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CHILDREN'S COPING WITH SCHOOL - RELATED AND ILLNESS - RELATED STRESSORS

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SUMMARY

A new self report measure of children's coping was administered in class-group format to 250 children in fifth to eighth grades. Subjects were asked to rate how often they used each coping behaviour (Frequency Scale) and how effective (Effectiveness Scale) they find them to be in their efforts to deal with two most common problems described by children: illness- related problems and school - related problems.

The differences in specific stressors and coping strategies were examined according to discrete coping categories (assistance seeking, cognitive-behavioural problem solving, cognitive and behavioural avoidance, etc.).

Data on sex and grade differences in coping are presented.

Clinicians might benefit from routine screening of coping with illness - related stressors in children. Prevention and treatment of school related and illness related problems requires helping children changing the methods they use to cope with stressors.

A I M S

The purpose of this study was to extend our knowledge of coping in children.

1. The first goal was to develop the Croatian inventory for assessing different strategies that children use under stress in school and illness related stress situations.

2. The second goal was to identify and categorise the types of strategies used to deal with school - related and illness - related stressors.

3. The third goal was to evaluate individual variables such as age and gender.

METHOD

Scale Development

The Coping Strategies Inventory for Children (CSIC) is the 58 item self-report instrument that measures the frequency and effectiveness of coping strategies used by school - aged children in response to stressful events.

Development of the Coping Strategies Inventory for Children (CSIC) proceeded in two phases. In phase 1 the coping strategies were generated by 10 to 15 year old children (N=112) from grades five to eight. The 327 coping strategies obtained were inductively sorted into 11 categories according to the theoretical (Ayers et al. 1996) and empirical data, from which 64 representative strategies were selected for CSIC.

Phase 2 of the research entailed identifying specific coping categories empirically through factor analysis in order to establish general, normative categories of coping. The 64-item coping inventory was administered to the subjects in class - group format to 291 children. The instruction was printed on the questionnaire and were read aloud, too. On the four point Likert scale children were asked to rate the frequency and effectiveness of particular coping behaviours they used for dealing with school stressors. One month later the same questionnaire was administered to the same groups of children with the same procedure, but according to the instruction they were asked to rate the same coping behaviours in illness - related situations.

Principal factor analysis with Varimax rotation yielded 8 separate factors. In further analysis a number of items was deleted due to several criteria: 1) items not loading with their theoretical factor, 2) items showing complex relations i.e. loading on more than one factor, and 3) items with low loadings (<0.30). This analysis resulted in a 7- factor scale composed of 58 items.

Subjects

Subjects were 291 children and adolescents ranging in age from 10 to 15 years and enrolled in fifth, sixth, seventh and eighth grades in primary school in Zadar, Croatia.

Procedure

The participants completed the CSIC during a regularly scheduled classroom period. They were first asked to rate how frequently they use each of the coping strategies listed below when they have to deal with the school / illness - related problem situations. Secondly, they were asked how helpful these strategies were. Each item was rated on a 4 point Likert - like scale ranging from 0 (not at all) to 3 (almost always/ very helpful).

COPING STRATEGIES INVENTORY FOR CHILDREN (SUO)

PROBLEM SOLVING
1. Try to solve the problem like the puzzle in my head.
2. Think about the ways to solve the problem
3. Concentrate to the problem and solve it as soon as possible
4. Decide to think better before it happen again
5. Think about the problem and see what are the best to do to handle it
6. Try to solve the problem thinking about it
7. Make the plan how to solve the problem and than following the plan
8. Try to fix the mistake and not let it happen again
9. Convince myself I can solve the problem
Cronbach α : school situation = .879 (frequency) .870 (effectiveness)   **illness situation = .862 (frequency), .846 (effectiveness)**

EXPRESSING FEELINGS
1. Fight with someone
2. Get mad to myself
3. Lock myself in my room and do not want to see anyone
4. Blame others for what's going on
5. Pick a quarrel with someone
6. Yell at others
7. Let off steam to someone
8. Wanted to break the things
Cronbach α : school situation = .840 (frequency) .824 (effectiveness)   **illness situation = .827 (frequency), .808 (effectiveness)**

AVOIDANCE (cognitive)

1. Try not to think about the problem

2. Think about something else in order to forget what is bothering me

3. Pretend the problem had nothing to do with me

4. Imagine to be on some other place where I feel nice

5. Pretend that the problem did not happen

6. Think about something completely opposite

7. Try to forget the problem by doing other things

8. Imagine how would it be if it is not happening to me

9. Try not thinking about the problem to avoid make me feel even worse

10. Not want to remember it

11. Try to forget all about it

Cronbach α : school situation = .848 (frequency) .846 (effectiveness)
illness situation = .800 (frequency), .779 (effectiveness)

DISTRACTION (behavioural)

1. Go walking

2. Go bicycle riding and feel much better afterwards

3. Listen to music or dance

4. Go to do some exercise

5. Go to play

6. Watch TV or video- movie

7. Read an interesting book

8. Drawing

9. Try to be funny and tell the jokes

10. Do something on the computer

Cronbach α : school situation = .792 (frequency) .791 (effectiveness)
illness situation = .767 (frequency), .766 (effectiveness)

SOCIAL SUPPORT - FRIENDS

1. Ask friends for help

2. Ask someone how she/ he felt in situations like this

3. Share my feelings with my friend

4. Talk with someone about how I feel

5. Try to forget the problem being with friends

6. Chat with my friends on the phone

Cronbach α : school situation = .787 (frequency) .784 (effectiveness)
illness situation = .769 (frequency), .768 (effectiveness)

SOCIAL SUPPORT - FAMILY

1. Think about how my parents will comfort me

2. Talk to my brother or sister how to solve problem together

3. Remember what my parents told me to be strong and brave

4. Talk to my parents about the problem

5. Ask my father or mother for the advice about what I should do

6. Pray

Cronbach α : school situation = .759 (frequency) .779 (effectiveness)
illness situation = .773 (frequency), .774 (effectiveness)

COGNITIVE RESTRUCTURING

1. Tell myself that I fare well the worse situations so I'll manage somehow this one too.

2. Think about others who have more problems than I do

3. Imagine how others would cope with the same problem

4. Tell myself that it's nothing to be upset about

5. Tell myself that it could be worse

6. Encourage myself and it calm me down

7. Tell myself something nice and it makes me feel better

8. Tell myself: "Get yourself together! You'll survive it!"

Cronbach α: school situation = .813 (frequency) .817 (effectiveness)
illness situation = .787 (frequency), .796 (effectiveness)

TOP 5 COPING STRATEGIES

... in dealing with school - related stressors

most frequently used	most helpful
1. *Try to fix the mistake and not let it happen again* **2.** *Decide to think better before it happen again* **3**. *Concentrate on the problem and solve it as soon as possible* **4.** *Think about the problem and see what are the best to do to handle it* **5.** *Think about the ways to solve the problem*	**1.** *Try to fix the mistake and not let it happen again* **2.** *Concentrate on the problem and solve it as soon as possible* **3.** *Pray* **4.** *Decide to think better before it happen again* **5.** *Think about the problem and see what are the best to do to handle it*

... in dealing with illness - related stressors

most frequently used	most helpful
1. *Watch TV or video movie* **2.** *Try to fix the mistake and not let it happen again* **3.** *Pray* **4.** *Convince myself I can solve the problem* **5.** *Think about the ways to solve the problem*	**1.** *Pray* **2.** *Talk to my parents about the problem* **3.** *Try to fix the mistake and not let it happen again* **4.** *Remember what my parents told me to be strong and brave* **5.** *Watch TV or video movie*

GRADE & SEX DIFFERENCES IN COPING

To examine grade and sex differences in coping behaviour univariate analysis of variance was performed on the 7 categories of coping in 2 situations. The present study indicated that CSIC is sensitive to grade and sex differences in coping behaviour.

⇒ *GRADE*

In school related situations results indicated grade effects for **Problem solving** /$F(3,271)$= 3.36 (frequency scale) and 4.61 (effectiveness scale), $p<0.05$/, **Distraction** (behavioural) /$F(3,271)$= 2.67 (frequency scale), $p<0.05$/, and **Social support- friends** /$F(3,271)$= 2.78 (effectiveness scale), $p<0.05$. There was not significant differences in illness related situations according to grade.

Eighth graders displayed more frequent use of Problem solving strategies than fifth graders and they find both - Problem solving and Social support from friends to be more helpful in school problems situations. Decline with age was reported in using Distraction as coping strategies.

$\Rightarrow$ *SEX*

In school related as well as illness related situations in both frequency and effectiveness subscales significant main effects were found for sex according to **Expressing feelings, Distraction** and **Social support** both **friends** and **parents**.

Girls reported more frequent use and more helpful strategies such as social support from friends and parents than did boys. On the contrary, boys prefer expressing feelings and distraction in coping with school - related and illness related problems.

CONCLUSIONS

Seven core strategies of coping were identified in this study. These categories are quite similar to those found in other researches, especially the work of Ayers et al. (1996) and Brodzinsky et al. (1992). The scale was found to be reliable and the factor pattern was comparable across different stressors.

First aim of this study was to examine coping as a function of type of stressor. According to the results children's coping moderate varied as a function of the identified stressor: Problem solving is more often used and together with Distraction is more helpful in response to school problems, whereas Cognitive avoidance is more often used and together with family and friends Support is more helpful in response to health problems. This finding is directly in line with the results reported by Band and Weisz (1988) and Brodzinsky et al. (1992) that school problems may evoke more primary and active coping (assistance seeking, problem solving etc.) because of children's perception that these types of stressors are directly controllable. In contrast, unfamiliar stressors like illness may evoke more secondary coping (cognitive avoidance, distraction, etc.) as a way of minimising the distress associated with a problem that is appraised as less controllable. The fact that differences were detected with this screening measure and with no particular situations examined, points to the potential clinical utility of this measure.

The present study also indicated that our newly developed scale is sensitive to grade and sex differences in coping behaviour. Specifically, older graders displayed more frequent use of Problem solving strategies than younger graders and they find both Problem solving and Social support from friends to be more helpful in school problems situations. This is consistent with the literature showing that children use more cognitive strategies as they get older (Spirito et al. 1994). No age effects in illness- related situations were found in this study suggesting that possibly age is less important factor to consider when evaluating this stressor than is with a more common, everyday school problem.

Results also indicated that girls reported more frequent use of assistance seeking from friends and parents than did boys. On the contrary, boys prefer Expressing feelings and Distraction in coping with school related and illness related problems. These findings are consistent with previous research especially those studies showing that girls more often use social support than boys. Moreover, results may provide evidence for stress- tolerance hypothesis (Compas et al. 1987) about different strategies males and females adopt through development. Under high stress social support and other resources may be more readily available to females in the way that resort to emotional regulation and social support as a means to cope. Boys adopt different coping mechanisms- cognitive restructuring and self blame.

Despite some stability, results in this study indicate moderate differences across type of stressor, age and sex variables. These findings support the notion that coping is a process that differs somewhat within individuals across situations but that also has some stability

(Lazarus & Folkman, 1984). To date, research suggests that the use of active coping strategies such as information seeking minimises distress associated with medical procedures better than avoidance behaviours. But Peterson (1989) is warning that presenting information to the children who characteristically avoid such information might have an adverse effect. So the question appears: Should avoiding children are assisted in their natural inclination to avoid, perhaps through training in imagery and distraction or should they be assisted through shaping and modelling to encounter the feared stimuli in desensitization like paradigm? It seems that according to clinical setting it is best to reinforce a child's preferred coping style rather than attempt to change coping strategies, although children with a small number of coping strategies available might benefit from early intervention to enhance coping strategy use. As Berg (1989) pointed out it is unlikely that the strategy that will provide better fit will always be the same type of strategy across various problems.

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