

CHANGES IN COPING DURING ADOLESCENCE - POSSIBLE CONCEPTUALIZATIONS

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Abstract: Developmental research into coping assumes the observation not only of quantitative changes in the use of individual strategies or occurrence of various types of responses, but also the changes in the structure of coping. The present study focuses on the structure of coping and its changes during adolescence from a transactional approach; this is with a view to the interdependent relationship between stress and coping and to the mutual connections between the various responses to stress, given their parallel or sequential occurrence. The shifts that occur during adolescence are viewed in part from an analysis factor derived from a range of problems and responses, and in part through the help of structural models of the problems and the responses to them within two age groups. The data comes from 403 thirteen-year-old and 248 fifteen-year-old adolescents, longitudinally observed within the framework of the Czech part of the ELSPAC study.

Key words: coping, stress, transactional approach, development, change, structure

INTRODUCTION

Coping during adolescence has received great attention over the past twenty years. Previous research in this area has often relied on the results of generic methods that had originally been intended for adults or for the general observation of previously defined coping structures. This has been considered a weakness in various reviews (Lazarus, 1999; Compas, 1987).

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Both R.S. Lazarus and B.E. Compas refer to the need for prospective studies that would describe the development in the structure of coping, using methods reflecting the specific characteristics of adolescence, and would respect the transactional nature of the process of coping. In their later review B.E. Compas et al. (2001) refer to the growth of research interest in this area, the result of which is the growth not only of knowledge, but also of different interpretations of coping, and potential obstacles in comparing research findings.

Coping is a complex, dynamic phenomenon, an ongoing and transformational process, comprising various psychological functions and occurring through different life domains. Its clear definition within the process of adaptation and regulation therefore presents difficulties. There are analo-

gous difficulties in providing research that is suitable for static (e.g., trait) constructions and complies with traditional psychometric criteria. There is moreover, in a period marked by developmental changes and their accumulation as is adolescence, an expectation of important changes in the structure and dynamics of coping. This paper attempts to review the relevant definitions and conceptualizations of coping with respect to its dynamic character and to important elements and dimensions in the process of coping. It focuses on coping in adolescence, using two-wave longitudinal data to demonstrate the possibilities for understanding the dynamic character and variability in the structure of coping.

Definitions of Coping

The most influential authors of the transactional interpretation of coping are R.S. Lazarus and S. Folkman (1984). They define coping as "constantly changing cognitive and behavioral efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person" (p. 141).

B.E. Compas (1987) notes that, just as with the more traditional approach to coping as a "mastery" of the demands of the environment, the transactional interpretation also includes means and approaches such as acceptance, toleration, ignoring or reducing the effect of the stressor, but such efforts do not necessarily have to be effective to be considered as coping (e.g., Lazarus, 1999). R.S. Lazarus and S. Folkman (e.g., 1984) also describe in detail the character of the transactions between a person and his/her environment, the phases of the response where both a cognitive appraisal of the situation and of personal resources play a significant role, the result of which is an emotional quality and spe-

cific motivation. They also divided coping efforts into two main categories - problem-focused and emotion-focused coping.

B.E. Compas (ibid) further noted the differences in the wider interpretations of the definitions of R.C. Silver and C.B. Wortman (1980) where they defined coping as "any and all responses made by an individual who encounters a potentially harmful outcome" (p. 281). Coping then also includes reflexive or instinctive responses. Other authors such as E.A. Skinner and J.G. Wellborn take a similar approach to coping and define coping as "how people regulate their behavior, emotion and orientation under conditions of psychological stress" (p. 112, Compas et al., 2001). Like Lazarus, their approach derives from the motivational model, but differs in that it includes instinctive or automatic responses as well as intentional ones.

Despite disagreement about the role of intentional activities within coping, there appears to be agreement among the approaches described that:

- coping has the character of a process;
- there is a combination of various strategies involved, in some cases psychological functions and domains, towards which coping is oriented;
- an essential characteristic is the (subjective) appraisal of a situation seen as being in some way demanding;
- the process of coping is dependent on both the character of the situation and individual characteristics ("interdependent nature of the relation between stress and coping" - Compas; "relational" or "transactional" character of coping - Lazarus);
- the effectiveness of coping relies upon the wider context and is relative.

Therefore, in constructing a measure and analyzing data in the area of coping it is useful to observe a wide range of variables (a combination of the dimensions of the

problem, of the responses and strategies). Comparisons are not to be restricted to separate dimensions or strategies, but are to follow the co-occurrence of several responses (simultaneous or sequential), and to monitor the character of the situation to which people respond (the interdependence of situation and response, stress and coping).

Many questionnaires contain statements that describe "non-coping", automatic, or mainly instinctive responses. In the narrower sense of the word it is not about indicators of the means of coping, it is necessary to work with them as indicators of the motivational relevance of stressors (Smith, Lazarus, 1991), the difficulties in the relationship to the resources (Hobfoll, 2002), or to elements of the adaptational response, which are the subjects of coping as well. The measure we use contains similar statements but they are interpreted as a "response", the elements of the process of coping, but not as a "strategy".

A suitable assessment of the effectiveness of the response is always subjective and requires at least a review of the specific situation or more specific criteria. In this way, we approach the interpretation of our data - apart from representing the relationship of individual responses and including the context of identified problems in the present study, there is also an appraisal of the effect of strategies in previous studies (shown through the characteristic of coping in the formation of a social position - see Kohoutek, Mareš, Ježek, 2006). A superficial reading of the conceptualizations of coping easily leads to distortions like seeing the emotion-focused strategies as less effective, which is a myth possibly based on the reading of questionnaire items (see Stanton, Franz, 1999).

As the above examples show dimensions of coping cannot be disjunctive categories.

Dimensionality issues are treated as significant guides during interpretation. Therefore we continue with a brief overview of influential interpretations.

The Dimensionality of Coping

On the basis of a summary of several approaches, B.E. Compas et al. (2001, p. 89) defined coping generally as "one aspect of a broader set of processes that are enacted in response to stress... conscious volitional efforts to regulate emotion, cognition, behavior, physiology and the environment in response to stressful events or circumstances. These regulatory processes are constrained by the collective idea of self-regulation and by the biological, cognitive, social and emotional development of the individual." Eisenberg et al. (Eisenberg, Fabes, Guthrie, 1997 as cited in Compas, 2001) defined three aspects of self-regulation: attempts to directly regulate emotion, attempts to regulate the situation and attempts to regulate emotionally driven behavior.

The idea of regulation is also used by E.A. Skinner and J.G. Wellborn (1984, as cited in Compas et al., 2001). The main areas of regulation are the regulation of behavior, emotion and orientation. Behavioral coping includes information seeking and problem solving, regulation of emotion focuses on attempts at maintaining optimism, and regulation of orientation includes avoidance.

These models can be considered to be motivational or intentional. Apart from the motive of psychological control, it is important to mention E.A. Skinner's and J.G. Wellborn's (1984) motives and needs for competence, autonomy and relationship.

When examining dimensionality of coping, (pseudo)dichotomies are often used. Apart from the dichotomy of problem-

focused and emotion-focused coping and of the dimension of primary and secondary control, we can also mention approach vs. avoidance strategies related to the interpretation of the basic two responses to the stressor as "fight or flight", H. Selye (1956), or the less frequently used dimension of self-focus and external-focus of coping, cognitive and behavioral coping or active and passive coping (Compas et al., 2001). Such general tendencies may of course be manifested in different specific ways. R.S. Lazarus and S. Folkman (1984) showed that the content of emotion-focused coping could be a response such as expressing an emotion, searching for consolation or social support, or the attempt to avoid the source of stress. A single strategy could also be used in a more general way, and could even be aimed both at the problem and the emotion. In a "molecular" interpretation of definite situations there is also noted a chain of responses and their timing within the framework of the situation and complementary or overlapping strategies in various domains of life.

Problems in Dealing with Data Concerning Coping

From the fluidity of the phenomenon of coping it is obvious that data analysis also has its specifics in contrast to data on constructs describing static or relatively stable characteristics. In the construction of scales it is not always possible to properly apply the usual criteria for reliability such as internal consistency (e.g., a scale investigating social support divided into individual providers does not have to be reliable in these cases, because it is logical that people will only turn to one of these persons), theoretically contrived scales do not fit the analytically derived factors

(which include a collocation of phenomena), and correlations with e.g., personality characteristics are usually low because coping is always a function of the situation and of its wider context. Higher correlations can emerge from comparison with more widely conceived coping scales, reflecting general tendencies. However, these widely conceived sets often oversimplify the structure of coping, and if changes on these scales are the subject of research interest (e.g., while researching change during development), a series of significant specific structures could be omitted (Connor-Smith et al., as cited in Compas et al., 2001).

Specifics of Coping During Adolescence

Coping is in part dependent on the developmental level, and can in part become the developmental factor as well. This is evident in particular in its relation to self-regulation and self-actualization towards a level of adaptation.

The attention that has been specifically paid to coping in adolescence over the past decades is a response to the gaps and weakness of previous research. Despite a tradition of very wide research "on adolescents" due to the accessibility of the population, it was not always possible to talk about "adolescent research" in the proper sense - adult models were used for coping among youth, which failed to take into account the age-specific and varying structures of problems and coping. Another problem is the absence of longitudinal research (see Compas, 1987; Lazarus, 1999). Despite this, questions of specific processes, developmental changes and "tasks", which occur during this period, are discussed and can be found in the extensive classic literature (Freud, Piaget, Erikson, Marcia...).

A ground-breaking piece of research was provided by G. Spivak and M.B. Shure (1982, as in Compas, 1987), which examined the development of abilities to solve interpersonal problems and identified the following conditions: construction of alternative solutions, consideration of the effects of social interaction, the development of deliberations over the relationship between a goal and the means, the development of causal thought in a social context, sensitivity towards problems and dynamic orientation.

More recent research (e.g., Wills, Sandy, Shinar, 1998) posits a development in the style of coping during adolescence in connection with the development of emotional, cognitive and executive functions. Further research examines the specific influence of conditions and episodes in life during the sensitive period of adolescence (Frydenberg, 1999).

B.E. Compas (2001) presents even more reasons why coping in the context of adolescence requires special attention. He shows that psychosocial stress is a significant and pervasive risk factor for psychopathology and that the ways in which children cope with stress are important mediators and moderators of the impact of stress on current and future adjustment.

Adolescence can also be seen as a sensitive period for the development both of the means of coping and the various forms of psychopathology and maladjustment. The development of characteristic ways of coping may "place" individuals on more versus less adaptive developmental trajectories and can be a precursor of patterns of coping throughout adulthood.

METHOD

In our study we examined the types of problems experienced and ways of coping

with them in early (13 years old) and mid adolescence (15 years old - a similar breakdown used by, for example, B. Plancherel et al., 1998). We also analyzed the changes between these two age groups. The sample of 403 thirteen-year-old and 248 fifteen-year-old adolescents is a sample used by the Czech longitudinal ELSPAC study. We used a measure formally inspired by PQ and CASQ by I. Seiffge-Krenke (1989). Our measure consists of 28 items asking about possible problems and demands and 35 items about coping responses. Data were collected longitudinally in 2005 and 2007. Data were factor-analyzed using both exploratory and confirmatory procedures. We used structural modelling mainly to explore the relationships between factors. The first pair of models presents the structure of perceived problems in thirteen- and fifteen-year-olds. A further two pairs present an alternative representation of responses to problems - the first, more detailed, mostly copies the factorial structure of responses; the second, a less detailed model, comprises general dimensions of coping tendencies. In a further text we examine the potential for a different interpretation of both pairs of models. The scales based on the results of these analyses were used for longitudinal comparisons.

RESULTS

Exploratory Factor Structure

Among the perceived problems we identified seven factors (see Table 1).

The identified ranges of problems correspond with other findings about common problems dealt with in adolescence - see, for example, P. Macek (1999). The average incidence of problems (according to the sum of regression scores) increases

Table 1. Factors of perceived problems

Factor	Description	Eigenvalue/ % of variance
I	Problematic relationships with peers and in a group, which covers a range from the absence of a good friend (Lerner, 1985; Macek, 1999), through relationships with classmates and hostile behavior to a general lack of understanding with the majority of peers.	5.6 / 20%
II	Problems with the maintenance of "personal space" (Noack, 1992; Seltzer, 1989) - subjective lack of free time, impossibility of applying myself to what I want and plan to do, feeling of constraint on the side of the families, disagreements with adults, bad relationships with siblings.	2.0 / 7%
III	Problems concerning ability and academic performance - coping with the stresses of school (Čáp, Mareš, 2001) also including the aspect of the attitude of families, relationship towards school and ideas about own future career.	1.6 / 6%
IV	Disagreements with adults - (Macek, 1999) responding especially to the statements "I often get a note (from the teacher)" and "I have disagreements and problems with some of the teachers", but also in respect of the attitudes of families towards academic performance, behavior and the maintenance of outward appearance and disagreements with adults in general.	1.4 / 5%
V	Questions connected with a change in living conditions, social relationships and identity (Macek, 1999); this factor somewhat surprisingly responds to statements with positive and negative content (better understanding with many people, change in view on many things, and, equally, helplessness concerning hitherto unknown feelings, a desire to change many things, the feeling that I don't know what I want, and romantic problems).	1.3 / 5%
VI	Problems in the family; it signals the enduring significance of families (Macek, Osecká, 1996); responding to statements that identify confrontational relationships between parents, or between respondents and their parents.	1.2 / 4%
VII	Incidence of non-specific significant adverse life episodes and health problems of respondent.	1.1 / 4%

with age in all factors. The lowest increase is in problems with academic performance and problems in the family. The highest increase is in the sphere of developmental changes, problems with maintain-

ing personal space and problems with adults.

Using the same method we identified factors in responses to stress and resources for coping (see Table 2).

Table 2. Factors in responses to stress and resources for coping

Factor	Description	Eigenvalue/ % of variance
I	A complex effort to cope with a problem and its consequences - includes statements of one's own active resolution, but also seeking support in various forms, regulation of one's own emotions, searching for information and attempts to restructure the problem, changes in one's own approach and possibly making up for the problem caused.	5.3 / 15%
II	Deflection of the problem; responds to statements that express an attempt to avoid the problem, not to resolve it, to stop thinking about it at all.	3.7 / 10%
III	Isolation; most marked response to statements that express hiding one's own problem in front of others.	1.9 / 5%
IV	Giving in to problems - loss of control can be external (not controlling one's temper) or internal (need to constantly think about problems), includes cognitive, emotional and behavioral aspect. Negative response even to the statement "I am used to solving things calmly". We don't consider it to be a resource for coping in the strict sense, but a reaction to boundaries expressing the relevance of the problem and a deficit of one's own possibilities.	1.7 / 5%
V	Assertive and confrontational resolution of problem; factor covers aspects of activity, asserting one's own will, expressing feelings and confrontation with the source of the problem.	1.5 / 4%
VI	Avoidance and withdrawal; here particularly from the source of the problem and in the direction of solitude or fantasy.	1.3 / 4%
VII	Hiding response to the problem; negative response even to the statement "I can confide in my parents without fear".	1.2 / 3%
VIII	Searching for information, responding to the statement "I chat with my teacher" and, marginally, "I am used to resolving things calmly".	1.0 / 3%

Shifts in the area of reactions to a problem are more differentiated than in the case of the problems. Without a conclusive distinction the only preference remains assertive confrontation, an increase is evident in comprehensive resolution, searching for information, isolation - hiding problems, and general evasiveness in social relations. There is a decrease in preference for two other subtypes of avoidant responses - hiding response and problem deflection.

Structural Models

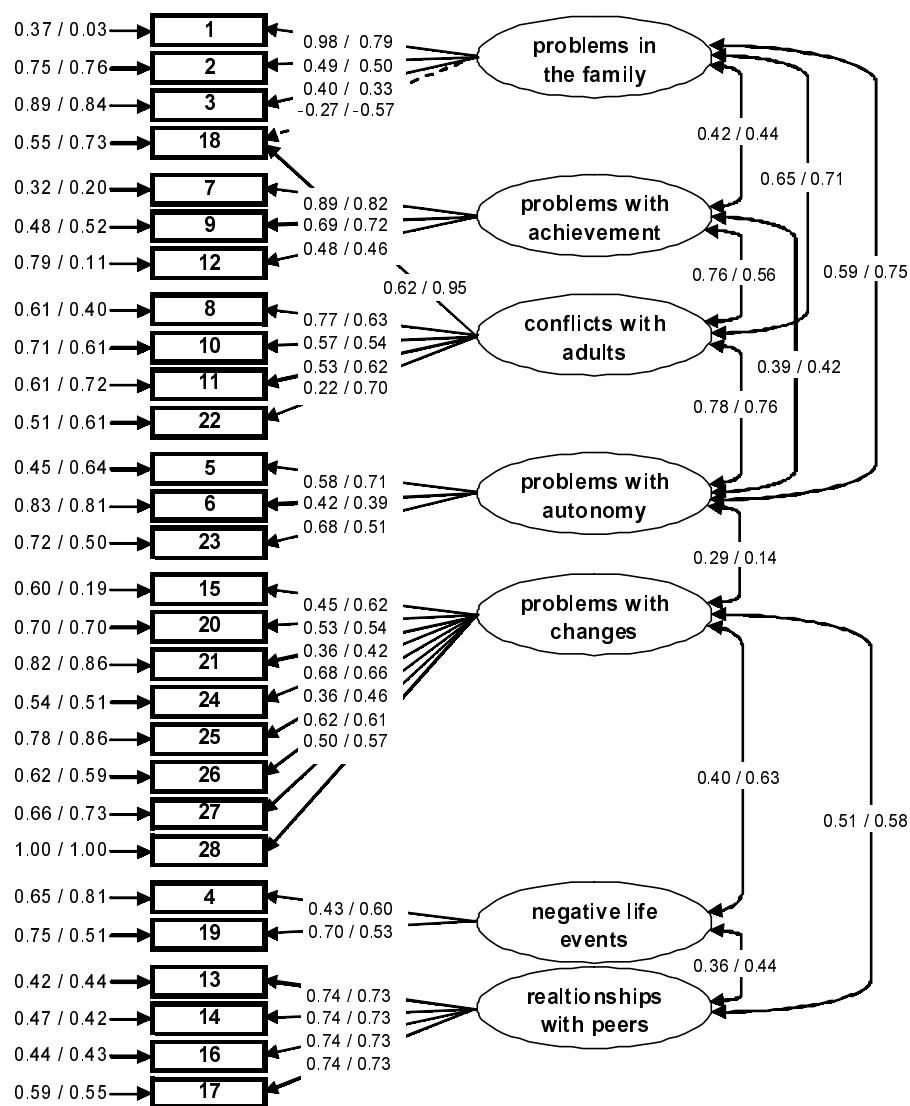
Our seven-factor correlated model of problems (see Figure 1) fits the data only moderately, but comparably in both age 13 and age 15 (age 13: Normal-theory Chi-Square = 1480, $df = 343$, $p < .01$, RMSEA = .046, CFI = .97; age 15: Normal-theory Chi-Square = 1258, $df = 343$, $p < .01$, RMSEA = .038, CFI = .97). When comparing factor loadings between the two age groups, differences of approximately .2 (S.E. = .10) can be considered statistically significant at .05 level.

The relationships between the latent factors show two relatively independent groups of problems. The first of them consists of problems with family relationships, academic performance, maintaining personal space and problems with adults. The strong associations are between conflicts with adults and problems in the family, achievement and autonomy, and between problems in the family and problems with autonomy. Most of the correlations remain relatively constant in time, but at age 15 there is a weaker association of the problems with academic performance and problems with adults, and the association of problems in the family and problems of autonomy becomes significantly stronger.

The second group includes the subjectively perceived aspects of change, problems with peers and the incidence of negative life events. The specific "link" with the previous group of problems represents an association of perceived changes and problems with autonomy; this however, is weak and decreases further with age. An association grows between life episodes and perceived changes, other connections remain relatively stable.

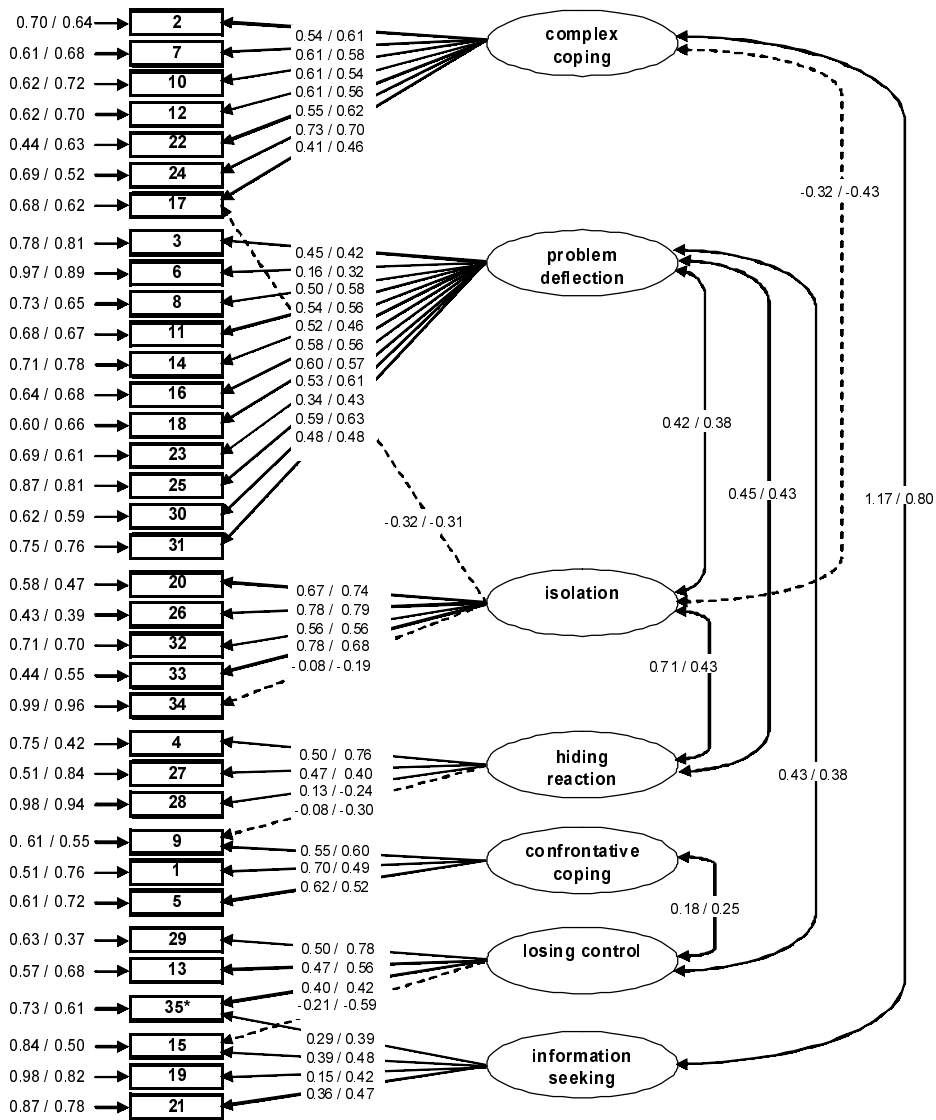
We tested two models of coping responses - a seven-factor model based on the process of construction of the inventory and a simpler four-factor model. The fit of the seven-factor correlated model of coping responses (Figure 2) is again only moderate and comparable in the two age groups (age 13: Normal-theory Chi-Square = 2138, $df = 549$, $p < .01$, RMSEA = .056, CFI = .92; age 15: Normal-theory Chi-Square = 1768, $df = 549$, $p < .01$, RMSEA = .056, CFI = .91). The fit of the reduced four-factor correlated model of coping responses is quite the same as for the more complicated model (age 13: Normal-theory Chi-Square = 1948, $df = 543$, $p < .01$, RMSEA = .051, CFI = .93; age 15: Normal-theory Chi-Square = 1424, $df = 543$, $p < .01$, RMSEA = .053, CFI = .91).

The strongest factor of complex solving is relatively independent in the more detailed model, with the association with the weakest factor for searching for information, and with the negative association with the factor of isolation. Further we can identify the group of avoidance strategies, including problem avoidance, isolation and hiding response, and factors of assertive confrontational solutions and loss of control, which are relatively independent of the rest of the variables, but mutually correlated. The factor of loss of control correlates with the problem deflection too.



Legend: 0.00 / 0.00 - values for 13 years olds model / values for 15 years olds model

Figure 1. Model of the structure of problems and demands in 13- and 15-year olds, standardized solution



Legend: 0.00 / 0.00 - values for 13-year-olds model / values for 15-year-olds model

Figure 2. Seven-factor model of the structure of coping responses in 13- and 15-year olds, standardized solution

Most relationships between 13- and 15-year-olds remain stable. However, there is a weakening in the association between hiding problem and isolation, and the negative association between complex solution and avoidance becomes stronger. An interesting specific difference is that the item identifying the cognitive aspect of impact of problem is significantly less associated with the factor of loss of control and much more with the search for information.

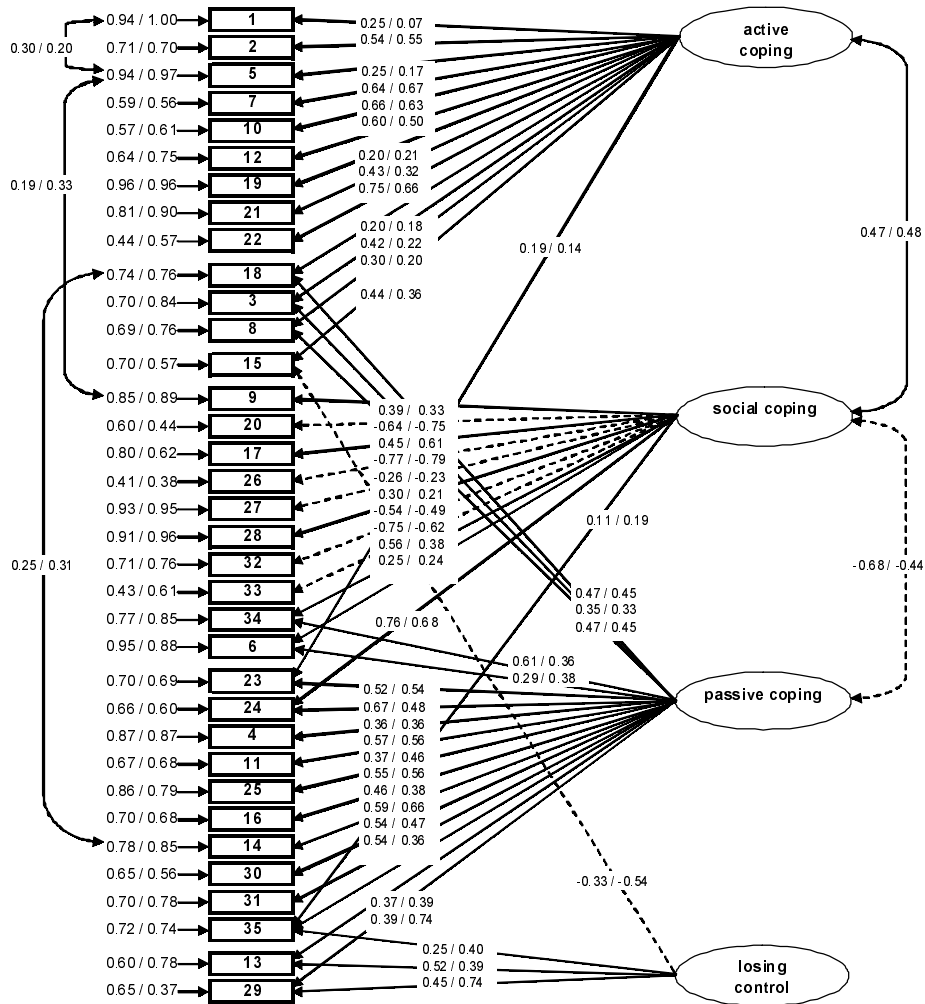
In the four-factor model (Figure 3) the first factor mainly involves avoidance and passive strategies, the character of which is passive accommodation, wishful thinking, deflection of the problem, avoidance and hiding responses, and, marginally, support seeking. The second includes variables that reflect the barriers in social coping - they respond negatively to them, and positively to the items of expressing emotion, of trust and seeking social supports in a general and instrumental aspect. It correlates negatively with the previous factor of avoidance, one of the items (restructuring of the problem and its relevance) having a positive overlap. The third factor is active coping; it includes activities in a factual, social and cognitive sense; three items from the avoidance factor are saturated with this factor marginally, which can correspond to attempts to subdue negative and awaken positive emotions (J. Kuhl speaks about activity in this sense in his concept of "action orientation" - 2001). Within this factor, there are partial associations between items of assertiveness and confrontation. The whole factor correlates stably and positively with the factor of social coping. Finally, the fourth factor responds positively to indicators of a loss of control and negatively to the item "I am used to solving things calmly". The separate items of this factor are also satu-

rated with other factors; mainly with the factor of avoidance, and the social coping factor saturates the cognitive aspect of restraint.

Between 13- and 15-year-olds there is a weakening from strong to medium in the negative association of avoidance and social coping. Other changes include a weakening in the items concerning the search for social supports in the avoidance factor, a decreased loading of escape into fantasy ("Imagine how good it would be if the problem just didn't exist") and confrontation ("I always try to get my own way") on the factor of active coping and reinforcing of negative loading of the item "I am used to solving things calmly" on the factor of losing control.

DISCUSSION

The aim of this study was in part to identify the differences in the structure of coping in early and mid adolescence, and in part to present the various ways of classifying coping responses. We are following the transactional approach to coping - in accordance with this we provide parallel observation of the problems and responses to them, and use structural models as a method of elaborating results. R.S. Lazarus (1999) highlighted the system character of coping when the same variable can play the role of independent variable, mediator or dependent variable. Such an approach is particularly important during the observation of the developmental changes of coping resources, responses and cognitive appraisals. Structural models are included for this reason; they serve us not as the tool to confirm predicted structures, but to observe the possible relationship between variables for which we can expect reciprocal links and a dynamic character of interaction.



Legend: 0.00 / 0.00 - values for 13-year-olds model / values for 15-year-olds model

Figure 3. Four-factor model of the structure of coping responses in 13- and 15-year olds, standardized solution

The design of the models was preceded by an examination of the results of an exploratory factor analysis. By this method we identified seven main areas of perceived problems and eight types of response to coping.

The range of problems points to the lasting influence of the family, but also to the particular importance of peer relationships at this age, of the effect of developmental factors - perceived changes (both positively and negatively evaluated), and of the increasing occurrence of problems and sensitivity towards them at the beginning of adolescence. An exception to this are problems with academic achievement and with individuals' abilities - it is predicted, however, that these are mostly based on the reactions of the social environment, which is relatively stable, and that passing from grade 7 to grade 9 is not a period that would bring specific new demands (such as adapting to studying at secondary school).

The area of the problems and their evaluation also represent a significant determinant for coping motives, which is why it is important to look at the problems and motives that are specific for the given period. Problems with maintaining "personal space" seem to be a category of especial importance during this period. This broad category includes the need for autonomy, balanced by taking into account the demands and character of social relationships (see e.g., Skinner, Wellborn - motives or needs for competence, autonomy and relativity). With the younger adolescents from our group it was more closely linked to academic demands, later on this connection weakens but becomes more pronounced within family relationships.

For coping responses two alternative models are proposed. The basis for cre-

ating a more detailed model is, most importantly, an identified factor structure. This model consists of seven specific response types and the relationships between them. There is a subtle distinction between disengagement and avoidant ways of responding - it consists of the differences between hiding the problem, hiding the reaction, and general displays of social isolation. The changes that occur between early and mid adolescence are characteristic of the changing types of avoidance - the original hiding response acquires the more general features of hiding problems themselves or more general social isolation. It is possible that the increase in avoidance is due to a communication barrier regarding the actual problems. Apart from one exception we found an increase in the intensity of all other coping responses (we assume the relationship with higher incidence and appraisal of the importance of problems). The structure of mutual relationships between coping responses appears constant. A strong factor of complex coping includes the strategy of passive conformity and reinterpretation, and the protection of the person's means of coping, and it is narrowly associated with information seeking. Assertive confrontational solving appears as the most stable - there is neither growth nor decline here. The fact that social confidence and confrontational style are factors of defining social position, as demonstrated in our earlier work, may play a role here (Kohoutek, Ježek, Mareš, 2006). This is also the case for complex coping, where the noticeable influence of social desirability can be applied. The "loss of control" factor is not considered to be a coping response, though it is an important indicator of the evaluation of motivational relevance of the problem (Smith, Lazarus, 1991) and is associated with specific ap-

proaches - there is an obvious association with deflection of the problem and with a confrontational approach. Its cognitive dimension (rumination) is markedly associated with age in the search for information (see Mareš, 2008).

The alternative model contains four general dimensions - the factors of several types of disengagement and avoidance, of social coping and of active solving are again supplemented with "mal-coping" - loss of control. In this model the disengagement factor includes all aspects contained in the more detailed model such as a hiding response, hiding of the problem and social isolation. The factor of active solving involves outer and inner activities (e.g., oriented towards emotion and the cognitive restructuring of the situation), the factor of social coping is associated with the lack of barriers in social contact. It correlates positively with active solving and negatively with problem deflection. It is believed that there is support for communication approaches to coping and for a formulated hypothesis on communicative barriers as elements in the growth of avoidance.

The separate items in this model are often, however, saturated with several factors - some with specific features of behavior (especially in the area of passive accommodation and deflection) can be part of particular strategies and styles of coping. Thus, the broad dimensions cannot therefore be clearly defined as scales. This is certainly the case with items reflecting emotions (part of active approaches and deflection), and with the loss of control in all three main dimensions. It is therefore possible that this loss of control represents both the type of response and the result of the unsuccessful process of coping, and also the motive for distinct ways of behavior.

The changes that occur between 13 to 15 years of age manifest themselves in the separate items within this variant of the model. The connection between the dimensions weakens and discrete strategies emerge (e.g., assertive confrontation within the dimension of activity and expression of feelings and thoughts in a context of social way of coping).

Both approaches - the identification of general dimension and the identification of specific strategies - have theoretical support and specific consequences for application. The identification of specific strategies and stages of coping processes can be applied, for example, if the aim is a detailed analysis of behavior and subsequent intervention in critical points of behavior. A.M. Nezu et al. (1998) proceeded in this direction with a transactional approach in the concept of a training program for reinforcement of problem-solving skills in cancer patients. E. Karaffová (2007), too, adopted this approach when working with physically disabled adolescents. The general dimension (with a structure analogous to our model) is included, for example, in the SPNS questionnaire by M. Frankovský and F. Baumgartner (1997). In our present study the more detailed results pertaining to the development of coping resources were acquired when working with the more detailed alternative model of coping resources. Further studies will compare the two models within the context of particular solving in connection with the styles and strategies of coping. We assume that when comparing general characteristics that manifest themselves in the style of coping (e.g., attachment style or occurrence of depression) the model of general dimensions of coping will be more suitable; by contrast, when dealing with the role of coping strategies in the context of social adaptation, problem and risk-taking behav-

ior, it may be more useful to follow a model of particular phenomenologically conceived strategies.

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ZMĚNY VE ZVLÁDÁNÍ ZÁTĚŽE V ADOLESCENCI - MOŽNÉ KONCEPTUALIZACE

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Souhrn: Vývojově psychologický výzkum zvládání zátěže předpokládá nejen sledování kvantitativních změn v používání individuálních strategií nebo výskytu různých typů reakcí na problém, ale také sledování změn ve struktuře zvládání. Studie se proto zaměřuje na strukturu zvládání a její změny během adolescence, a to z transakční perspektivy, t. j. s přihlédnutím k vzájemné závislosti mezi stresem a zvládáním. Změny, k nimž na individuální úrovni ve způsobech zvládání zátěže v adolescenci dochází, jsou zachyceny zčásti prostřednictvím faktorů odvozených z široké palety problémů a reakcí na ně a zčásti prostřednictvím strukturálních modelů problémů a reakcí na ně ve dvou věkových skupinách. Data pocházejí od 403 třináctiletých a 248 patnáctiletých adolescentů longitudinálně sledovaných v rámci české studie ELSPAC.