

Adolescent coping with everyday stressors: A seven-nation study of youth from central, eastern, southern, and northern Europe

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The present study compares problem-specific coping strategies and coping styles of European adolescents from seven nations. The sample consisted of 3031 adolescent participants, aged 11 to 20, from Croatia, the Czech Republic, Germany, Italy, Norway, Portugal, and Switzerland. The adolescents completed the Coping Across Situations Questionnaire (CASQ) by indicating which coping strategies (from 20 alternatives) they usually employed in dealing with age-specific problems (covering 8 different domains). The strategies can be collapsed to three coping styles: active coping, internal coping, and withdrawal. Results show that adolescents from all seven nations predominantly employed functional forms of coping, i.e., active coping and internal coping. In addition, the pattern of frequently and rarely applied coping strategies was similar across cultures. Differences in coping style were

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revealed for some, but not all problem domains, suggesting that cross-cultural similarity in coping exists for specific stressors. Problem-specific analyses helped to clarify where cultural influence is most distinct. Whereas cultural diversity was highest for coping with job-related problems, coping with self- and future-related problems was highly similar among adolescents from all the nations. Despite the considerable traditional, educational, and economic differences among the cultures investigated, the similarities in coping behaviour were impressive. Explanations for cultural universals and differences in adolescent coping are discussed.

It is widely accepted that adolescence is a transitional period hallmarked by rapid physical development (e.g., the attainment of sexual maturity) as well as dramatic psychosocial changes (e.g., becoming more autonomous from parents, initiating romantic relationships). Due to these closely intertwined changes, diverse age-specific normative stressors emerge, which have to be accomplished in order to overcome adolescence with relative ease (Berk, 2003; Lerner, 2002). Most adolescents have the resources to face these challenges without serious problems (Ebata & Moos, 1994; Petersen, 1993). Far less regard has been paid to the fact that transitions during adolescence are also moulded by the social and cultural contexts in which they occur (Crockett, 1997). As a consequence, the aim of the present study was to analyse how young people from different European nations deal with diverse normative age-specific stressors during the adolescent period.

Coping in adolescence

Lazarus and Folkman defined coping (1984, p. 141) 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". Despite a burgeoning increase in research on adolescent coping over the last twenty years (for a summary see Compas, Connor-Smith, Saltzman, Thomsen, & Wadsworth, 2001), there is still controversy about the dimensions of coping. Seiffge-Krenke (1995), whose coping instrument was employed in the present study, differentiates between actively approaching and solving the problem (active coping), thinking about the problem and cognitively reflecting about possible solutions (internal coping), and withdrawing from the problem and looking for distraction (withdrawal coping).

Similar to the work that has been done on adult samples, research on stress and coping in adolescence has primarily concentrated on the impact of major life events. Studies have thus tended to focus on adverse circumstances that only a small percentage of adolescents are confronted with, such as a major illness, parental divorce, the death of a close friend/

relative, or any other kind of traumatic experience (Chelf & Ellis, 2002; Drapeau, Samson, & Saint-Jaques, 1999; Rask, 2002). However, the majority of stressful events in adolescence are everyday hassles, such as conflicts in school or quarrels with parents or peers (Seiffge-Krenke, Weidemann, Fentner, Aegenheister, & Poebblau, 2001).

It has been repeatedly shown that coping behaviour in childhood and adolescence significantly depends on the type of normative stressor (e.g., Band & Weisz, 1988; Kavsek & Seiffge-Krenke, 1996; Repetti, McGrath, & Ishikawa, 1998; Spirito, Stark, Grace, & Stamoulis, 1991; Williams & McGillicuddy-De Lisi, 2000). For instance, Seiffge-Krenke (1995) found that adolescents usually employ more active coping strategies in dealing with peer-related stressors, but use more dysfunctional coping strategies when troubled by school- or parent-related problems. The highest percentages of cognitive-reflective coping strategies were used in dealing with future-related problems. According to Wertlieb, Weigel, and Feldstein (1987), a general coping factor cannot be assumed; rather, unique situational factors must be taken into account (Argyle, Furnham, & Graham, 1981). However, many investigators who have examined coping with everyday stressors have failed to systematically differentiate between them. Instead, they have assumed cross-situational stability of coping behaviour. Yet, it has been argued that the different appraisal of the situation leads to differences in coping behaviour (Ebata & Moos, 1994; Klein-Heßling, & Lohaus, 2002; Lazarus, 1993). Therefore, in the present study, a situation-specific approach was adopted to assess how adolescents cope with daily hassles from eight different developmental areas.

Age and gender effects

Age and gender effects in adolescent coping behaviour have been repeatedly reported. Coping behaviour changes throughout the course of adolescence due to altered cognitive, social and behavioural abilities as well as a shift in the severity and importance of different stressors (Frydenberg, 1997). On the coping style level, an increase in active and internal coping was documented between early and late adolescence, both cross-sectionally and longitudinally (Seiffge-Krenke, 1995; Seiffge-Krenke & Beyers, 2005). As well, a greater tendency in older adolescents to show emotion-oriented coping behaviour was found (Compas, Malcarne, & Fondacaro, 1988). Furthermore, it has been shown that the total number of available coping strategies increases with age (Frydenberg & Lewis, 2000), thus indicating a more differentiated coping pattern in dealing with specific stressors. Further, a strong association between age and the use of specific coping strategies has been documented. For example, tension-reducing strategies (such as letting out aggressions, drinking alcohol, or taking drugs) increase with age as well as

the ability to beneficially use self-reflective strategies. Concerning social support, older adolescents discuss problems less with their parents, but turn more towards peers or institutions (Frydenberg & Lewis, 2000; Seiffge-Krenke, 1995).

Most of the studies carried out on adolescent coping behaviour have focused on gender differences. Gender was consistently found to be one of the most prominent moderators of coping (Frydenberg, 1997). On the coping-style level, male and female adolescents are more characterized by similarities than differences. Instead, gender differences are more prominent in the use of specific coping strategies. Regarding active coping strategies, one of the most consistent findings is that females seek more social support whereas males use more physical-recreation strategies and relaxation. As regards dysfunctional forms of coping, females tend to use more wishful thinking, tension-reducing strategies, and withdrawal, whereas males use more emotional outlets and more frequently ignore the problem (Copeland & Hess, 1995; Frydenberg & Lewis, 1993; Seiffge-Krenke, 1995).

Various reasons for gender-related differences in coping behaviour have been discussed. First, some authors have argued that female and male adolescents cope with different types of stressors and, further, with different levels of stress. Research on adolescent stress perception has shown that females experience more stress than males, which is particularly noticeable concerning relationship stressors (see, for example, Frydenberg, 1997). However, other studies did not find gender differences in stress levels and stress types (see, for example, Seiffge-Krenke et al., 2001). Second, Seiffge-Krenke (1995) argues for gender differences in stress appraisal: females do not experience quantitatively more stress than males, but experience the same stressors as up to four times more stressful and challenging than males do. Third, the social context may influence gender-specific coping. Socialization in gender roles as well as different gender-specific self-concepts are discussed as having a moderating effect on coping (Frydenberg, 1997).

Culture and coping

To date, relatively few studies have compared young people's coping behaviour across different cultural communities. Many researchers implicitly assume cross-cultural universality of coping behaviour without considering differences between cultures due to traditional customs, religious orientation, or type of educational, political, and economic systems (Kagitcibasi, 1996).

According to the contextual model of development by Lerner and Castellino (2002), all developmental processes are embedded in more general

frameworks, such as society, culture, and community, each of which may be characterized by a variety of culture-specific aspects. By going beyond the framework of *one* culture and the boundaries of *one* society, the model provides additional explanations for the range of individual differences. Therefore the power to explain interindividual differences is greater, thus contributing to higher levels of generality and validity (Grob, Little, Wanner, Wearing, & Euronet, 1996). By neglecting the influence of cultural aspects, however, the variation in emotions, cognitions, or behaviour may solely – and perhaps erroneously – be explained in terms of individual variation. The neglect of cultural influences in adolescent research is all the more problematic since, over the last decades, intercultural exchange has markedly increased. In recent years, the relaxation of border controls between European countries, the introduction of a free labour market within the European Union (EU), and an increased demand for international experience in schools, universities, and companies has augmented the likelihood that Europeans will come into contact and interact with people of different cultural backgrounds in their daily lives. Hence, the relative proportion of non-native youths in most industrialized nations has risen markedly, and European societies are becoming increasingly more characterized by cultural diversity (Organisation for Economic Cooperation and Development, [OECD] 2004). These changes might foster the development of a shared cultural identity among individuals with previously different cultural backgrounds. Larson and Mortimer (1999, p. 1) have noted: “As a result of globalization, middle class adolescents across the world are increasingly attending to the same media sources, buying clothes from the same companies, and, possibly, arguing with their parents over the same issues”. However, an opposite trend develops as well, i.e., the need to uphold national identity and preserve culturally specific traditions. As a consequence, Arnett (2002, p. 774) proposes that, “most people worldwide now develop a bicultural identity that combines their local identity with an identity linked to the global culture”. Both of these trends may have an impact on individual and collective structures of thinking and acting. In this regard it is noteworthy that recent studies have shown that European adolescents, though from very distinct parts of Europe with different traditional, religious, social, political, and economic backgrounds, report more similar stressors and employ more similar coping strategies than their counterparts in Asia (Olah, 1995) or South America (Gibson-Cline, 1996).

Studies that have focused on the cultural influence on coping in adolescence have mostly compared populations existing in only two different countries, usually those sharing common borders (e.g., Poland and Germany; Schönplflug, & Jansen, 1995), or those with specific political or economic relations (e.g., Russia and the United States; Jose et al., 1998). Furthermore, different ways of life, particularly based on the individualism–collectivism

paradigm (Triandis, 1995), have been compared in cross-cultural research (e.g., Olah, 1995; Sinha, Wilson, & Watson, 2000). However, multinational empirical research involving six and more cultures is still scarce and makes up only 5% of all the cross-cultural studies that were published in the *Journal of Cross-Cultural Psychology* in a given time (Brouwers, van Helmert, Breugelmans, & van de Vijver, 2004), presumably with similar percentages in coping research.

Existing research findings have revealed cross-cultural variation in adolescent coping behaviour as well as striking similarities. In comparing the responses of German and Israeli adolescents on the Coping Across Situations Questionnaire (CASQ), Seiffge-Krenke and Shulman (1990) found more similarities than differences in coping behaviour. In detail, German adolescents were more influenced by situational demands and showed a more pronounced approach – avoidance behaviour, whereas Israeli adolescents showed less variability in coping behaviour across diverse stressful situations and higher levels of cognitive coping. Another study using the same instrument (Seiffge-Krenke, 1992) revealed that Finnish adolescents' coping behaviour was characterized by the same three-dimensional factor structure found for German and Israeli adolescents (active, internal and withdrawal coping). However, compared to German adolescents, Finnish adolescents reported higher levels of internal coping (e.g., compromising) in dealing with diverse stressors.

The Gibson-Cline study (1996) represents a milestone in cross-cultural research on stress and coping in adolescent populations. The results of semi-structured self-reports obtained from young people living in 13 nations, spanning all continents, revealed that adolescents' ways of coping are quite similar all over the world. The coping style "individual problem solving", which encompasses specific strategies like "planning", "trying harder", or "seeking support" was employed most often by adolescents around the globe. Unfortunately, the investigators only questioned globally about coping behaviour and failed to systematically differentiate coping according to the specific stressor at hand. Furthermore, the variety of possible coping options was limited by the fact that adolescents were asked to spontaneously name their ways of coping. This procedure may account for the similarities found in the Gibson-Cline study, as self-reports generally yield fewer and highly similar responses from each participant (Frydenberg, Lewis, Kennedy, Ardila, Frindte, & Hannoun, 2003).

Whereas many researchers focused on the cross-cultural comparison of aggregated *coping styles*, it can just as well be argued that differences in coping behaviour may also emerge on the level of specific *coping strategies*. Even if overall levels of coping styles are comparable across groups, the single strategies contributing to these coping styles may differ. Coping strategies (e.g., asking for help in institutions or looking for diversion in the next

bar) are often directly linked to the cultural context (Do consulting institutions exist in this culture? Is it permissible to go to bars and look for diversion?) whereas coping styles reflect a more abstract level. An active coping style, for example, is not that much more bound to culture than the specific active coping strategies an individual may use to cope with a stressful event. Therefore, adolescents with high levels of active coping may use different strategies to do so depending on their cultural background. As mentioned above, individual problem solving was the most employed coping style found in Gibson-Cline's (1996) cross-cultural investigation on adolescents in 13 cultures. However, by far the most employed strategy within this coping style was "trying harder" among adolescents from Russia, Turkey, or the United States, whereas it was "planning toward a solution" for Brazilian, Dutch, and Philippine adolescents, "showing assertiveness" for Venezuelan females and "seeking social support" for Australian females and Kuwaiti males. Furthermore, Frydenberg et al. (2003) found that Palestinian adolescents showed a quite diverse coping pattern, i.e., they used many different coping strategies, whereas Australian, Colombian, and German youths employed a smaller number of coping strategies for coping with stressful events. Based on these reflections, the present study aimed to analyse aggregated coping styles as well as single coping strategies across cultures.

In summary, cross-cultural research on adolescent coping behaviour is meagre and has produced heterogeneous results. The prevailing trend of only binational cross-cultural investigation does not provide sufficient information to permit generalizations about adolescent coping behaviour across cultures. Furthermore, in most studies, the stressors have been assessed too globally, and specific coping strategies have been ignored.

Consequently, the aim of the present study was to compare coping behaviour of adolescents from seven different European nations in order to contribute to a better understanding of universal and culture-specific factors in the coping process. Coping behaviour in eight different problem domains was analysed. Results of the aforementioned studies, that coping behaviour varies depending on the type of stressful situation at hand, were to be replicated on a larger and culturally more diverse sample. The cultural influence was expected to be highest in coping with school- and parent-related problems, since these systems are directly associated with cultural rules and norms. In coping with stressors that are less related to cultural norms and traditions (e.g., self-related problems), less cultural variability was expected. Emphasis was put on aggregated coping styles as well as on situation-specific coping strategies. Whether or not cultural variability was more evident with respect to the use of particular coping strategies or the frequencies of aggregated coping styles was assessed. Considering the fact that coping strategies are more directly linked to specific behaviour within a cultural

context, it was expected that greater cross-cultural variability would be found on the coping-strategy level rather than on the coping-style level.

METHOD

Sample

A total of 3031 adolescents from Croatia ($n=230$), the Czech Republic ($n=563$), Germany ($n=466$), Italy ($n=167$), Norway ($n=548$), Portugal ($n=462$), and Switzerland ($n=595$) participated in the study, which constitutes a subsample of a large cross-cultural project (Seiffge-Krenke, 2006). Participants' ages ranged between 11 and 20 years ($M=15.7$; $SD=1.93$); the mean age was lowest in Switzerland ($M=14.3$; $SD=1.0$) and highest in Germany ($M=16.8$; $SD=1.3$); see Table 1. For further analyses the following three age groups were formed according to Steinberg (1993): early adolescents (aged 11–13 years), mid adolescents (14–16 years), and late adolescents (17–21 years). The percentages of males and females in each country and in each age group were nearly balanced, amounting to 49.4% males ($n=1497$) and 50.6% females ($n=1534$) across all nations. Participants were only recruited from bigger cities in order to avoid unwanted variance due to different degrees of urbanization. According to the father's profession, most of the subjects stemmed from middle-class families. More detailed family variables, including information about the parents' marital status and the number of siblings, were obtained in all countries except Portugal and the Czech Republic. The majority of adolescents (81.1%) lived together with both parents; 18.9% lived with only one parent, mostly the mother. The highest percentage of two-parent-families was found in Germany (89.1%), the lowest in Norway (64.6%). On average, 24.0% of participants were only children, with the highest percentage of them in Italy (34.7%) and the lowest in Switzerland (9.6%). Due to these unequal though expected and representative group differences (Eurostat, 2004), no specific analyses were carried out concerning family variables.

Instrument

Coping was measured using the Coping Across Situations Questionnaire (CASQ; Seiffge-Krenke, 1995). This instrument assesses 20 coping strategies that may be used to deal with problems in the following eight domains: school, parents, peers, romantic relations, self, future, leisure time, and vocational goals. These domains had been previously demonstrated to be problem areas that concerned adolescents the most (Seiffge-Krenke, 1995). For each problem domain, adolescents were instructed to indicate the strategies that they usually employed when a problem in this area arose.

TABLE 1
Local origins and descriptive variables of the investigated samples

Sample origin country	Sample origin city	N	Gender		Age		Family situation		Siblings
			Male (%)	Female (%)	M	(SD)	Two-parent home (%)	One-parent home (%)	Only children (%)
Croatia	Rijeka	230	52.6	47.4	15.04	(2.32)	82.2	17.8	23.9
Czech Republic	Brno	563	47.6	52.4	15.59	(2.21)	–	–	–
Germany	Frankfurt	466	47.0	53.0	16.81	(1.32)	89.1	10.9	19.1
Italy	Bologna	167	53.9	46.1	16.35	(1.69)	85.6	14.4	34.7
Norway	Gran/ Hammerfest	548	50.4	49.6	15.77	(2.10)	64.6	35.4	22.8
Portugal	Viseu	462	47.8	52.2	16.56	(1.33)	–	–	–
Switzerland	Zurich	595	50.8	49.2	14.33	(1.00)	85.2	14.8	9.6
Total	–	3031	49.4	50.6	15.71	(1.93)	81.1	18.9	18.5

The resulting 20×8 matrix was then used to analyse the pattern of situation-specific coping strategies and general coping styles across situations. Previous tests of dimensionality for the CASQ on a German sample (Seiffge-Krenke, 1995) had revealed three factors corresponding to the following coping styles: (1) *active coping*, involving activities such as seeking information or advice (e.g., strategy 1: “I discuss the problem with my parents”); (2) *internal coping*, emphasizing the adolescent’s appraisal of the situation and internal reflection about possible solutions (e.g., strategy 10: “I think about the problem and try to find different solutions”); and (3) *withdrawal*, including defences such as denial, regression, or withdrawal (e.g., strategy 20: “I withdraw because I cannot change anything anyway”). Withdrawal may be regarded as dysfunctional in the sense that no immediate solution is reached. The active coping style and withdrawal each encompassed seven strategies, while internal coping covered six strategies. A confirmatory factor analysis based on the sample at hand revealed that 13 of the 20 items could be assigned clearly to the original three factors. The remaining seven items were characterized by double loadings on the original and a further factor within the three-factorial solution. The original factor structure was kept up for three reasons: First, from the theoretical concept of coping, all items are unambiguous representations of the underlying three dimensions; second, by maintaining the original factor structure, the results obtained in this study can be compared with results from other cross-cultural studies employing the CASQ; and third, respectable Cronbach alphas of .82, .79 and .80 for these three dimensions were yielded in the reliability analysis based on the entire sample. In no case would the deletion of items have led to a better reliability.

Procedure

Originally developed in Germany, the CASQ was translated by native-speaking psychologists into all of the five foreign languages spoken by the participants of this study.¹ Back translations corresponded satisfactorily to the original version. Participants were asked to complete the CASQ and a social data sheet (asking for age, gender, parents' marital status, number of siblings, and SES) anonymously during one school lesson hour. A native psychologist or psychology student explained the instructions to the participants. He/she was present throughout the lesson in order to provide students with additional clarification when needed.

RESULTS

Subjects' data² are first displayed regarding the relative importance of coping styles in dealing with specific stressors. Subsequently, the use of particular coping strategies is analysed by culture. The influence of age and gender is examined, both on the coping-style and the coping-strategy level. If not otherwise indicated, only those effects that are significant at the .01 level are described and interpreted.

Coping styles across cultures

General coping styles. In a first step, the relative importance of the three coping styles (active coping, internal coping, and withdrawal) was analysed by culture. Means were transformed into percentages³ for each culture, thus allowing for a relative comparison of coping styles across situations and cultures. Relative values are far more meaningful than absolute means for determining cultural effects on coping, as differences in absolute means may be due to cultural differences in how easily people in different cultures use extreme values, independently of what is rated (Poortinga, 1989; van de Vijver, 2003). In particular, for each participant, the total sum of active coping, internal coping, and withdrawal was computed for each of the eight problem domains as well as for the total coping score. Subsequently, each of the three coping styles was divided by this total sum. This procedure was carried out for each problem domain as well as for the total coping score.

¹No translation was required for the Swiss adolescents as they all came from the German-speaking part of Switzerland.

²Norwegian data included only general coping styles collapsed across problem domains, and thus is only included in Figure 1.

³By this procedure the sum of active, internal, and withdrawal coping always adds up to 100%. Possible deviations are due to rounding error.

Figure 1 displays the relative percentages for the three coping styles, collapsed over all eight problem domains.

Subsequently, a multivariate analysis of variance (MANOVA) was conducted with the percentages of active coping, internal coping, and withdrawal as dependent variables, and culture, gender, and age group as between-subject factors. The results are displayed in Table 2.

A main effect of culture was found for all three coping styles, revealing the highest percentages of active coping for German, Norwegian, and Croatian adolescents, the highest percentages of internal coping for Czech, Swiss, and Norwegian adolescents, and the highest percentages of

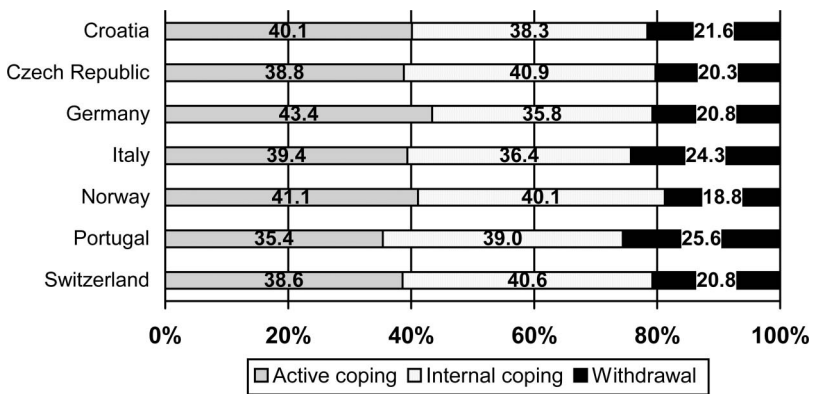


Figure 1. Mean percentages of coping style use in seven cultures (across eight problem domains).

TABLE 2

Main effects and interactions in three coping styles for culture, gender, and age group

	Main effects						Interactions ^c
	Culture		Gender ^a	Age group ^b		F	
	F	Post hoc	F	F	Post hoc		
Active coping	12.35***	D > I,CZ,CH,P	9.37** F > M	9.84***	EA > MA,LA	2.81**	C × A
Internal coping	4.75***	N,HR > P CZ,CH,N > I,D	–	5.74**	–	2.50**	C × A
Withdrawal coping	14.58***	P > HR,CH,D,CZ,N I > CH,D,CZ,N df = 6/3025	7.01** M > F df = 1/3025	5.59**	MA > EA df = 2/3025	5.69***	C × A df = 10/3025

Note: ^aM = Male; F = Female. ^bEA = Early Adolescence; MA = Mid Adolescence; LA = Late Adolescence. ^cC = Culture; A = Age group. ***p* < .01; ****p* < .001.

withdrawal for Portuguese and Italian adolescents. Considering only functional forms of coping (active and internal coping), follow-up *t*-tests for paired samples revealed the most balanced proportion of active and internal coping for Norwegian adolescents. For German adolescents, the percentage of active coping (43.4%) most clearly surpassed internal coping (35.8%), $t(465) = 5.46$; $p < .001$, whereas the opposite pattern was revealed for Portuguese adolescents, with 39.0% internal coping clearly exceeding the active coping style (35.4%), $t(462) = -5.97$; $p < .001$.

Main effects of gender were found for active coping and withdrawal, with females scoring higher (on average +3.4%) with higher percentages for males (on average +1.8%). No gender differences were found with respect to internal coping. Age differences were found for each of the three coping styles: whereas active coping was most pronounced among early adolescents, the highest proportions of internal coping were reported by late adolescents. Withdrawal was most pronounced in mid adolescence. Significant two-factor interactions between culture and age group were obtained for all three coping styles. Further analyses supported the fact that these interactions are based on culture-dependent differences in the height of the age effects. In contrast, no interactions between culture and gender or gender and age group were found. Furthermore, no three-factorial interaction gained significance.

Problem-specific coping styles. In the next step, differences in coping style depending on specific stressors were analysed. The relative percentages of use for all countries (except Norway) and for each of the eight problem domains are presented in Table 3. MANOVAs with culture as between-subject factor and the eight problem domains as within-subject variables were carried out separately for the percentages of active, internal, and withdrawal coping. The influence of age group and gender was controlled as covariate.

Careful scrutiny of the mean value differences in active, internal, and withdrawal coping revealed that the use of a particular coping style varied among adolescents from different cultures, dependent on the problem domain. The most striking cultural variability was found for coping with job-related problems, which is substantiated by high effect sizes. Whereas German and Czech adolescents were characterized by a high use of active coping and a comparatively low use of withdrawal in response to job-related problems, Portuguese, Italian, and Croatian adolescents exhibited the opposite pattern of low active coping and high withdrawal. Coping with school-related problems was also characterized by comparatively high cultural variability, with outstandingly high values of active coping among German adolescents, of internal coping among Czech adolescents, and of withdrawal among Portuguese adolescents. In

TABLE 3
Mean percentages of problem-specific coping styles used in six countries and eight problem domains

	Nationality						Main effect culture	
	Croatia (HR) %	Czech Republic (CZ) %	Germany (D) %	Italy (I) %	Portugal (P) %	Switzerland (CH) %	F ^a	Effect size (η^2)
<i>School-related problems</i>								
Active coping	42.5	37.4	44.2	37.8	33.2	39.7	6.22***	.014
Internal coping	36.6	42.4	34.6	37.5	39.8	40.1	9.15***	.021
Withdrawal coping	21.0	20.3	21.2	24.8	27.0	20.2	15.45**	.035
<i>Parent-related problems</i>								
Active coping	37.6	36.2	47.2	40.4	37.0	38.6	1.38	–
Internal coping	40.2	39.8	29.1	33.3	40.0	40.5	4.57**	.010
Withdrawal coping	22.2	24.0	23.7	26.3	23.0	21.0	1.11	–
<i>Peer-related problems</i>								
Active coping	41.6	39.1	48.0	44.2	38.5	39.1	3.57	–
Internal coping	39.9	39.9	34.2	34.1	40.3	40.4	4.96**	.011
Withdrawal coping	18.5	20.9	17.8	21.7	21.2	20.4	0.46	–
<i>Leisure time-related problems^b</i>								
Active coping	33.8	34.7	38.4	40.7	38.5	–	8.19***	.021
Internal coping	42.4	43.5	39.7	40.3	40.3	–	5.60**	.015
Withdrawal coping	23.8	21.8	21.9	19.0	21.2	–	2.29	–
<i>Opposite gender-related problems</i>								
Active coping	37.3	35.6	45.5	40.9	35.4	36.8	2.64	–
Internal coping	37.5	40.7	35.9	31.0	36.1	41.8	11.04***	.025
Withdrawal coping	25.1	23.7	18.6	28.1	28.5	21.4	6.16***	.014
<i>Self-related problems^b</i>								
Active coping	39.7	36.4	33.0	33.0	33.1	–	1.07	–
Internal coping	34.5	38.1	35.2	35.1	38.3	–	0.63	–
Withdrawal coping	25.8	25.5	31.8	31.9	28.6	–	2.17	–
<i>Job-related problems^b</i>								
Active coping	34.4	51.8	59.9	36.1	33.2	–	60.86***	.140
Internal coping	42.0	36.3	30.2	38.5	39.8	–	3.99**	.011
Withdrawal coping	23.6	12.0	9.9	25.4	27.0	–	63.77***	.146
<i>Future-related problems^b</i>								
Active coping	46.5	44.2	47.8	41.8	38.1	–	5.62**	.015
Internal coping	33.8	40.6	35.9	36.3	40.3	–	1.96	–
Withdrawal coping	19.8	15.2	16.3	21.9	21.6	–	15.50***	.040

Note: ^adf = 3/1301 (school, parents, peers, opposite sex); df = 3/1128 (leisure time, self, job, future).

^bThe Swiss version of the CASQ did not include these problem domains. ** $p < .01$; *** $p < .001$.

contrast, similarities in coping styles across cultures were particularly prominent when coping with self- and peer-related problems. Specifically, all adolescents showed comparatively low levels of active coping and high levels of withdrawal when dealing with self-related stressors. When dealing with peer-related stressors, high levels of active coping and low levels of withdrawal were found among all adolescents, suggesting that, cross-culturally, problems with friends and peers were more actively

coped with than, for example, problems with parents. Similarly, adolescents from all six cultures showed high levels of active coping in dealing with future-related problems.

The overall main effects of culture presented in the previous paragraph (Table 2) could be confirmed for most of the problem-specific coping styles. Accordingly, German adolescents were characterized by high levels of active coping throughout diverse problem domains. Portuguese adolescents, in contrast, showed comparatively low percentages of active coping across the diverse problem domains. With respect to withdrawal, comparatively high percentages for Portuguese and Italian adolescents were found in most of the problem domains.

Coping strategy use across cultures

In the next step, the absolute and the relative importance of each of the 20 coping strategies was analysed across cultures. For a more accurate cross-cultural comparison, z -transformations were computed separately for the seven active, six internal, and seven withdrawal coping strategies within each culture. The transformation was based on the summarized frequency across all eight problem domains. Thus, the sum of all z -values within one culture and one coping style always adds up to zero. The higher the z -value, the more this specific coping strategy is used by adolescents of this culture, compared with the remaining coping strategies of this particular coping style. Additionally, within-country rankings were conducted per culture and coping style, based on the procedure suggested by the International Round Table for the Advancement of Counselling (Gibson et al., 1991, 1992).

To test for cross-cultural differences, a MANOVA with culture as between-subject factor was carried out for the z -values of the 20 coping strategies. The influence of age group and gender was controlled as covariate. Table 4 displays z -values and rank coefficients separately for the active, internal, and withdrawal coping strategies for each culture as well as the F -values and effect sizes of the main effect culture.

A main effect of culture was found for each of the 20 coping strategies, thus illustrating the enormous influence of culture on the use of all coping strategies. High effect sizes ($\eta^2 > .060$) were found for six coping strategies, four of them belonging to the internal-coping style, one to the active-coping style, and one to withdrawal. Concerning active coping, the most prominent cultural difference was found for the strategy: "I look for help in institutions". Although this strategy ranked lowest in every sample, German adolescents employed it to a much higher extent than Portuguese youths, who hardly ever used it. For the internal coping strategies, variation due to culture was highest. As can be seen in Table 4, most of the internal coping strategies differed markedly in the z -values. This was most prominent in the

TABLE 4

Mean frequency of use (z-values) of seven active, six internal, and seven withdrawal coping strategies separated by culture (collapsed over eight problem domains). Values in parentheses indicate the strategies' within-country rank, separately for each coping style

CASQ-Items ^a	Nationality														Main effect culture
	Croatia (HR)		Czech Republic (CZ)		Germany (D)		Italy (I)		Portugal (P)		Switzerland (CH)		Effect size (η^2)		
	z	Rank	z	Rank	z	Rank	z	Rank	z	Rank	z	Rank		F ^b	
<i>Active coping strategies</i>															
I discuss the problem with my parents	1.31	(1)	1.07	(2)	0.77	(1.5)	1.78	(1)	0.43	(3)	0.75	(2)	21.27	.041	
I talk straight about the problem	0.14	(3)	0.34	(4)	0.15	(3)	-0.99	(5)	0.02	(5)	0.57	(4)	17.79	.035	
I look for help in institutions	-1.12	(7)	-1.55	(7)	-0.79	(7)	-1.76	(7)	-2.01	(7)	-1.63	(7)	55.37	.101	
I talk with the person concerned	0.09	(4)	0.57	(3)	0.05	(4)	0.82	(3)	1.21	(2)	0.63	(3)	29.33	.056	
I search for information in magazines, etc.	-0.71	(6)	-1.15	(6)	-0.72	(6)	-1.46	(6)	-1.14	(6)	-1.16	(6)	9.39	.019	
I get help from people in similar situations	-0.12	(5)	-0.56	(5)	-0.22	(5)	-0.10	(4)	0.18	(4)	-0.13	(5)	8.60	.017	
I ask friends for help	0.41	(2)	1.29	(1)	0.77	(1.5)	1.71	(2)	1.30	(1)	0.97	(1)	15.37	.030	
<i>Internal coping strategies</i>															
I accept my limits	-0.90	(6)	0.00	(3)	0.00	(4)	-0.32	(3)	0.42	(2)	-0.81	(5)	22.84	.044	
I don't worry	0.22	(2)	-0.78	(6)	-0.44	(6)	-0.47	(5)	-1.83	(6)	-0.66	(4)	54.13	.099	

(continued)

TABLE 4
(Continued)

CASQ-Items ^a	Nationality												Main effect culture	
	Croatia (HR)		Czech Republic (CZ)		Germany (D)		Italy (I)		Portugal (P)		Switzerland (CH)			
	z	Rank	z	Rank	z	Rank	z	Rank	z	Rank	z	Rank		F ^b
I think about the problem and solutions	0.89	(1)	1.32	(1)	0.65	(1)	1.77	(1)	1.82	(1)	1.63	(1)	36.06	.068
I compromise	-0.15	(5)	-0.49	(5)	0.01	(3)	-0.41	(4)	0.27	(3)	0.77	(2)	37.08	.070
I accept that there will always be problems	-0.02	(3)	0.05	(2)	0.08	(2)	-0.74	(6)	0.05	(4)	0.45	(3)	10.70	.021
I think about problems only when they appear	-0.03	(4)	-0.09	(4)	-0.30	(5)	0.17	(2)	-0.73	(5)	-1.39	(6)	34.04	.064
<i>Withdrawal coping strategies</i>														
I expect the worst	-0.15	(5)	0.25	(3)	0.23	(2)	-0.27	(4,5)	0.01	(4)	0.72	(2)	12.24	.024
I behave as if everything is all right	0.19	(3)	0.32	(2)	0.09	(3)	-0.27	(4,5)	0.57	(3)	-0.35	(5)	18.93	.037
I let out my aggression	0.38	(1)	1.76	(1)	0.71	(1)	1.61	(1)	1.57	(1)	1.31	(1)	23.69	.046
I let out my anger/ desperation	0.04	(4)	-0.64	(5)	-0.13	(4)	0.13	(3)	-0.68	(5)	-0.47	(6)	14.10	.028
I try not to think about the problem	0.32	(2)	-0.16	(4)	-0.24	(5)	0.62	(2)	0.68	(2)	0.34	(3)	20.36	.040
I consume alcohol or drugs	-0.41	(7)	-0.83	(7)	-0.40	(7)	-1.01	(7)	-1.41	(7)	-1.48	(7)	50.82	.093
I withdraw since situation is unchangeable	-0.36	(6)	-0.70	(6)	-0.26	(6)	-0.82	(6)	-0.73	(6)	-0.07	(4)	14.18	.028

Note: ^aMost of the items are displayed in a shortened wording. ^bdf = 5/2474. All F-values are significant at $p < .001$.

strategy: "I don't worry, because usually everything turns out alright", which was most often approved by Croatian adolescents and least employed by their Portuguese same age peers. From all withdrawal coping strategies, the most remarkable cultural variation was found with respect to alcohol and drug use as a coping strategy. Although ranking last among adolescents from all cultures, this strategy was more often employed by Croatian and German youths, whereas Swiss adolescents had the lowest values.

In sum, the *z*-value comparisons indicate a cultural influence on all coping strategies. In contrast, the relative importance of coping strategies, which is reflected in the ranking, reveals far fewer cross-cultural differences but more similarities. Concerning *active coping* strategies: "I ask friends for help" and "I discuss the problem with my parents" were the two most frequently employed active coping strategies in every nation except Portugal, where discussing a problem with parents ranked third. The two active coping strategies ranking last in all samples were: "I look for institutional help" and "I search for information in magazines, etc.". Likewise, efforts to "get help from people in similar situations" ranked low among adolescents from all countries. In some other active coping strategies, however, there were pronounced rank differences between cultures. For example, whereas: "I talk straight about the problem" was most favoured in the Croatian and German samples (rank 3), it was less employed by Italian and Portuguese adolescents (rank 5). The contrary was true for the strategy: "I talk with the person concerned", which was used most by Portuguese (rank 2) and least by German and Croatian adolescents (rank 4).

The same *internal coping* strategy ("I think about the problem and try to find different solutions") was ranked first in all investigated samples. In contrast, marked cultural differences were revealed in the use of the remaining five internal coping strategies. "I accept my limits" was the least employed strategy in Croatia (rank 6), but it was widely used by the Portuguese sample (rank 2). The strategy: "I don't worry, because things usually turn out alright" ranked second in the Croatian sample, but ranked lowest in the Portuguese sample. "I compromise" was a relatively popular strategy for the Swiss adolescents (rank 2), but not for Croatians and Czechs (rank 5). Saying to oneself that "there will always be problems" turned out to be more preferred by German and Czech adolescents (rank 2) than by Italian adolescents (rank 6). Finally, the coping strategy: "I think about a problem only when it appears" was often employed by Italian adolescents (rank 2), but rarely used by Swiss adolescents (rank 6).

Among the seven coping strategies that indicate *withdrawal*, the one most clearly preferred by adolescents from all nations was: "I try to let out my aggression with loud music, riding my motorbike, wild dancing, sports, etc." (rank 1), whereas: "I consume alcohol or drugs" was the least preferred dysfunctional strategy in all samples (rank 7). Also, the strategies: "I

withdraw because I cannot change anything anyway” and “I let out my anger and desperation by shouting, crying, slamming doors, etc.” were seldom employed in all cultures. Rank differences between cultures were most pronounced for the strategy: “I expect the worst”, which ranked second for German and Swiss adolescents, and fifth for Croatian adolescents.

It can be concluded that the absolute importance of each of the 20 coping strategies, based on the comparison of z -values, differs remarkably between cultures. However, the relative importance of coping strategies, based on the comparison of rank orders, exhibits great cross-cultural similarity. The latter is particularly true for the most and the least popular coping strategies (first and last rank numbers), respectively.

Age and gender differences in coping strategies

To determine age and gender effects at the coping-strategy level, a MANOVA with gender and age group as between-subject factors was carried out for the z -values of the 20 coping strategies. The influence of culture was controlled as covariate. All reported F -values were significant at $p < .001$ unless otherwise indicated.

Age. Age effects were revealed in four active, four internal, and four withdrawal coping strategies. Two active coping strategies were more frequently named by early adolescents compared with the other two age groups: discussing the problem with parents, $F(2, 2482) = 31.80$, and talking straight about the problem without worrying much, $F(2, 2482) = 12.11$. Another two active coping strategies did not differ between early and late adolescents but were significantly lower among mid adolescents, namely trying to get help from institutions, $F(2, 2482) = 19.87$, and looking for information in magazines, etc., $F(2, 2482) = 8.06$. Regarding internal coping strategies, the highest age effect was found for accepting one's limits, which was far more pronounced in late adolescence, $F(2, 2482) = 16.72$, than in the other two age groups. Furthermore, late adolescents more often agreed that they only thought about problems when they appeared, $F(2, 2482) = 11.11$. In contrast, early adolescents more often indicated that they did not worry, because usually everything turns out alright, $F(2, 2482) = 7.89$. Mid adolescents finally more often agreed that they made compromises than did adolescents from the other two age groups, $F(2, 2482) = 5.06$, $p = .006$. Concerning withdrawal, the most pronounced age effect was found with respect to consuming alcohol or drugs as a coping strategy, which was considerably higher among late adolescents, $F(2, 2482) = 38.56$. A withdrawal strategy differing between all three age groups was not to think about the problem, which was highest in early adolescence and lowest in the oldest age group, $F(2, 2482) = 9.73$. Expecting the worst, $F(2, 2482) = 5.86$,

$p = .003$, and withdrawing because the situation seems unchangeable, $F(2, 2482) = 10.23$, were highest among early adolescents.

Gender. The MANOVA revealed that the aforementioned main effect of gender for the active-coping style was due to higher values for females in the following three coping strategies: trying to talk about the problem with the person concerned, $F(1, 2482) = 18.56$; trying to get help from people in a similar situation, $F(1, 2482) = 50.20$; and asking friends for help, $F(1, 2482) = 105.54$. The remaining four active coping strategies did not exhibit gender differences. Concerning internal coping strategies, a higher employment of females was found for accepting one's limits, $F(1, 2482) = 7.74$, $p = .005$, thinking about the problem and possible solutions, $F(1, 2482) = 42.41$, and accepting that there will always be problems, $F(1, 2482) = 9.47$, $p = .002$. In contrast, males scored higher in not worrying about the problem, $F(1, 2482) = 16.89$. With respect to withdrawal, females' z -values were significantly higher for the two emotional outlet strategies: letting out one's aggressions, e.g., by loud music, $F(1, 2482) = 8.22$, $p = .004$, and letting out anger and desperation by shouting, slamming doors, etc., $F(1, 2482) = 19.68$. Males instead more often indicated that they behave as if everything is alright, $F(1, 2482) = 10.79$, and they more often consumed alcohol and drugs as a coping strategy, $F(1, 2482) = 20.88$.

Interactions of age group and gender occurred for three active coping strategies and one withdrawal strategy, but not for internal coping strategies. In particular, the following interactions were found: discussing problems with parents, $F(2, 2482) = 8.93$, $p < .001$, higher values for males in early adolescence, higher values for females in mid and late adolescence; trying to get help from institutions, $F(2, 2482) = 7.00$, $p = .001$, higher values for males in early and mid adolescence, no gender difference in late adolescence; talking about the problem with the person concerned, $F(2, 2482) = 5.18$, $p = .006$, higher values for females in early and late adolescence but not in mid adolescence; letting out anger and desperation by shouting, slamming doors, etc., $F(2, 2482) = 7.98$, $p < .001$, no gender differences in early adolescence, higher values for females in mid and late adolescence.

DISCUSSION

The aim of this study was to analyse the similarities and differences in adolescents' coping with a variety of normative stressors in seven European countries. More specifically, the goal was to determine whether adolescent coping styles and strategies differ from country to country, and, if so, how. Results shed light on some of these queries. Taking the variety of the seven cultural backgrounds considered, the following discussion cannot provide culture-based explanations for all of these findings—but it can offer

a bunch of potential reasons for these results. Thus, it may hopefully stimulate an ongoing discussion about possible cultural factors and influences.

Coping styles across cultures

The findings revealed that the coping behaviour of adolescents from all seven European countries was significantly more functional than dysfunctional. In all investigated cultures, the proportion of the two functional coping styles (active and internal coping) was higher than dysfunctional coping (withdrawal). This suggests a universal, non-culturally linked capacity for solving age-specific stressful situations in an active manner (Gardner, 1984). The ratio of active to internal coping was most equally balanced in Norway, which converges with findings obtained in another Scandinavian sample from Finland (Seiffge-Krenke, 1992). Noteworthy are differences in the focus of preferred functional coping styles. Whereas German adolescents showed the strongest preference for using functional, active coping strategies, their same age peers from Portugal most clearly preferred using internal forms of functional coping.

In concordance with previous research based on binational coping studies (Seiffge-Krenke, 1992; Seiffge-Krenke & Shulman, 1990), the findings revealed that cross-cultural homogeneity or heterogeneity in coping style was dependent on the type of stressor. Whereas adolescents from the six European countries exhibited quite similar coping styles when dealing with leisure time- or self-related problems, the ways of coping with job-, school-, or parent-related stressors showed a high cultural variability.

Concerning coping with job-related problems, this study revealed that adolescents from Portugal, Italy, and Croatia especially showed similarly high patterns of withdrawal. A possible explanation—at least for Croatia and Italy—may be that the youth unemployment rates in these countries are comparatively high (in 2001: 37.3% in Croatia; 27.0% in Italy; United Nations Economic Commission for Europe, 2003). This situation may have caused these adolescents to feel desperate or hopeless about their futures, such that they preferred to use dysfunctional coping strategies. Evidence supporting this hypothesis is the finding obtained in this study that adolescents from countries with lower levels of youth unemployment (in 2001: 8.4% in Germany; 16.6% in the Czech Republic; United Nations Economic Commission for Europe, 2003) showed low levels of withdrawal and high levels of active coping in dealing with job-related issues.

Cultural differences concerning coping with other age-specific stressors may have different reasons. Considering coping with parent-related stressors, German adolescents turned out to be the most active copers.

High levels of internal coping were obtained for adolescents from all countries except Germany and Italy when dealing with stressors related to their parents. One explanation for this finding may be related to differences in child-rearing practices and parental styles (Harkness & Super, 2002). The increased popularity of less authoritarian and more co-operative child-rearing practices in Germany following the Second World War (Fend, 1988) may explain why German adolescents cope more actively when dealing with parent-related problems. In contrast, parents in eastern and southern European countries retain a more traditional form of child-rearing that upholds obedience to and respect towards the parents (Inglehart, 2004). As a consequence, adolescents in these countries may be more disinclined to actively cope with parent-related problems, for example, by talking with them about the problem.

Based on these findings, it seems warranted to suggest that some problems elicit a more culturally universal coping pattern than others. This implies that the influence of a specific cultural background on coping depends on the problem to be solved. This finding converges with earlier research (Seiffge-Krenke, 1995) and supports the view that a problem-specific approach is needed to deepen our understanding of how adolescents cope with the variety of difficulties that typically emerge in their daily lives. Due to the diverse cultural coping patterns in respect to the problem domains, it may be suggested that particular aspects of a given culture (e.g., youth unemployment rate, child-rearing practices) influence coping with specific stressors (e.g., job- or parent-related stressors) rather than a general cultural factor. Thus, for each problem domain, a distinct cultural cue or combination of factors may have a bearing on coping behaviour. Therefore, an analysis of the combination of salient factors in a respective culture is needed to explain similarities or differences in coping behaviour across nations.

Coping strategies across cultures

An important finding of the study was that all adolescents shared similar preferences for particular coping strategies. Concerning the relative importance (ranking) of coping strategies, the most and the least preferred active, internal, and withdrawal strategies were highly similar in all investigated cultures. Active coping in all samples mostly consisted of discussing the problem, either with parents, friends, or the person concerned. Internal coping behaviour was hallmarked by the frequent use of strategies involving reflection about the problem and how to solve it.

However, for some coping strategies, profound differences between cultures were found with respect to the absolute frequency of use. Among active coping strategies, the most striking example was the strategy of asking

for institutional assistance, used with the highest frequency by German adolescents. This may be related to a broader and more elaborated and accepted system of professional help in Germany (Wallace & Kovatcheva, 1998) than in eastern or southern European cultures. However, according to this approach, the comparatively low values among Swiss adolescents remain unexplained. Due to a similar structure and density of professional help systems in Germany and Switzerland, similar values for adolescents in these two cultures would have been expected.

Respectable high effect sizes due to cultural variation were found for the absolute frequencies of internal coping strategies. For example, Portuguese adolescents frequently used the strategy of accepting one's limits, Croatians preferred not to worry, the Swiss were more likely to make compromises, Germans resigned themselves to the notion that there will always be problems, and Italians thought about problems only when they appeared. These results clearly point to the fact that cultural variation in coping strategies is caused by more than just variation in external opportunities: internal strategies are focused on the individual's handling of problems and they are less tied to external environmental conditions than active or withdrawal strategies.

In all of the samples, the clearly preferred withdrawal coping strategy was to let out one's aggressions by, for example, engaging in athletic activities or listening to loud music. However, the importance of trying to reduce the burden of a problem by seeking an emotional outlet was, compared to other withdrawal coping strategies, highest among Portuguese, Italian, and Czech adolescents, thus supporting—at least in part—the image of more spirited and sultry cultures in southern and eastern Europe as described, for example, by Rushton (1999). The notion that natives of southern European countries have a more easygoing mentality is further supported by the finding of higher frequencies of not thinking about the problem, reported by Italian, Portuguese, and Croatian youths in this study.

In accordance with previous research (Seiffge-Krenke, 1995), this study revealed that drinking alcohol and using drugs in order to cope with normative stressors was not an important strategy of adolescents in any of the investigated samples. Recent research has identified an increased consumption of alcohol especially among young adolescents in Europe (Choquet, Morin, Hassler, & Ledoux, 2004; Settertobulte, Jensen, & Hurrelmann, 2001), but apparently this does not serve as a coping strategy. Although generally of low importance, the coping strategy of drinking alcohol or using drugs was employed more often by German and Croatian adolescents than by Swiss and Portuguese same age peers. Whereas this finding does not necessarily mean that German or Croatian adolescents drink or use drugs more often, it does indicate that they do resort more to this option as a way of solving problems. Some of the cultural aspects that

may be considered responsible for this fact are the low prices of alcoholic beverages (e.g., compared with Finland or Switzerland) as well as a low legal drinking age (in Germany 16 years for beer and wine).

It is noteworthy that adolescents from cultures who showed similarities in their preferences for certain coping strategies also showed major differences concerning other strategies. For example, adolescents from the neighbouring countries Germany and Switzerland similarly assigned importance to *some* coping strategies (e.g., “I discuss the problem with my parents” or “I behave as if everything is alright”), but they differed with respect to their preferences for other coping strategies (e.g., “I drink alcohol or use drugs” or “I try not to think about the problem”). In the case of the latter two strategies, German participants were more similar to the Croatian and Czech adolescents. In addition, adolescents from different nations who showed highly similar coping styles (e.g., showed a preference for active coping), nevertheless used very different strategies (e.g., talked about a problem with their parents versus addressed the concerned individual) within this approach. It can thus be concluded that conceptualizations of similarity/dissimilarity in coping behaviour must differentiate between similarity in coping styles and similarity in coping strategies that need not to go hand in hand. Furthermore, similarity/dissimilarity in coping behaviour turned out to be closely linked to the event to be coped with. Thus, similarity in coping behaviour of adolescents from two cultures can be limited to coping with certain problems, whereas dissimilarity may be more characteristic in coping with other problems. Global indices of similarity/dissimilarity in coping behaviour may, however, veil these problem-dependent cultural differences.

Age and gender effects

In the present study, the effects of age and gender on coping behaviour turned out to be less substantial and less consistent than the influence of culture and situational factors. In general, most of the obtained age and gender effects were in line with previous research (e.g., Frydenberg, 1997; Frydenberg & Lewis, 2000; Hampel & Petermann, 2005; Seiffge-Krenke, 1995; Seiffge-Krenke & Beyers, 2005).

Age. Age effects were found for all three coping styles, showing that coping behaviour underlies important changes in the adolescent years. Active coping was most prominent among early adolescents; internal coping was highest among late adolescents, while withdrawal peaked in mid adolescence. This is highly concordant with the results of longitudinal studies (for an overview see Fields & Prinz, 1997). Obviously, internal coping strategies, which are based on cognitive-reflective processes,

especially seem to develop in adolescence, whereas conversely dysfunctional ways of coping lose weight. Analyses on the coping-strategy level revealed differences in the employment between adolescents of different age for 12 of the 20 coping strategies of the CASQ. Again, results are in concordance with research demonstrating that older adolescents rely less on communicating with their parents about problems as a coping strategy (Seiffge-Krenke, 1995). Furthermore, the higher acceptance of one's limits among late adolescents points to a more realistic self-assessment in this age group due to progressed adolescent identity development (Grotevant, 1998). Finally, the higher employment of alcohol and drug use as a coping strategy in late adolescence was substantiated. However, it must be borne in mind that differences in the mean ages of the cultural samples might have contributed to these effects, especially on the interactions of culture and age group obtained for the coping styles. Furthermore, interpretations of age effects should be cautious, as the present results are based on cross-sectional data with different age groups. In order to better disentangle the interplay of time, age, and culture, future research efforts should be devoted to obtaining longitudinal data. Recent longitudinal research has shown that important changes in coping behaviour occur in the course of adolescence (Seiffge-Krenke & Beyers, 2005).

Gender. Concerning gender effects, the present study substantiates findings that males characteristically show higher levels of withdrawal coping, whereas females cope more actively with their problems (Cleto & Costa, 1996; Winkler Metzke & Steinhausen, 2002). As gender did not interact with culture concerning the coping styles, these findings can be considered of cross-cultural validity. The analysis of single coping strategies in this study highlights that males and females differ even more strikingly in the use of certain coping strategies than in the use of the three coping styles. Thus, even if males and females both cope actively, they employ different strategies to do so (cf. Frydenberg & Lewis, 1993, p. 1: "Boys play sport, girls turn to others"). Indeed, in concordance with existing research literature, the highest gender effects were obtained for strategies focusing on social support by parents or peers, which were used far more by females.

Finally, some limitations about the present study should be noted. Although the CASQ was administered in each subject's mother tongue, the items' contents may have different meanings across cultures (Berry, Poortinga, Segall, & Dasen, 2002). Furthermore, the 20 different coping strategies included in the CASQ may not equally well represent the range of adolescent coping behaviour in the investigated countries. Future studies should thoroughly test for the cultural fairness of the instrument used.

In summary, this study revealed that adolescents from seven European countries were characterized both by universal as well as culture-specific coping styles and strategies in dealing with stressful situations. Despite the

discussed cultural variation, many similarities in adolescent coping behaviour have been shown. This lends support to the idea that coping behaviour in adolescence reflects the influence of a more basic or underlying feature that is not necessarily tied to cultural heritage. This feature might be considered as the active agency of the adolescent “as the producer of his own development” (Lerner & Busch-Rossnagel, 1981, p. 3). Further cross-cultural research may substantiate the finding of a more universal than distinct nature of coping among European adolescents. As well, more research is needed to elucidate how and to what extent adolescents cope with stressors, given an increasing assimilation between European cultures. Apparently, balancing distinctive and universal features is one of the most important challenges for today’s adolescents.

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