

Comparing the cross-situational stability of coping strategies and coping patterns

Lončarić, D. (2007). Comparing the cross-situational stability of coping strategies and coping patterns. In V. Čubela Adorić (Ed.), *15th Psychology Days in Zadar - Book of Selected Proceedings* (pp. 185-197). Zadar, Croatia: University of Zadar.

Darko Lončarić

Higher school for teachers' education

University of Rijeka

Rijeka

Croatia

Running head: Cross-situational stability of coping

Darko Lončarić

Trsatske stube 20

51000 Rijeka

Croatia

dloncaric@inet.hr

ABSTRACT

The dispositional and transactional models of stress and coping provide somewhat different answers to the question whether we apply similar coping strategies in various stressful situations. Although the stated models anticipate a different level of cross-situational stability of strategies, virtually all research clearly indicates to a higher level of the stability in emotion focused coping strategies and to a lower level of the stability in strategies oriented to problem solving. Little research was dedicated to investigating the cross-situational stability of children and adolescents coping strategies and there has been no research that has studied the problem of stability of coping patterns. Therefore the principal aim of this research is to compare the cross – situational stability of coping strategies and patterns among children and adolescents.

The research involved both female ($N=194$) and male ($N=178$) pupils ranging from the fifth to the eighth grade of primary school. The pupils filled in two coping scales, which measure the same strategies in different stressful situations: Academic Stress Coping Scale (ASC-Scale) and Interpersonal Conflict Coping Scale (ICC-Scale).

The results showed that the highest level of situational stability was not reached on emotion focused coping strategies, but on violent, emotional and inappropriate reactions. In coherence with previous research, the lowest level of cross-situational stability was indicated by the strategies aimed at problem solving. The analysis of cross-situational stability of coping patterns demonstrates that the most stable patterns are the absence of coping efforts and the intensive, non-discriminative use of all strategies. The least stable pattern is that of exclusive focus on problem solving.

The importance of new information obtained by the analysis of coping patterns has been emphasized. The methodological advantages and some of the limitations of such an approach to the assessment of cross-situational stability of coping are outlined.

Keywords: Stress, coping strategies, coping patterns, school failure, interpersonal conflict

INTRODUCTION

The diverse theoretical approaches of authors who strive to investigate the problem of cross-situational stability of coping strategies considerably determine the methodology of stress and coping research, and thus the anticipated results of the research. The approaches to research and the expected outcomes of cross-situational stability of coping are largely in conflict between the dispositional (e.g., McCrae & Costa, 1986), and the transactional (e.g., Lazarus & Folkman, 1984) models of stress and coping.

From the tradition of personality questionnaires and the individual differences approach emerges a research orientation focused upon styles or dispositions of coping. According to this approach an individual possesses stable characteristics, which determine his reactions to stressful events. Coping is mostly measured through participants' answer to the introductory question, where they are asked to report their usual way of coping with stressful situations. The advocates of this approach anticipate a very high level of cross-situational stability of coping. The principal advantages of such an approach (Aldwin, 1994) are good psychometric properties of utilized scales and high correlations with the delayed consequences of coping with stress (health, general well-being). However, it is questionable whether the participants truly cope with different stressful situations in the same manner, and whether they can give a reliable self-report on such coping scales. Moreover, it has been noted that the results obtained in this way do not correlate with the real behaviour of the participants in actual stressful events.

The transactional approach (Lazarus & Folkman, 1984) views coping as a dynamical transaction between the personality of an individual and environmental influences, where individual and environmental characteristics merge into the construct of a cognitive appraisal of a stressful situation. The advocates of this approach do not assume either the situational or the temporal stability of coping. They emphasize that the actual coping efforts will change between the various stages of a stressful event, and that these changes will be connected to the circumstances of the situation, the personal characteristics of the individual and his cognitive appraisals of the stressful event. Here coping is measured by the respondent's evoking the most recent actual stressful event and noting down the strategies of coping he used in the situation. The primary advantages of this approach refer to the high correlations with the participant's real behaviour in actual stressful situations. High correlations between the result and the immediate outcome of the stressful event (e.g., success on an exam or the solution of a problem) have also been confirmed. On the other hand, these measures show somewhat

lower psychometric properties. Most questionnaire items are not adapted to the numerous stressful situations the participants can remember, and which may vary in intensity and controllability (Aldwin, 1994).

In order to avoid the deficiencies of the stated approaches, some researchers limit the assessment procedure to coping with a stressor related to a certain social role (sociological and social-psychological perspective). Coping is therefore assessed within the limits of a particular stressor category linked with the social role of the individual (Pearlin & Schooler, 1978). The advocates of this approach will limit themselves to marital problems, difficulties in raising children, school problems, etc. In such research a stability of coping within the confines of a particular role or problem is anticipated, while coping may considerably differ between different problem categories. The main advantages of this approach are satisfactory correlations between obtained results and the real behaviour of the individual in actual stressful situations and with the delayed outcomes of coping. These measures show satisfactory psychometric properties and there are no inappropriate items in the scales because they are tailored for a specific stressor.

The given models envision different levels of cross-situational stability of all strategies of coping. Comparing various coping strategies, regardless of authors' theoretical background, it is consistently proved that the results are similar. A higher level of stability has been achieved with emotion focused coping strategies; while problem focused coping strategies recorded a lower level of stability. The above-stated outcomes suggest that emotion focused coping strategies are more determined by personality factors, while problem focused coping strategies are more determined by situational factors (Lazarus, 1990).

Some recent researches (Lončarić, 2005; Mantzicopoulos, 1997; Rijavec & Brdar, 2002; Seiffge-Krenke, 1990) demonstrated the importance of the definition of coping patterns. The foundation of these researches is the idea that individuals often do not use only one strategy of coping, but combine several coping strategies. This enables the definition of coping patterns of every individual. In the above-mentioned researches the participants were grouped according to the dominant coping pattern, and the comparison between groups resulted in new information, which could not have been obtained by standard correlational analyses. This information managed to explain some contradictory findings of previous correlational researches.

By reviewing the above and other available researches, it can be concluded that until now the cross-situational stability of such coping patterns has not yet been evaluated. Moreover, there are only a small number of researches that investigate the cross-situational

stability of coping among children and adolescents (e.g., Causey & Dubow, 1992). Within this population a relatively higher level of stability can be expected for several reasons. First, children may have a smaller number of coping strategies at their disposal, and they can have problems differentiating those strategies. Secondly, children may have difficulties in the perception of various demands linked with different situations (Aldwin, 1994; Compas et al., 1988; Wills, 1986). In addition, children may be less flexible in using strategies because of difficulties in differentiating adaptive and non-adaptive strategies in various stressful situations (Berg, 1989).

The analysis above directs towards the need for a comparison of stability of coping strategies and coping patterns among children and younger adolescents, which is the principal aim of this paper.

METHOD

Participants and procedure: The participants of this research were female ($N=194$) and male ($N=178$) pupils ranging from the fifth to the eighth grade of primary school. The age range of the participants was between 10 and 15 years ($M=12.58$, $SD=1.19$). The participants were obtained from two urban Croatian schools. All participants were Croatian.

The questionnaires were administered during the second term of the school year. The principal and the professional staff of each school, after getting acquainted with the instruments and procedure, approved of the scheduled research. The parents had been informed about the research in advance and indirectly (via their children). It was possible for a child or his parent (in his name) to refuse collaborating with the research (the method of passive acceptance).

The research was conducted in groups, separately in each class. The scales were administered by assistants (university students of psychology) who were acquainted with the materials and procedure. The pupils completed the questionnaires within regular school periods, with the presence of a teacher and one assistant. Prior to the beginning, assistant would read the introductory guidelines and check whether everybody had understood how to fill in the form.

Measures: Academic Stress Coping Scale (ASC- Scale) and Interpersonal Conflict Coping Scale (ICC-Scale) developed by Lončarić (2005) were used to assess pupils' coping with academic and interpersonal stressors. Using four-point Likert-type scales (0= I never use this strategy; 3= I use this strategy frequently), these instruments measure 15 empirically-

derived coping strategies: Ignoring the problem; Distraction, avoidance and relaxation; Humour; Wishful thinking; Emotion control; Disengagement; Self-blame; Problem-solving; Disregarding other activities; Praying; Social support- friends; Social support- parents; Social support- siblings; Communication of emotions, Emotional reactivity.

The scales were designed on the basis of the exploratory factor analysis and they have satisfactory internal consistency coefficients. In the ASC-Scale the internal consistency coefficients are the lowest for the Disengagement scale (.75), and the highest for the Emotional reactivity scale (.92). In the ICC- scale the internal consistency coefficients are the lowest for the Emotion control scale (.78) and the highest for Social support- siblings (.95). These strategies can be divided into four, second order coping scales (according to a higher order, exploratory factor analysis): Avoidant coping strategies (the first six subscales), Problem focused coping (next four subscales), Asking for social support (next four subscales), and Emotional reactivity. Emotional reactivity is the only subscale that did not group with any other subscales. These scales also have satisfactory internal consistency coefficients that range from .76 to .92.

RESULTS

Preliminary analysis showed that most of the ASC and ICC scales and subscales were positively correlated. Within the ASC- scale Problem solving showed small but statistically significant negative correlations with Emotional reactivity (-0.20) and Disengagement (-0.31) strategies. Within the ICC-Scale Problem solving showed small, statistically insignificant negative correlations with Emotional reactivity and Humour strategies. On both ASC and ICC subscales boys scored higher than girls on the Emotional reactivity scale ($F_{(1,371)} = 15.20$; $p < 0.01$), while girls scored higher than boys on Wishful thinking ($F_{(1,371)} = 20.13$; $p < 0.01$), Problem solving ($F_{(1,371)} = 8.60$; $p < 0.01$), Prayer ($F_{(1,371)} = 11.16$; $p < 0.01$), Communication of emotions ($F_{(1,371)} = 11.20$; $p < 0.01$), Social support- parents ($F_{(1,371)} = 5.90$; $p < 0.05$) and Social support- friends ($F_{(1,371)} = 5.50$; $p < 0.05$) scales.

Table 1 about here

The cross-situational stability of coping strategies has been determined by the correlation between the comparable scales and the subscales of coping with academic and interpersonal stress.

By reviewing Table 1 it is noticeable that the Problem focused coping scale has the lowest cross-situational stability. However, it should be noted that, on the level of subscales the cross-situational stability differ considerable. The strategy of Disregarding other activities has a very low, while Prayer has a very high level of cross-situational stability. The cross-situational stability of using social support in various stressful occasions is somewhat higher, while it varies on a subscalar level, ranging from the lowest for Social support- friends, to the highest for Social support-siblings. A high level of cross-situational stability has been achieved on the Avoidant coping strategies, without considerable differences on a subscalar level. The highest cross-situational stability has been detected on the scale of Emotional reactivity.

In order to check the cross-situational stability of coping patterns it was necessary to classify the participants by their coping pattern. Considering the fact that the participants may have different patterns of coping (the usage of only one strategy, the usage of several strategies, the non-discriminative use of all strategies), a K-Means cluster analysis was used for the classification.

According to the results of earlier researches (Mantzicopoulos, 1997) it could have been assumed that the number of clusters could be equal to the number of the empirically obtained coping scales (four cluster solution). More recent researches (Rijavec & Brdar, 2002) suggest that such a number of clusters could be increased for two groups which would include the participants who use equally all coping strategies. In this case we can obtain a group of participants with a high score on all strategies and a group with a low score on all strategies. For that reason two variants of the cluster analysis were analysed: cluster analysis with four and six cluster solution.

The K-Means cluster analysis with four clusters did not result in a consistent solution (in terms of cluster interpretation), while the cluster analysis with six clusters resulted in anticipated and interpretable outcomes. A subsequent check of the classification of the participants into six groups showed that the resulting groups differ significantly on all the subscales of the ASC-Scale and ICC-Scale. The average results of each group were calculated on each coping subscale (the scores were divided by the number of items which formed a subscale so that they could be compared) and are shown in Table 2.

Table 2 about here

With a review of all the results shown in Table 2 it is possible to determine the respondents' patterns of coping.

Pupils with a high score on all coping scales: This group includes the participants who, when found in a stressful situation, very often and indiscriminatively use all coping strategies.

Pupils with a low score on all coping scales: This group includes the participants who, when found in a stressful situation, use very little of any coping strategy.

Pupils focused only on problem solving: This group includes the participants who are largely focused on problem solving and approach this matter seriously, taking responsibility for the stressful event. They do not depend upon humour, distraction and avoidance. In addition, they are not keen on ventilating or communicating emotions. They mainly do not solicitate the social support of other people.

Pupils who use social support and problem solving strategies: This group includes the participants who are mainly oriented towards using social support and problem solving. Apart from the results on social support scales, this group differs from the previous by not disregarding other activities and do not tend to self-blame, by communicating their emotions and, to a lesser degree, controlling them, and they do not give up trying to find the solution for a problem.

Pupils who ignore the problem: This group includes the participants who try to reduce the problem with humour, ignoring it or escaping from reality. Apart from their liking for making jokes about their problem, they control their emotions well and do not wish to neglect other activities because of the problem. In accordance with their relaxed view of problems, they use Prayer the least. They do not use the social support of their family, while they moderately use their friends' social support.

Pupils with high emotional reactivity: This group includes the participants who tend to react to stressful situations very emotionally, with many inappropriate and aggressive reactions and blaming others. They tend to give up on problem solving easily and avoid taking either direct or indirect actions to solve a problem. They mostly try to direct their attention away from the problem to other activities and attempt to relax. They usually seek for social support from their siblings.

Table 3 about here

According to the results of the cluster analysis two nominal variables have been created, in which the recorded cluster membership of each participant is determined by his results on the ASC-scale and the ICC-scale. The cross-situational stability of coping patterns has been determined by the analysis of the contingency table (Table 3). A preliminary analysis of this contingency table shows that the pupils' cluster memberships, as computed from the results on the ASC-scale and the ICC-scale, are not independent ($\chi^2(25)=285.98$; $p<0.01$). The contingency coefficient shows that cluster memberships are significantly related ($C = .66$).

Full cross-situational stability of coping patterns would be obtained if the empirical frequencies were to be grouped only in diagonal cells, leaving all off-diagonal cells empty. That would represent a linear relationship between cluster membership variables. The contingency coefficient is sensitive to nonlinear relationships between nominal variables. For this reason the symmetric measure of agreement, called Cohen Kappa's coefficient, was also computed ($Kappa = .30$), and it indicates a medium agreement of the subjects' assignment to clusters.

Finally, we wanted to determine whether coping patterns differ in regard to their cross-situational stability. In order to achieve that, the theoretical frequencies had been subtracted from the empirical frequencies only in the diagonal cells. The size of obtained differences indicates a level of cross-situational stability of a particular coping pattern.

A review of Table 3 indicates that all the calculated differences are positive, which indicates a cross-situational stability of all coping patterns. A detailed analysis shows that the largest difference between empirical and theoretical frequencies is found on Low score on all coping scales pattern, and only a slightly lower one on High score on all coping scales pattern. The Emotional reactivity pattern also showed a considerable amount of cross-situational stability, followed by the Ignoring the problem pattern. The pattern that includes social support and problem solving strategies has a lower cross-situational stability, and the pattern of exclusive focus on the problem shows the lowest level of cross-situational stability.

DISCUSSION

The cross-situational stability of coping strategies may be influenced by numerous factors, such as biological properties, personality, the availability of coping resources, the social support network, etc. A person that is strongly emotionally affected by a stressful event may tend towards using emotion focused coping strategies such as ignoring, distraction, humour, wishful thinking, emotion control and disengagement. Lazarus (1990) names them emotion focused strategies, McCrae (1984) entitles them neurotic forms of coping, while both authors agree that these reactions show the highest consistency in various stressful situations. These strategies are considered to be under a considerable influence of personality factors. On the other hand, there are strategies that the stated authors name problem focused strategies, or mature ways of coping. These are under the influence of the specific demands of each situation and contextual factors.

In accordance with previous research, the lowest correlation was gained on the subscales Problem solving, Disregarding other activities, and Self-blame. The pupils are less prone towards using the above-mentioned strategies on a wider range of situations, and certain strategies may not be applicable in different situations. However, this research has determined that the highest level of cross-situational stability is not demonstrated by emotion focused coping strategies, but by emotional reactivity.

A very high correlation of the level of emotional reactivity in various stressful situations supports the hypothesis of biological determinants of personality factors and temperament (Fulgosi, 1994), which may be the foundation of such reactions towards stress. Individuals who experience negative and positive emotions very intensively, which is the definition of emotional reactivity given by Larsen and Diener (1987), usually concentrate only upon the emotional aspects of the situation and more often personalize and generalize emotions (Kardum & Tićac, 1993). This can explain a very high level of agreement of their emotional reactions in various stressful situations.

The applicability of coping strategies on various stressful situations and some personal (e.g., religiosity) and social (family, upbringing) factors can also explain a high level of correspondence between using Prayer in the situation of an academic and interpersonal stressor.

The availability of coping resources may represent another parameter of the stability of using particular coping strategies in various stressful situations. This is particularly related

to strategies of seeking social support. Although individuals may have different inclinations towards seeking social support or activating existing resources of it (which differentiates coping measures from other measures of perceived or real social support), seeking social support also somewhat depends on its actual or perceived presence. This is obvious from the data that shows that the highest correlation of results in the situation of an academic or interpersonal stressor is gained on the subscale of seeking social support from a sibling. It must not be neglected that some of the subjects have no siblings, therefore they do not use that strategy of coping in any kind of stressful event. If the individual does not possess a well-structured social support network of friends, this will affect his seeking of social support from them in all stressful situations. The pupils' overall relations with their parents can also affect the level of seeking social support from them in different stressful situations. Although parents are at times a good source of social support for some stressful situations, they may be a bad one for others.

The personality traits of the pupils also must not be neglected as a factor of the stability of social support in various stressful situations, particularly in the subscale concerning communicating emotions. Pupils that are less emotionally expressive or do not possess highly developed skills of communicating their emotions will act in a similar manner in different stressful situations.

The results of this research can be compared with the results of the research conducted by Causey and Dubow (1992), which also included a sample of somewhat younger children. In comparison to this research, they found higher levels of cross-situational stability of coping strategies. This can be explained by the differences in scale construction. The mentioned authors administered the same questionnaire with different instructions, which directed the participants towards different stressors, without adapting the content of the items to various stressors. Moreover, their participants were somewhat younger (from the fourth to the sixth grade of primary school), therefore the higher coefficients of correlation are in accord with the findings that suggest a higher level of cross-situational stability of coping among children and younger adolescents (Aldwin, 1994; Compas et al., 1988; Wills, 1986).

The incapability of children to differentiate between different coping strategies and selectively use them may result in specific coping patterns, such as the intensive and non-discriminative use of all strategies. Considering the fact that one of the aims of this work was to determine the cross-situational stability of children's coping patterns, the participants were divided into six groups, the coping patterns of which are described in the chapter entitled Results. Previously, very little research had been dedicated to analysing coping patterns. The

obtained grouping of participants into six clusters does not completely correspond with the results of previous researches dedicated to this matter (Mantzicopoulos, 1997; Rijavec & Brdar, 2002; Seiffge-Krenke, 1990). The differences emerge from the diverse methods of grouping the participants, and from the differences between the scales designed to measure coping with stress.

Seiffge-Krenke (1990) grouped adolescents according to their favoured coping style with a larger number of stressors. She named the obtained groups "active copers", "internal copers" and "defenders/withdrawers".

Mantzicopoulos (1997) grouped the participants by the factor scores they achieved on particular scales, thus making four groups named Positive, Denial, Projection and Self-blame. The participants, in order to be sorted into a particular group, were obliged to have a high result on only one subscale of the used coping scale (Academic Coping Inventory: Tero & Connell, 1984). The author stated that by abiding to these rules he was unable to classify a particular number of individuals. This suggests that there were participants who did not differentiate themselves according to their use of different coping strategies and had similar results on all scales. The author excluded these participants from the analysis. The above-mentioned research is in concordance with this one regarding the identification of the participants that did not differentiate themselves according to the use of different coping strategies.

Rijavec and Brdar (2002) used a K-Means cluster analysis in order to investigate the possibility to classify pupils (aged from 15 to 18 years) according to their dominant strategy when coping with academic stress. The authors used a School failure coping scale (Rijavec & Brdar, 1997). The results pointed towards the possibility of extracting four interpretable clusters. The first cluster included pupils focused on problem solving, while the second included the emotion focused ones. The third and fourth cluster included those pupils who achieved high results on all strategies, and those with low results on all strategies. The results are in concordance with this research considering that two groups that use all of the strategies or non of the strategies had been extracted. The large number of clusters obtained in this research can be explained with the large number of subscales (15) used to measure coping. This ensured a detailed measuring of various coping strategies and enabled differentiation between a larger numbers of groups that cope with school failure in a different manner.

The results suggest that there are many different patterns for coping with stress, therefore individuals are able to use some strategies to a higher degree, some to a lower degree, or have an equal frequency in using all coping strategies. Moreover, some researches

demonstrated how comparing groups with different coping patterns can give information that cannot be obtained by usual correlational analyses, and also can clarify some contradictory correlational findings (Lončarić, 2005; Seiffge-Krenke, 1990). Authors use different names for these two different analytical approaches. For example, Roeser et al (2002) name analyses based on the co-variation between measured variables a "variable - centred approach to data analysis", while analyses based on the groupation of participants and determining the patterns of their results are described as a "person centred approach to data analysis".

The results obtained in this work also shed a new light on the matter of the cross-situational stability of coping. Namely, it has been demonstrated that avoidant coping strategies, emotion focused coping strategies or patterns of emotional reactivity do not possess the highest level of stability. The highest level of stability is achieved by very specific patterns of non-discriminative use of all strategies. The greatest stability is shown by the non-coping pattern characterized as the absence of coping effort and low scores on all coping scales. The pattern of intensive and non-discriminative use of all strategies of coping shows a slightly lower level of stability. According to the expected order, the patterns of emotional reactivity, ignoring the problem, social support and problem solving follow in terms of stability. The lowest cross-situational stability is shown by the pattern of exclusive focus on the problem.

Considering the lack of research dedicated to the stability of coping patterns, we can only conclude that the results of this research are in correspondence with the findings that indicate the smaller number of strategies that are at the disposal of children and younger adolescents. Results also correspond with findings that point out children's inability to differentiate between various strategies and use them to the demands and characteristics of the situation (Ayers et al, 1998). A child's limited inventory of coping patterns can affect a child in the manner that it uses the same habitual coping patterns in various situations. According to some authors (Berg, 1989; Vulić-Prtorić, 1997), such a cross-situational consistency in using coping strategies can be characterized as maladjusted behaviour. An individual with well-developed strategies of coping is more sensitive to changes within and around him, and thus can adequately react in different situations with different demands.

Some of the limitations of the used method of determining coping patterns should also be mentioned. The cluster analysis is not a method for the experimental formation of groups that differ only in the results achieved on the variables used for the formation of clusters (e.g., coping strategies). The obtained groups differ according to the coping strategies they use, but they can differ according to some other variables such as gender, age, appraisals

of a stressful situation, personality characteristics and so on. In following researches it should be investigated whether the obtained groups differ according to the above-stated variables. It is also of special importance to determine whether the pupils that use all coping strategies and those that use none differ in terms of the level of stress they experience in the tested situations, their assessment of the controllability of the situation, anxiety, neuroticism, etc. The above-stated characteristics may be the cause of the higher level of cross-situational stability of non-coping and high-coping patterns.

Finally, it can be concluded that the results of previous researches have mostly been confirmed, and that emotion focused strategies have a higher cross-situational stability level than problem focused strategies and the solicitation of social support. However, it should be emphasized that emotional reactivity has shown the highest level of cross-situational stability. This justifies excluding this pattern into a separate scale, and emphasizes the dilemma whether this pattern is a coping strategy or a manifestation of a stable temperamental trait. The analysis of the cross-situational stability of coping patterns brings a new perspective to this field of research. The pattern approach suggests that the non-coping and the high-coping pattern show the highest degree of cross-situational stability. It remains to be seen whether these findings are specific to this age group (children and young adolescents), and whether coping patterns are related to other measures such as personality traits and appraisals of different stressful situations.

REFERENCES

- Aldwin, C. M. (1994). *Stress, coping, and development. An integrative perspective*. New York: Guilford Press.
- Ayers, T. S., Sandler, I. N. & Twohey, J. (1998). Conceptualization and measurement of coping in children and adolescents. In T. H. Ollendick i R. J. Prinz (Eds.), *Advances in Clinical Child Psychology* (Vol. 20, pp. 243-301). New York: Plenum.
- Berg, C. A. (1989). Knowledge of strategies for dealing with everyday problems from childhood through adolescence. *Developmental Psychology*, 25, 607-618.
- Causey, D. L. & Dubow, E. F. (1992). Development of a self-report coping measure for elementary school children. *Journal of Clinical Child Psychology*, 21, 47 - 59.
- Compas, B. E., Malcarne, V. L. & Fondacaro, K. M. (1988). Coping with stressful events in older children and young adolescents. *Journal of Consulting and Clinical Psychology*, 56, 405-411.
- Fulgosi, A. (1994). *Biološke osnove osobina ličnosti: Uvod u prirodnoznanstvenu psihologiju* [Biological bases of the personality traits: Introduction to psychology as a natural science]. Jastrebarsko: Naklada Slap.
- Kardum, I. & Tićac, K. (1993). Emocionalna reaktivnost: validacija konstrukta [Emotional reactivity: Construct validation]. *Godišnjak zavoda za psihologiju*, 2, 101-114.
- Larsen, R. J. & Diener, E. (1987). Affect intensity as an individual difference characteristic. A review. *Journal of Research in Personality*, 21, 1-39.
- Lazarus, R. S. (1990). Stress, coping and illness. In H. S. Friedman (Eds.), *Personality and disease* (pp. 97-120). New York: Wiley.
- Lazarus, R. S. & Folkman, S. (1984). *Stress, appraisal and coping*. New York: Springer.
- Lončarić, D. (2005). *Strategije suočavanja s akademskim i socijalnim stresom kod učenika* [How pupils cope with academic and social stressors?]. Magistarski rad. Filozofski fakultet Sveučilišta u Zagrebu, Zagreb.
- Mantzicopoulos, P. (1997). How do children cope with school failure? A study of social/emotional factors related to children's coping strategies. *Psychology in the Schools*, 34, 229-237.

- McCrae, R. R. (1984). Situational determinants of coping responses: Loss, threat, and challenge. *Journal of Personality and Social Psychology*, 46, 919-928.
- McCrae, R. R. & Costa, P. T. (1986). Personality, coping, and coping effectiveness in an adult sample. *Journal of Personality*, 54, 385-405.
- Pearlin, L. & Schooler, C. (1978). The structure of coping. *Journal of Health and Social Behaviour*, 19, 2-21.
- Rijavec, M. & Brdar, I. (1997). Coping with school failure: Development of the school failure coping scale. *European Journal of Psychology of Education*, 12, 37-49.
- Rijavec, M. & Brdar, I. (2002). Coping with school failure and self-regulated learning. *European Journal of Psychology of Education*, 17, 177-194.
- Roeser, R. W., Strobel, K. R. & Quihuis, G. (2002). Studying early adolescents' academic motivation, social-emotional functioning, and engagement in learning: Variable- and Person-Centered Approaches. *Anxiety, Stress and Coping*, 15, 345-368.
- Seiffge-Krenke, I. (1990). Developmental processes in self-concept and coping behaviour. In H. Bosma i S. Jackson (Eds.), *Coping and self-concept in adolescence* (pp. 50-68), Berlin: Springer-Verlag.
- Vulić-Prtorić, A. (1997). Koncept suočavanja sa stresom kod djece i adolescenata i načini njegova mjerenja [The concept of coping with stress amongst children and adolescents and ways of measuring it]. *Radovi Filozofskog fakulteta u Zadru*, 36(13), 135-146.
- Wills, T. A. (1986). Stress and coping in early adolescence: Relationships to substance use in urban school samples. *Health Psychology*, 5, 503-529.

Table 1. Cross-situational stability of coping strategies

SCALES:	<i>r</i>
AVOIDANT COPING (.69)	
Ignoring the problem	.52
Distraction, avoidance and relaxation	.49
Humour	.54
Wishful thinking	.56
Emotion control	.54
Disengagement	.40
PROBLEM FOCUSED COPING (.41)	
Self-blame	.36
Problem-solving	.31
Disregarding other activities	.20
Praying	.65
ASKING FOR SOCIAL SUPPORT (.63)	
Social support- friends	.40
Communication of emotions	.47
Social support- parents	.51
Social support- siblings	.60
EMOTIONAL REACTIVITY (.74)	

All correlations (Pearson) are statistically significant: $p < 0.01$ ($N = 372$).

Table 2. Testing the difference between group means obtained from ASC and ICC scales

		Group 1.		Group 2.		Group 3.		Group 4.		Group 5.		Group 6.		Academic stressor	Interpers. conflict
		Ma	Mi	Ma	Mi	Ma	Mi	Ma	Mi	Ma	Mi	Ma	Mi	$F_{(5,430)}$	$F_{(5,430)}$
AVOIDANT COPING	Ignoring the problem	0,34	0,45	0,99	0,96	0,82	0,92	1,75	1,62	1,63	1,68	2,05	2,22	68,82**	54,00**
	Distract., avoid. and relax.	0,40	0,59	0,73	0,74	0,73	1,10	1,38	1,63	1,67	1,60	1,97	2,28	68,82**	97,98**
	Humour	0,50	0,53	0,60	0,48	0,83	1,02	2,31	2,02	1,62	1,50	2,26	2,23	89,37**	54,76**
	Wishful thinking	0,73	0,80	2,08	1,96	2,07	2,30	2,21	2,05	1,74	1,64	2,52	2,44	61,99**	55,80**
	Emotion control	0,81	0,84	1,25	1,10	1,45	1,58	1,83	1,72	1,44	1,47	2,21	2,32	29,70**	47,33**
	Disengagement	0,44	0,42	1,09	0,82	0,51	0,85	1,32	0,98	1,35	1,43	2,03	2,09	61,97**	67,48**
PROBLEM FOCUSED COPING	Self-blame	0,50	0,39	2,08	2,25	1,82	1,37	1,21	0,93	1,43	1,38	2,55	2,46	50,78**	39,02**
	Problem-solving	1,11	1,18	2,53	2,70	2,84	2,58	1,90	1,55	1,96	1,81	2,69	2,34	36,50**	52,53**
	Disreg. other activities	0,76	0,56	1,72	1,31	1,29	1,10	1,14	0,96	1,50	1,32	2,03	2,15	22,45**	39,38**
	Praying	0,52	0,61	1,76	1,83	1,95	2,13	0,93	1,02	1,61	1,55	2,45	2,31	57,69**	56,63**
SOCIAL SUPPORT	Social support- friends	0,70	0,67	0,90	1,01	2,27	2,15	1,38	1,30	1,55	1,48	2,31	2,24	71,65**	42,59**
	Communic. of emotions	0,43	0,55	0,66	1,05	1,88	1,91	1,17	1,11	1,44	1,50	1,81	2,11	55,87**	31,64**
	Social support- parents	0,60	0,57	1,52	1,01	2,48	2,32	1,32	0,81	1,61	1,60	2,53	2,17	50,2**	73,92**
	Social support- siblings	0,31	0,38	0,33	0,85	0,85	1,04	0,28	0,25	1,54	1,44	2,21	2,08	81,31**	53,57**
EMOTIONAL REACTIVITY		0,32	0,43	0,54	0,40	0,46	0,49	0,80	0,44	1,70	1,74	1,45	1,63	46,27**	78,07**

** p<0.01

Ma = Group arithmetic mean (ASC-Scale)

Mi = Group arithmetic mean (ICC-Scale)

Group 1 = Pupils with a low score on all coping scales

Group 2 = Pupils focused only on problem solving

Group 3 = Pupils who use social support and problem solving strategies

Group 4 = Pupils who ignore the problem

Group 5 = Pupils with high emotional reactivity

Group 6 = Pupils with a high score on all coping scales

Table 3. Cross-situational stability of coping patterns

			Clusters membership (academic stressor)					
			Group 1	Group 2	Group 3	Group 4	Group 5	Group 6
Cluster membership (interpersonal conflict)	Group 1:	Count	39,00	15,00	7,00	7,00	5,00	0,00
		Expected Count	11,58	15,31	10,79	10,40	12,36	12,56
		Difference	27,42					
	Group 2:	Count	11,00	16,00	13,00	5,00	4,00	0,00
		Expected Count	7,77	10,27	7,24	6,98	8,30	8,43
		Difference		5,73				
	Group 3:	Count	0,00	16,00	18,00	5,00	5,00	20,00
		Expected Count	10,15	13,42	9,46	9,12	10,84	11,01
		Difference			8,54			
	Group 4:	Count	6,00	15,00	7,00	22,00	11,00	3,00
		Expected Count	10,15	13,42	9,46	9,12	10,84	11,01
		Difference				12,88		
	Group 5:	Count	3,00	15,00	9,00	13,00	34,00	15,00
		Expected Count	14,12	18,66	13,16	12,68	15,07	15,31
		Difference					18,93	
	Group 6:	Count	0,00	1,00	1,00	1,00	4,00	26,00
		Expected Count	5,23	6,92	4,88	4,70	5,59	5,68
		Difference						20,32

Difference = Count - Expected Count

Group 1 = Pupils with a low score on all coping scales

Group 2 = Pupils focused only on problem solving

Group 3 = Pupils who use social support and problem solving strategies

Group 4 = Pupils who ignore the problem

Group 5 = Pupils with high emotional reactivity

Group 6 = Pupils with a high score on all coping scales