, 2004). By contrast, non-productive or maladaptive strategies are associated with emotional maladjustment, including symptoms of anxiety and depression (Lapointe & Marcotte, 2000; Morales & Trieres, 2010; Seiffge-Krenke, 2000; Wright, Banerjee, Hoek, Rieffe, & Novin, 2010), and also with social-emotional and school maladjustment (Seiffge-Krenke, 2000; Wadsworth & Compas, 2002). In particular, some studies (Morales-Rodríguez & Trieres, 2012; Seiffge-Krenke & Stemmler, 2002) find that problem-avoidance strategies are often associated with symptoms of depression and high levels of self-reported aggressive behaviour and anxiety.

With regards to the aim of this study, that is, epidemiological research of coping strategies, some studies can be taken as a reference: Dávila and Guarino (2001) studied a sample of 28,973 Venezuelan schoolchildren aged between 8 and 16 years (the final sample was composed of 2,121 children, of whom 51.8% were girls) who were moderately stressed both in terms of frequency and intensity. The main sources of stress encountered were those that threatened their well-being or that of their families, together with “getting bad grades”. The most frequently used strategies to deal with specific stressors were active coping, showing emotion, acceptance and seeking social support. Further epidemiological studies were conducted with adolescents, unlike the sample of this study, aged 8 to 12 years old. Figueroa, Contini, Lacunza, Levín, and Estévez (2005) found that the most frequently used coping strategies (in descending order) by 150 Argentinean students aged 13 to 18 years old from a middle-class socioeconomic context were as follows: (a) worrying, (b) seeking relaxing diversions, (c) focusing on the positive aspects, (d) seeking to belong, and (e) physical recreation. Girls mostly used: wishful thinking, seeking social support, seeking spiritual support, self-blame, lack of coping and reducing tension; whereas boys mostly used: physical recreation and ignoring the problem. Likewise, the study found that adolescents with low levels of psychological well-being used lack of coping, reducing tension and self-blame to a greater extent than adolescents with high levels of psychological well-being, who used coping strategies aimed at solving the problem.

Gómez-Fraguela, Luengo, Romero, Villar, and Sobral (2006) studied coping strategies in a sample of 371 secondary school students, of whom 53.2% were boys, aged 11 to 15 years old. The most used coping strategies by both sexes were as follows (in this order): physical recreation, seeking relaxing diversions, investing in close friends and worrying. The least used coping strategies by both sexes were (in this order): seeking spiritual support, not dealing with the problem, ignoring the problem and reducing tension. The above-mentioned data is similar to that obtained by González et al., (2002) which examined coping strategies in 417 adolescents aged between 15 and 18 years old and their association with psychological well-being, as well as the impact of age and sex. The study concludes that adolescents of both sexes with high levels of well-being use coping styles aimed at solving the problem to a great extent. By contrast, adolescents of poor well-being show a non-productive coping style. Coping, age and well-being are therefore barely associated.

Another recent study (Wong, 2015) analysed strategies for coping with school problems in a sample of 53 children (22 boys and 31 girls) aged 6 to 7 years-old. The study found that the most commonly used strategies (in descending order) were as follows: 1) Strategies of active solution of the problem, 2) Search for information and social support and 3) Strategies involving emotional support. This study highlights the importance of promoting strategies directly focused on solving the problem, strategies involving emotional support, improving interpersonal relationships and adopting a positive approach to the problem.

Having mentioned the above studies, further studies are still required to evaluate young ages. The present study deals with an epidemiological assessment of students aged between 8 and 12
years old. This group age has been less studied and may have a greater variety of coping strategies according to each problem, for two reasons: 1) children have less social knowledge of coping strategies than adolescents; and 2) children are still not affected by the social uniformity that affects most adolescents. This paper aims to examine a wide sample of children from all Andalusian cities with the purpose of conducting an epidemiological analysis of the way they cope with daily stress, finding out the prevalence of coping strategies used in relation to three everyday problems, and describing socio-demographic, context and teacher assessment’s variables.

Method

Participants

The sample consisted of 7,058 subjects with a mean age of 10.52 years old (SD = 1.22). The minimum age was 8 and the maximum was 13. 48.7% of students (n = 3,434) were girls and there were 11 missing data. The type of sampling was incidental. The sample was gender-balanced. Students with special education needs (disabilities or severe behavioural disorders) were excluded from the sample. Some other students were excluded due to lack of data.

Instruments

1) Set of Items on Coping for Children: A set of items aimed at collecting children’s coping strategies was used to conduct the epidemiological study (Morales, 2005; Morales et al., 2012). The item content was extracted from the work of the research team as well as from current theoretical reviews on coping in childhood and adolescence (Morales et al., 2012). A pilot study (900 subjects) was conducted in order to detect potential difficulties of understanding in item wording. Difficulties were dealt with. The final set consisted of 20 items that assess the coping strategies that arose in the face of three problems related to family, health, school tasks and peers. Students had to indicate whether or not they use seven specific strategies to solve three types of problems of their everyday life (0 = I don’t do it; and 1 = I do it): Active Solution, Passivity, Search for Information, Emotion, Behavioural Avoidance, Social Support and Keeping the Problem to Oneself/Concealing the Problem. Items whose discrimination indices were too low (well below .30) were removed. Likewise, the general items that could belong to several coping strategies at the same time were also excluded from the epidemiological analysis. The final set of items that was selected represents the background for a published scale, the Coping Scale for Children (EAN, “Escala de Afrontamiento en Niños”, as it is known in Spanish), which includes some of these items (Morales-Rodríguez et al., 2012). This published instrument presents evidence of external validity in relation to other instruments on children’s daily stress and maladaptation.

2) Questions answered by the teacher. The study used questions referred to students’ date of birth, sex, age, distribution by city, type of school, school timetable, parents’ occupation and level of education, and number of people living at home. Additionally, the study used a template designed by

Research Group HUM-378 from the Andalusian Research Plan. The template was to be completed by teachers and assessed social and schoolwork skills in students (Muñoz, Trianes, Jiménez, Sánchez, & García, 1996). The template has proven to be correlated to sociometric measures (Trianes et al., 2002).

Procedure

117 Andalusian public schools were assessed with the help from the area of Education of CCOO (“Comisiones Obreras”, a Spanish Trade Union), which published a “call for participating schools” on their website, where instructions were provided for teachers to fill out the template and administer the set of items to their students. Prior to administering the instruments, each participating school informed parents about this study, making it clear that participation was voluntary and the all data would remain confidential. Questionnaires with the items were completed in the classroom during school hours. After two weeks, teachers either posted or handed in the completed tests at the Faculty of Psychology and Educational Sciences, at the University of Malaga.

Data analysis

The univariate descriptive statistics of the sample were presented according to their sociodemographic characteristics: sex, age, distribution by city, type of school, school timetable, parents’ occupation and level of education, and number of people living at home. Teachers’ assessments of social competence and schoolwork skills were also included. Estimates of the prevalence of each coping strategy were shown, to a confidence level of 95%. Confidence intervals for proportions were calculated using the following SPSS Macro to generate 95% confidence intervals. Data were entered and processed by using the SPSS-PC-V.17.

Results

A descriptive analysis of coping strategies was used in this epidemiological study (Table 1).

Percentages were extracted from sociodemographic data such as: type of city, school variables (type of school, school timetable, level of education), social competence reported by teachers, schoolwork skills reported by teachers and parents’ occupation (Tables 2 and 3).

<table>
<thead>
<tr>
<th>Table 1</th>
<th>Descriptive statistics of the coping strategies used in this epidemiological study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategy</td>
<td>N</td>
</tr>
<tr>
<td>Active solution</td>
<td>7035</td>
</tr>
<tr>
<td>Passivity</td>
<td>7034</td>
</tr>
<tr>
<td>Search for information</td>
<td>7035</td>
</tr>
<tr>
<td>Emotion</td>
<td>7035</td>
</tr>
<tr>
<td>Behavioural avoidance</td>
<td>7035</td>
</tr>
<tr>
<td>Social support</td>
<td>7035</td>
</tr>
<tr>
<td>Keeping the problem to oneself</td>
<td>7035</td>
</tr>
</tbody>
</table>
Regarding the aim of exploring the prevalence of strategies for coping with daily stress in children, Tables 4, 5 and 6 below show the most relevant data per area or problem, and Table 7 presents the final analysis of the prevalence of coping strategies in general terms, regardless of the context.

In the area of health and psychosomatic problems, the prevailing strategy is Other Strategies (.70). It is estimated to range between 0.69 and 0.71 at a 95% confidence level, with similar content as "keeping the problem to oneself" and "concealing the problem", among others, followed by the Passivity strategy (.50), with a 95% CI [0.49, 0.51]. The Active Solution is the least prevailing strategy in the area of health, with a prevalence of .22, ranging between 0.21 and 0.23 with a 95% confidence level.

In the school context, the prevailing strategy is the Active Solution (.93), which is estimated to range between .92 and .93 at a 95% confidence level, followed by Search for Information (.85, 95% CI [.85, .86]), Expertise (.85, 95% CI [.84, .86]) and Social Support (.94, 95% CI [.94, .95]). The least prevailing strategy is Passivity (.06, 95% CI [0.06, 0.07]).

Table 2
Frequency and percentage according to city and school variables

<table>
<thead>
<tr>
<th>City</th>
<th>no.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Almeria</td>
<td>476</td>
<td>6.7</td>
</tr>
<tr>
<td>Cadiz</td>
<td>1064</td>
<td>15.1</td>
</tr>
<tr>
<td>Cordoba</td>
<td>610</td>
<td>8.6</td>
</tr>
<tr>
<td>Granada</td>
<td>764</td>
<td>10.8</td>
</tr>
<tr>
<td>Huelva</td>
<td>547</td>
<td>7.8</td>
</tr>
<tr>
<td>Jaen</td>
<td>891</td>
<td>12.6</td>
</tr>
<tr>
<td>Malaga</td>
<td>1094</td>
<td>15.5</td>
</tr>
<tr>
<td>Seville</td>
<td>1612</td>
<td>22.8</td>
</tr>
</tbody>
</table>

Table 3
Frequency and percentage according to parents' professional occupation and level of education

<table>
<thead>
<tr>
<th>Father's level of education</th>
<th>no.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>No education</td>
<td>1256</td>
<td>22.1</td>
</tr>
<tr>
<td>Primary Education</td>
<td>3099</td>
<td>54.5</td>
</tr>
<tr>
<td>Baccalaureate/VT</td>
<td>813</td>
<td>14.3</td>
</tr>
<tr>
<td>Undergraduate Diploma</td>
<td>286</td>
<td>5</td>
</tr>
<tr>
<td>Graduate Degree</td>
<td>229</td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mother’s Level of Education</th>
<th>no.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Education</td>
<td>1283</td>
<td>22.2</td>
</tr>
<tr>
<td>Primary Education</td>
<td>3217</td>
<td>55.5</td>
</tr>
<tr>
<td>Baccalaureate/VT</td>
<td>815</td>
<td>14.1</td>
</tr>
<tr>
<td>Undergraduate Diploma</td>
<td>317</td>
<td>5.5</td>
</tr>
<tr>
<td>Graduate Degree</td>
<td>160</td>
<td>2.8</td>
</tr>
</tbody>
</table>

Table 4
Prevalence of coping strategies in the area of health and psychosomatic problems

<table>
<thead>
<tr>
<th>no.</th>
<th>Strategy</th>
<th>Estimate</th>
<th>Confidence interval 95%</th>
</tr>
</thead>
<tbody>
<tr>
<td>7035</td>
<td>Active solution</td>
<td>.22</td>
<td>.21 to .23</td>
</tr>
<tr>
<td>7035</td>
<td>Passivity</td>
<td>.50</td>
<td>.49 to .51</td>
</tr>
<tr>
<td>7035</td>
<td>Search for information</td>
<td>.37</td>
<td>.36 to .38</td>
</tr>
<tr>
<td>7035</td>
<td>Emotion</td>
<td>.37</td>
<td>.36 to .38</td>
</tr>
<tr>
<td>7035</td>
<td>Behavioural avoidance</td>
<td>.25</td>
<td>.24 to .26</td>
</tr>
<tr>
<td>7035</td>
<td>Keeping the problem to oneself</td>
<td>.70</td>
<td>.69 to .71</td>
</tr>
</tbody>
</table>

OP = Open-Plan, PEAC= Preferential Educational Attention Centre
In the family context, the prevailing strategy is Active Solution (.84). It is estimated to range between .83 and .84 at a 95% confidence level, followed by the Emotion strategy (.75), 95% CI [0.74,0.76]. As observed in Table 6, the least prevailing strategy in the family context is Passivity (.16), 95% CI [0.16, 0.17].

In general terms—that is, regardless of the context—the prevailing strategy is Active Solution (.93), which is estimated to range between .92 and .93 at a 95% confidence level, followed by the Emotion strategy (.83), 95% CI [0.82,0.84]. As observed in Table 7, the least prevailing strategy in general terms is Behavioural Avoidance (.44), 95% CI [0.44, 0.46].

Discussion

This study aimed at analysing the prevalence (per problem) of strategies for coping with daily stress in children; namely health, school/peers and family, as well as in general terms, regardless of the context. The most prevalent coping strategies regardless of the context were Active Solution and Emotion. Both strategies belong to the two main coping styles suggested by Lazarus and Folkman (1984) in their transactional model, in line with further studies (Frydenberg & Lewis, 1996). Likewise, the Emotion strategy seems to be common among children, all the more so due to the fact that it is in the family context where this strategy is highly prevalent.

Results from the analysis of prevalence in the area of health showed that the most prevalent strategies were as follows: (a) Other Strategies (including “concealing the problem”, among others) and (b) Passivity. In childhood, the former (including “concealing the problem”) is associated with a poor psychological well-being (González et al., 2002; Morales-Rodríguez & Trianes, 2012).

Passivity is associated with the perception of not being able to do anything to address the problem (Arlarón, Vinet, & Salvo, 2005; Fantin, Florentino, & Correché, 2005; Morales-Rodríguez, & Trianes, 2012). Indeed, children are less likely to feel empowered and capable of addressing a health problem than adults. However, the above-mentioned limited coping and high passivity are associated at all ages with a risk of depression and other internalised symptomatology (Compas, Connor-Smith, & Jaser, 2004). The strategies of “concealing the problem”, “keeping the problem to oneself” and “passivity” are also present in other typologies within what is considered unproductive coping (Connor-Smith, Compas, Wadsworth, Tomsen, & Saltzman, 2000; Frydenberg & Lewis, 1993; Morales-Rodríguez et al., 2012). It is not surprising that the aforementioned strategies emerge in the area of health, where children perceive they are less likely to act and more dependent on decisions made by adults.

By contrast, one of the most prevalent strategies in the areas of school and family is the Active Solution. Together with Search for Information, which is the second most prevalent strategy in the school context in this study, they are considered to be strategies aimed at solving the problem (Griffith et al., 2000; Morales-Rodríguez et al., 2012; Wadsworth & Compas, 2002), falling within the category of productive coping (Morales-Rodríguez et al., 2012; Pincus & Friedman, 2004; Seiffge-Krenke et al., 2010). Empirical evidence shows that strategies of active solution of the problem are related to high adaptation and psychological adjustment (Connor-Smith & Compas, 2002; Hampel & Petermann, 2006; Morales-Rodríguez et al., 2012; Seiffge-Krenke 2000; Seiffge-Krenke et al., 2012). In the family context, Emotion is also highly prevalent. Indeed, it is in a family context where children feel most relaxed and free to express their emotions as a means of getting things and attention from adults. Families also show affection and care for children, so it is the context where they can unleash their emotions without fear of reprisal or retaliation as would occur at school.

The general pattern observed regardless of the context shows that Active Solution and Emotion are the prevailing strategies, which are indicative of a healthy lifestyle, in line with the childhood ages studied. Emotion here should not be seen as lack of regulation or excess of emotion, but as regarded from the perspective of Emotional Intelligence. Managing emotions competently seems to be positive for child development, and includes using positive coping strategies to deal with children’s everyday problems. It can even help problem-solving, as Emotion often increases the significance of problems and the strategies used on demand (Bisquerra, 2008; Martínez, Piqueras, & Inglés, 2011; Mestre, Samper, Tur-Porcar, Richaud de Minzi, & Mesurado, 2012). Behavioural Avoidance is the least prevalent strategy in the general pattern, revealing that the studied sample does no longer have the labile nature of small children and does not get easily distracted nor go off-topic when facing a problem that needs to be solved.
The study has used a sample of socially well-adapted children, as most of them have been considered as such by their teachers. The sample was characterised as outgoing and shy, with a low percentage of leaders and aggressive children. With regard to the assessment of their schoolwork skills, most children were collaborative. To a lesser extent, there was a high percentage of passive and restless children, in line with two current typologies that can be found at schools: (a) unmotivated, passive students who do not complete tasks effectively, and (b) restless young students who do not do well in school because of their being in constant motion, which is often associated with attention problems (Condemarín, Gorostegui, & Milicic, 2005).

Limitations of this study include having to use teachers’ questions on social relationships in students and how students worked in class. At the time of writing this article, there was no instrument available on the Spanish market that was considered appropriate (in terms of brevity and clarity) to be filled out by teachers.

To conclude, this study is of interest, as it allows professionals to get relevant epidemiological information on coping strategies used by children to face everyday problems related to health, family and school in a socially well-adapted and psychologically healthy sample of Spanish schoolchildren. The data obtained can be useful in an increasing number of situations and contexts, both for diagnostic purposes as well as for psycho-educational orientation and intervention. This information was required for designing a new instrument on children coping, which has already been published: Morales et al., (2012).

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