School-Related Stressors in Adolescents from 21 Countries: What is Universal?

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Abstract
School stress is one of the most important stressors in adolescents around the world. This study tested the impact of region, age, gender, family structure, and school achievement on adolescents' stress perception. In a cross-sectional design, 12.172 adolescents from 21 countries participated in the study. Adolescents from Central European and North American countries had generally quite low levels of school stress. Adolescents from Southern Europe exhibited the highest stress levels, but also adolescents from Latin America, the Middle East and Asian countries reported quite high levels of school-related stress. Rank 1 in many countries was the pressure to get the best marks. Additionally, the fear that differences in opinion with the teacher may result in bad marks and that the leaning material is too difficult or too boring were also important stressors, whereas rivalries among pupils seemed not to be a major problem. Adolescents from single-parent families experienced higher school-related stress than adolescents from two-parent families. The findings were discussed with respect to overall globalization and future insecurities, leading to universal stressors of adolescents in different parts of the world.

Key words: school stress, stress perception, gender effects, cross-cultural comparison

1. Introduction

Education is fundamental in the lives of adolescents and school is an important developmental context for adolescents' psychological functioning (Eccles & Roeser 2011). There are numerous studies that show that the school environment of young people is characterized by very high demands at achievements. School-related problems are very common, especially in middle adolescence, and may lead to a drop in performance, especially in male adolescents (Suldo et al., 2009). School stressors also include other stress factors besides a lack of interest in school material. Rivalry and pressure to perform in school are among the typical school-related stressors that also have health consequences (Moskness et al., 2016). School stressors often become particularly acute in the context of problematic family relationships.

1.1 Common school-related stressors: Change of school, pressure to perform, test anxiety, rivalries and aggression among students

In various studies, difficulties with peers in the class, worries about school performance, being overwhelmed by homework and conflicts with parents or teachers related to school were found to be important school stressors (Persike & Seiffge-Krenke, 2012). The stress load seems to be particularly high during the transition to high school (Kouzma & Kennedy, 2004). Very high levels of tension were reported during transition to school and the relaxation that most students experienced afterwards. Other studies shows that the level of stress varies depending on the type of secondary school. High school students reported the most school stress, secondary school students reported the least school stress, while comprehensive school students were in the middle in terms of their stressful experiences.

In the course of their school development, adolescents are repeatedly confronted with test and examination situations, the passing or failure of which has decisive consequences for further development, as success at school opens up access to further academic or professional training. Class tests with their corresponding grades therefore have decisive consequences for the future, are given a special personal meaning and are experienced as particularly stressful if failure is threatened (Schwarzer & Buchwald, 2003. In addition to exam fear and pressure to perform, it is also aggression among classmates that lead to significant stress reactions. Almost all students find rivalry between pupils stressful (Chen et al., 2003). Studies of openly displayed aggression, violence and bullying in schools are common (Hunter & Boyle, 2004). It was only in recent years that the term "relational aggression" began to be used to investigate processes of marginalization, devaluation, ridicule and ignoring, especially among school girls. However,

not all studies found higher levels of girls in relational aggression compared to boys. All forms of school stress are associated with numerous physical and psychological symptoms (Grant et al., 2006), including somatic complaints (Natwig et al., 1999), depression (Jayanthia et al., 2015) and suicide attempts (Ang et al., 2006), which clearly demonstrate the health-damaging effects of high school stress.

1.2. Relation to the family context: What makes school stress "stressful"?

Concerns about the future are at the forefront of the stressful problems of young people (Seiffge-Krenke et al., 2012) The wish to protect themselves from later unemployment is important when young people consider career choices. Almost all young people stated that it is very important to them to do well in school. This underlines that bad grades can be a significant stressor, especially if they can lead to or have already led to a failure to achieve the class goal.

Another noteworthy finding of several studies is that conflicts with parents about school performance led to strong emotional tension in adolescents, which was greater than the subjectively perceived stresses from the school requirements themselves (Laursen & Hafen, 2010) Gender-specific difference were also reported in that girls reacted significantly more strongly to performance difficulties with emotional tension than boys (Lehman & Repetti, 2007). It was also shown that the self-image of the young people was impaired even in those cases where the parents' demands with regard to school performance could not be met. Quite often parents expect their children to successfully complete their school career and achieve the development goals without major difficulties (Jose et al., 1998)

Psychosomatic symptom occur more frequently when young people experience educational "downward mobility", i.e. if the performance of the young people has just deteriorated rapidly and they are subsequently downgraded (Natvig et al., 1999). The frequency of psychosomatic symptoms increased when adolescents attended a type of school that led to an educational qualification that did not correspond to that of their parents. The values were particularly high in those subgroups in which one or both parents had graduated from high school, but the young people surveyed did not attend grammar school. High school students in this subgroup showed the most psychosomatic complaints. Overall, the stress level experienced and dealing with stress at school are therefore strongly influenced by the family context.

2. Cross- cultural comparison in school-related stressors: Design and Measures

Until recently, the vast majority of studies on school stress was conducted on white,

middle-class samples and the influence of cultural context was largely ignored. However, the overall value orientation in a given culture may impact school stress. Most Western cultures (e.g., the U.S., Canada, and Western Europe) show a greater orientation to individualism, characterized by encouragement of individual achievements and personal choice of professions (Oyserman et al., 2002). Other cultures (e.g., many Latin American countries) value harmony and interdependence among family members. Asian countries endorse the use of a restrictive parenting style and are less likely to tolerate low achievements (Fuligni, 2007). There might be higher parental control in countries formerly governed according to communist principles (Stetsenko, 2002). However, the economic background of a country and the future career opportunities of the younger generation also play a role. The question is whether young people from Non-Western countries, (e.g. from Asia, the Middle East, and South America) - compared to young people in Western countries (e.g. from Europe and North America)- suffer from a particularly high level of school stress. In the following, the stress level in the school area will be examined within the framework of a cultural comparison among young people from 21 countries.

Procedure

Data were collected from a sample of 12,173 adolescents from 21 countries (Canada, Costa Rica, Croatia, Czech Republic, Egypt, England, Estonia, Finland, France, Germany, Greece, Hong Kong, Italy, Korea, Pakistan, Peru, Poland, Russia, Spain, Turkey, and the US). In order to limit the variance caused by differences in school types and urbanization, assessments were conducted in high schools located in university cities across all countries. An indigenous research coordinator supervised data acquisition in each of the 21 countries. Written consent to participate in the study was provided by 94% of the adolescents' parents. Another 6% of adolescents were absent on the day of assessment, resulting in a low overall dropout rate of less than 12%. The native cooperation partner remained in the classroom during the assessment to answer questions. During a classroom period, each participant received a survey packet containing the PQ and a demographic survey to obtain data on participants' gender, age, socioeconomic status (SES), family structure and school performance All instruments were coded with a unique random ID to guarantee anonymity.

Measures

School-related stress was measured by the Problem Questionnaire (PQ; Seiffge-Krenke, 1995), which assesses the perceptions of minor stressors in seven stress domains. Participants are asked to indicate the stressfulness of specific events, ranging from 1 (*not stressful at*

all) to 5 (*highly stressful*). In the present study the 7 items pertaining to the domain of school stress were used (for example: "There is great pressure to get the best mark at school", "There is no comradeship in my class, only competition"; α = .89). Measurement invariance for the mean scores including a) configural invariance, b) slope invariance, and c) intercept invariance was established (see Persike & Seiffge-Krenke, 2014, for more details).

In addition, a *demographic survey* was administered. We asked participants about the family situation (two parent vs single parent families, number of siblings) the SES and the school performance (high, medium, low).

Sample

Clustering into regions

A total of 12,172 adolescents from 21 countries participated in this study. The countries were collapsed into larger groups, based on their geographic location and a set of key socioeconomic indicators. Clustering was validated by discriminant function analysis on indicators such as gross domestic product (GDP), birth rate, and age structure. A very good reproduction of the initial criterion based on clustering with 91.1% correct classifications (Wilk's λ = .029, $F(15,42) = 5.523$, $p = .001$) emerged. A post-hoc discriminant analysis, again with over 90% correct classifications, further corroborated the seven groups of countries. Hence, the particular grouping scheme employed was reproduced by multiple sets of different predictors. The group of *Central European* countries (N=2693) included Germany n=1799, England n=371 Finland n=523, the group of *North Amerika (*N=710) included Canada n=510 and the US n=200, and the group of *Eastern European* countries (N=2361) comprised Croatia n=228 the Czech Republic n=616, Estonia,n=867, Russia n=382 and Poland n=268. The group of *Southern European* countries (N=1535) included France n=309, Italy n=253, Spain n=351, and Greece n=623. *Asian* countries (N=2167) were Hong Kong n=1064 and Korea n=1103, the group of *Latin American* countries (N=1706) included Costa Rica n=394 and Peru, n=1312, and the group of *Middle East* (N=1000) included Egyp n=211, Turkey n=539, and Pakistan n=250.

Mean age (M=15,2, SD 2, 3, range 14,4 to 16,1 years) and gender ratio (52% females) were highly similar for most regions; more than two thirds of all adolescents were growing up in middle- or upper-class households, as assessed by adolescents' self-reports of SES. There were, however, marked differences in family structure and size between regions. Although almost all adolescents from Latin American countries, 94% of the youth from the Middle East, and about 90% from Asian countries lived in two-parent families, single-parent families accounted for about 20 to 30% of the family structures of adolescents from countries in the Western, Eastern Europe,

and Southern Europe groups. The number of children per family varied widely across regions, with the lowest found in Eastern European countries (about 1 child per family) and the highest in Latin American countries (over 3 children per family).

Plan of Analyses

As the sample sizes was unequal per country, in the first step, following Nunally and Bernstein's (1994) suggestion, we selected standardized samples of size n = 300 for each country, employing an iterative Monte-Carlo procedure on the full data set to most closely approximate the gender and age distributions of the reference sample. Where approximation did not sufficiently converge onto the reference sample, sample size was allowed to drop below n = 300 (for more details see Persike & Seiffge-Krenke, 2015). All calculations were first run on the standardized samples, collapsed into 7 regions and then, additionally, on the total sample, collapsed into 7 regions. No significant differences emerged, and thus the findings on the total sample were presented.

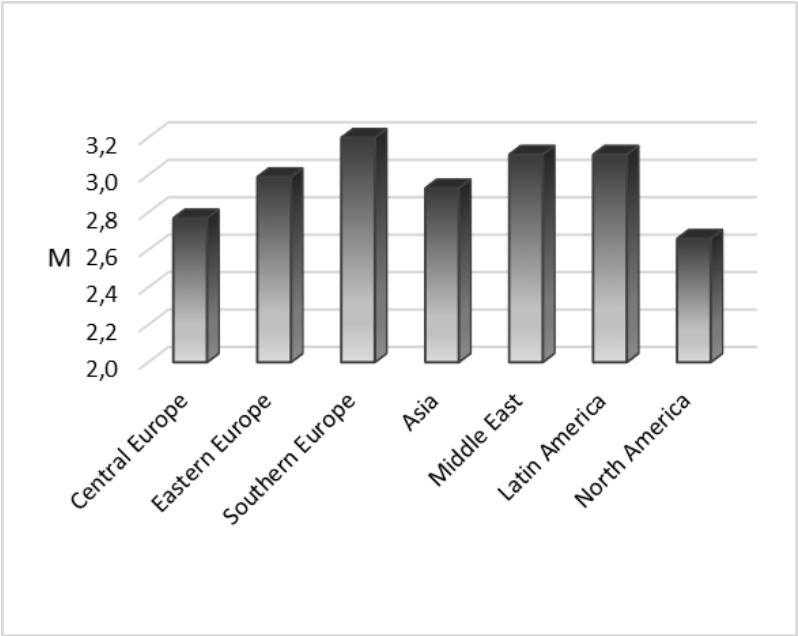
To compare the effects of country and school stress, a multivariate analysis of variance (MANOVA) was performed in the total sample, collapsed into 7 regions, on stress levels in the school domains as the dependent variable and region as the independent factor. Differences between mean scores in school stress for each region were tested with pairwise contrasts. In addition, rank orders for the seven stress items, depending on region, were determined on the basis of M and SD in each region. In addition, three-factor MANOVAs were run including region, gender, age, family status and school achievement as factors.

3. Results

3.1. School-specific stressors in a cultural comparison: Are Non-Western youth particularly stressed?

The effect of world region as the between-subject factor on school-related stress perception were compared in a MANOVA analysis. Figure 1 provides an overview of the mean values per region. Region affected stress perception significantly (Wilk's $\lambda = 0.917$, $F(10, 12{,}172) = 96.68$, $p < .001$). Post-hoc Tukey-Kramer HSD tests revealed that North American and Central European youth reported the lowest stress values in the school domain, whereas adolescents from Southern Europe scored highest ($p < 0.001$ for all pairwise comparisons). Adolescents from Non-Western countries also reported quite high stress levels with adolescents from Eastern Europe, from the Middle East and Latin America perceived even more school- related stress than Asian ($p < .01$) youth.

Figure 1: Differences in the total score of school stress across the regions



3.2. Rank order in specific school-related stressors in different regions of the world: What is perceived a particularly stressful?

Table 1 displays M and SD in all seven Items of the PQ, depending on region. In addition, the rank order of the items is given with rank 1 pertaining to the highest means, e,g, this school- related stressor is perceived as most stressful. Youth from Central Europe and North America had comparably low mean stress levels. As can be seen in Table 1, they uniformly perceive three stressors as particularly stressful: the pressure to get best marks (rank1), the fear that differences in opinion with the teacher may result in bad marks (rank2) and that the leaning material is too difficult (rank 3).The enormous pressure to get the best marks in school achieved rank 1, too, in youth from most other regions (Southern Europe, Asia, South America). Similarly, the fear that differing opinions with a teacher may result in bad marks is shared by youth from Southern Europe and Asia (Rank 2), and was even ranked higher (rank 1) in youth from Eastern Europe. For Asian youth, the difficulty of the subjects (ranks 2), disinterested teachers (rank 3) and the fear that they may get bad marks if they don't agree with the teacher's opinion (rank 2) were the most important stressors. Youth from Eastern Europe and youth from Latin America likewise stressed boring school material (rank 2) as a problem. Of note, the lack of comradeship is not a major problem for youth from Central Europe (rank 7), Latin America (rank 7) and Asia (rank 7) and is also not seen as a major stressor in youth from the Middle East (rank 6), Southern or Eastern Europe (both rank 5). Together, although the mean levels differ greatly,

the ranking of what is considered to be specifically stressful is quite similar in the individual regions.

Table 1. M, SD and rank of the school stress items in different regions of the world

	Central Europe (N = 2693)			Eastern Europe (N = 2361)			Southern Europe (N = 1536)			Asia (N = 2167)			Middle East (N = 1000)			Latin America (N = 1706)			North America (N = 710)		
PQ School Stress Items	M	sd	Rang	M	sd	Rang	M	sd	Rang	M	sd	Rang	M	sd	Rang	M	sd	Rang	M	sd	Rang
1. There is great pressure to get the best marks at school.	2.74	1.13	1	2.62	1.19	3	3.26	1.18	1	3.33	1.16	1	3.13	1.34	1	3.25	1.04	1	2.91	1.16	1
2. There is no comradeship in my courses, only competition.	1.94	1.16	7	2.34	1.25	5	2.82	1.37	5	2.27	1.20	7	2.47	1.43	6	2.05	1.07	7	1.68	0.92	5
3. Interactions with other students and teachers are mostly impersonal.	2.04	1.10	6	2.25	1.15	6	2.85	1.38	4	2.31	1.14	5	2.56	1.49	5	2.13	1.12	6	1.47	0.78	6
4. I can´t do anything with the school´s prescribed learning material.	2.13	1.10	5	2.71	1.22	2	2.96	1.18	3	2.33	1.16	4	2.89	1.31	2	2.96	1.15	2	1.45	0.83	7
5. The teachers aren´t not interested in my problems.	2.26	1.25	4	2.53	1.32	4	2.62	1.34	6	2.35	1.21	3	2.64	1.48	3	2.25	1.25	4	1.83	1.18 -	4
6. Differences in opinions with my teacher could result in bad marks.	2.58	1.35	2	2.91	1.35	1	3.13	1.41	2	2.54	1.35	2	2.62	1.54	4	2.22	1.29	5	2.03	1.15	2
7. Learning material is too difficult for me.	2.32	0.68	3	2.09	1.18	7	2.31	1.27	7	2.30	1.18	6	2.46	1.45	7	2.31	1.23	3	2.02	1.19	3

3.3.Effects of age, gender, family status and school achievement

To analyze the influence of the factors region, gender, age, family structure and school performance on the total score of school- related stress, two 3-factor ANOVA were carried out, including the seven regions, gender, age (3 age groups), family status (two- vs single- parent families) and school performance (low, medium, high).

The three-factor analysis of variance (design: region x gender x age group) showed a significant main effect of the region ($F (7, 12172) = 70.25$, $p < .001$) and two significant interaction effects, the interaction region x age ($F (14, 12172) = 2.85$, $p = .001$) and the interaction region x gender ($F (8, 12172) = 2.05$, $p = .037$). The Eta^2 values show that the region factor explains 4.9% of the variability of the stressors in the school area. The explained variance by the interaction region x age amounted to 0.4%, that of the interaction region x gender to 0.1%. The findings show that older adolescents experienced more school stress than younger ones ($p < 0.001$ for all pairwise comparisons). Further, there are significant gender differences for the regions of Central., Northern, Eastern and Southern Europe and for North America. Cohen's effect size were small and varied between d=.008 (Central Europe) and d = .26 (Southern Europe); in most regions boys scored higher than girls in school-related stress. In contrast, girls from Southern Europe named higher school-related stress than their male age mates. No gender differences were found in youth from Asia.

A further three-factor analysis of variance (design: region x family status x school performance) revealed a significant main effect of the region ($F (7, 12172) = 54.98$, $p = .000$) and school performance ($F (2, 12172) = 6.063$, $p = .002$). The significant main effect of school performance and pairwise comparisons showed higher stress levels in youth with lower school performance ($p < 0.001$ for all pairwise comparisons). In addition, family status had a tendential impact with youth from single parent families reporting higher school stress ($F(1, 1272) =3.227$, $p=.071$).

4. Discussion

In recent years, the contributions of cross-cultural research findings towards advancing our understanding of adolescent development have been duly acknowledged (Gardiner, & Kosmitzki, 2005; Georgas et al., 2006). So far, not many studies to date have investigated stress perception in adolescents from different cultural backgrounds (Hendersen et al., 1999; Jose et al., 1998; Seiffge-Krenke et al., 2012) while most focus on relationship stressors (Seiffge-Krenke, 2011). However, school is an important developmental context for adolescents' psychological functioning (Eccles & Roeser, 2011) and school stress is an important risk factor for health, leading to depression, body complaints and even suicidal ideation and suicide

attemps.

The findings from this study on adolescents from 21 countries, grouped into seven regions according to geographical proximity and the prevailing values for achievement, highlight many similarities across countries and regions, but also point to some differences in perceived school stress.

4.1 Differences in mean levels, but quite similar ranking in specific stressors

One of the main purposes of our study was to explore differences in school-related stress, depending on region or culture. We found the lowest stress levels among adolescents from North America and Central Europe, suggesting an overall positive school climate (Collie et al., 2012; Tomasik et al., 2009). Of note, stress levels were also quite low in youth from Asian countries. Research has shown that self-constraint, achievement and obedience are still strongly endorsed in most Asian cultures (Chao& Tseng, 2002). These three regions of the world were also characterized by relative economic stability and comparably low youth unemployment, which may have contributed to less pressure to perform at school (International Monetary Fund, 2018).

Distinctive stressors named by adolescents from the Central Europen and the North American region centered on the pressure to get best marks and a high level of difficulty in school materials. Consistent with other studies (Tomasik, et al., 2009) who found that parental expectations that their children obtain good grades in school was reported as highly stressful, the pressure to achieve excellence was ranked most stressful by adolescents from both regions. Furthermore, youth from all other regions (besides Eastern Europe) named high parental pressure to achieve as most important stressors. In Central Europe, North America, South America, Southern Europe, Asia, and the Middle East, this stressor received rank 1, e.g. can be perceived as universally stressful. This could indicate that in the course of globalization there has also been an approximation of educational practices with consistently high performance standards (Schlegel, 2001; Saraswathi & Larson, 2002).

Compared to young people from some other regions, young people from North America and Central Europe by no means achieve top scores in terms of school stress, but the basic ranking about what specifically is perceived as stressful was quite similar to the ratings given by young people from other regions of the world who reported much higher school-related stress levels. Thus, although the mean levels differ greatly, the ranking of what is considered to be specifically stressful is quite similar in the individual regions.

Of note, that differences in opinion with the teacher may result in bad marks is a

sorrow shared by quite many youth from Central and Southern Europe, Northern America, and Asia, resulting in rank 2 in these regions. Although there is a willingness to accept the adolescent's autonomy, youth of independent and interdependent societies might still have mixed feelings about these changes and how free they are in telling their opinions. In contrast, the teachers' limited understanding for their problems in the school was not an important stressor in most countries and regions. Likewise, a lack of comradeship was not mentioned as important; it ranked 7 in many regions, suggesting that the relationships between the students were experienced as being quite good, a finding approving results in different countries (Danielson et al., 2009; Crean, 2004).

4.2 Age and gender differences and the impact of family structure and school achievement

The study was designed in such a way that age and gender differences between the regions should be small and the SES should be more or less balanced. In fact, this study is characterized by a relatively homogeneous school sample compared, for example, with other studies in which very large age and gender differences were reported in the individual subsamples (see, for example Gibson-Cline, 1996; Gardiner & Kosmitzki, 2005). We found, due to the large sample size, age and gender differences. They illustrate that in all regions older pupils experience more school stress than younger ones and that in most regions boys feel more stressed than girls. We should however, not overestimated these small effects, as they disappear if these variables are entered together with the variable regions in the same MANOVA. Then the region effect is so strong that age and gender effects become insignificant.

The impact of family structure and school achievement was significant: Adolescents from single -parent families and low achiever experienced more school stress. It is easy to imagine that adolescents from single- parent families, mostly mother-headed families, experience economic strain, and are therefore particularly keen to improve their abilities through good grades and exams. For low achievers, it is just as likely that their future aspiration will be restricted by the low performance level and there is potentially a lot of pressure to come to terms with school demands.

4.3 Influence of parental rearing style and the overall economic situation

Some of the stressors named are related to personal resources, for example that the material is perceived as too difficult or to boring. Others are related to social relationships and the future perspectives in a given country. We did not directly investigate the parental rearing style and the overall value system in the families and we have only rough measures of the SES, which characterize our sample as a

middle class sample. However, some considerations are appropriate in the context of our results

The low stress levels found in our study named by Asian youth are unexpected, as several findings in Asian countries reported a strong focus on adolescents' academic performance in Asian families (Henderson, et al., 1999). In contrast, high stress levels were reported in adolescents from Latin America, which is consistent with a difficult economic situation and an unclear future perspective (Welti, 2002). A detailed evaluation of the seven school-specific stressors showed that they suffered particularly from the compulsion to get good grades, the difficult subject matter and boring learning material. Competitive thinking among classmates is not a major stressor for them, in the contrary, they report positive relationships with students and teachers, which can be considered as a resource in case of stress.

Research in Arab countries like Egypt and Pakistan substantiated that families in these countries are characterized by "patriarchal connectivity" (Booth, 2002, p. 213). Although formal relationships in schools in this region are less hierarchical than in the past, adolescents from the Middle East region in our study named disinterested teachers and the sorrow that their opinions might result in bad marks. This suggested that youth in these regions perceive the pupil- teacher relationships as quite stressful (rank 2 and 3) and therefore as much more stressful as youth from other regions.

The stress levels in adolescents from Eastern European countries were lower than among youth in the Middle East, and Latin America, supporting Stetsenko's (2002) suggestion that parents in this region have adopted authoritative parenting and school contexts have changed likewise to encourage autonomous achievements. However, their stress levels still lag behind the quite low levels in the school domain reported by adolescents from North America or Central Europe. The basic ranking of perceived stress is quite different to what other youth described, that is, they experience less strong pressure to achieve in school and feel more bored and unchallenged.

Differences in stress levels in the school' domain cannot only be attributed to child rearing practices, the strictness of the school system and the capacity of the youth themselves. We should acknowledge that adolescents from Southern Europe, Latin America, the Middle East, and Eastern Europe, live in a developmental context which is characterized by economic difficulties. We therefore validated our grouping of countries to regions according to the prevailing value system and by socioeconomic criteria and found over 90% correct classifications. This finding suggests that the lack of resources and opportunity structures potentially have contributed to higher levels of school

stress in certain regions and, potentially, to a greater intra-regional variations in adolescents among countries belonging to the Middle East.

Interestingly, adolescents from North America and Central Europe, who are economically better off, showed the same basic ranking of stressful items with the pressure of getting the best marks as youth from more disadvantaged regions of the world. In contrast, factors like economic hardships, high youth unemployment and a lack in social welfare structure may have contributed to the high stress levels experienced in adolescents from most other regions. Of note, adolescents from Southern Europe reported the highest overall levels in school-related stress, but also high levels of stress in relationships stressors (Persike & Seiffge-Krenke, 2014). More research is needed to better interpret the unusual pattern found for adolescents in this region. For now, we can only speculate that adolescents living in the Southern European region share values which lies between independent and interdependent cultures and are thus more sensitive to stress from different domains. In addition, the recent deterioration in economics in these countries may have added to this finding.

Our study has several important strengths. First, the design allowed for assessing stress on a large sample of adolescents in 21 countries with similar ages and levels of schooling. Second, we increased the comparability of measurement across cultures by using translation and back-translations of the instrument and by establishing measurement invariance for the measure of school- related stress.

Our study also had several limitations and weaknesses. First, although we placed great care on choice of country, the grouping of countries, and a narrow age range of participants, compared to earlier cross-cultural studies (Gibson-Cline, 1996), further refinement is necessary. Particularly, we are aware of the possibility of selection bias for the regions represented by fewer countries (i.e., Asia and Latin America) as well as for regions with different levels of traditionalism such as Hong Kong and South Korea. Further studies have to attend to these differences more thoroughly. Second, further analysis on country level might contribute to our knowledge, as districts within one country may diverge in modernization and prevailing school and teaching principle. Third, due to the cross-sectional nature of our data, we cannot make any conclusions about stress generation. For example, stress levels with parents may trigger increased stress levels in the school domain, and conversely.

5. Conclusions

In conclusion, it is important to note that the prevailing values for achievement and the overall developmental context with its constraints and challenges influences stress perception. Clinicians, teachers,

and other professionals working with adolescents and families with ethnic minority backgrounds may benefit from an increased awareness that cultural background has a significant bearing on how adolescents perceive stress in school. School stressors often became particularly acute in the context of problematic family relationships. Furthermore, it was noticeable, and this applied equally to young people from all countries, that structural changes in the family structure are a particular burden that lead to increased stress levels.

It should be noted that the shift towards "higher qualifications" is increasingly contributing to improving educational opportunities. But it has the downside of a significant increase in the pressure to perform and competition. School-related problems represent a serious source of stress for adolescents. Due to the fact that the school career is the decisive preliminary stage for professional entry and for the entire social status in adulthood and performance and qualification-related requirements are becoming increasingly important, failures in school might be very problematic. The pressure to get best grade was an universally high ranking school-related stressors in most countries and regions. This point to the impact of the family on school performance and suggests that setbacks in school performance or even downgrades might be perceived as a serious threat to future prospects. This can have negative effects on self-esteem and motivation and carries the risk of psychological and psychosomatic symptoms, like the frequent found headaches and depression among pupils.

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