Psychological well-being and self-esteem in Slovak adolescents

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Chapter 1

Introduction

Adolescence is a transitional developmental stage between childhood and adulthood that is characterised by more biological, psychological and social changes than any other stage of life with the exception of infancy (Lerner et al., 1999; Williams et al., 2002). There are two transitional points during this period: the transition from childhood to early adolescence and that from late adolescence to adulthood (Steinberg, 1996). In addition, the period of middle adolescence is important from a developmental point of view; it is characterised by its own pressures, cultural constrains and models of behaviour. There are several reasons why attention on the mental health of adolescents is a key research interest. Firstly, mental health is seen as fundamental to all forms of health (Weare, 2000). Secondly, several specific biological changes, such as sexual maturation, occur during this period, and social transformations, such as the construction of a social identity and the shift in relationships from family to peers, take place. Relationships become more intimate in comparison with the earlier period of adolescence (Zimmer-Gembeck, 2002), and school is considered as an important source of social experiences and psychological development (Marinoni et al., 1997). Such changes have a potential impact on a person's psychological development in terms of stress (Arnett, 1999; Mahon et al., 2003; Ybrandt, 2008). Next, the important role of some psychological factors, particularly anxiety and depressive feelings, with regard to adolescents' health risk behaviour has been shown (Avinson & Mcalpine, 1992; Marinoni et al., 1997; Katreniakova et al., 2005; Sarkova et al., 2005). Finally, the importance of developmental success during this period and its consequences for adult development and health has made it a current area of interest (Keyes, 2006; Trzesniewski et al., 2006). In this study we use psychological well-being and self-esteem as indicators of mental health in adolescents.

1.1 Psychological well-being and self-esteem as aspects of mental health

Adolescents' psychological well-being and self-esteem can be interpreted as indicators of the adaptive emotion regulation which is crucial for ongoing developmental processes in adolescence (Galambos & Costigan, 2003). Similarly, indicators of psychological distress (e.g., depression) can be viewed as capturing emotion dysregulation (Galambos & Costigan, 2003).

Self-concept, identity and assertiveness are important developmental tasks in adolescence (Erikson, 1968; Harter, 1990) and are related to successful emotional regulation (Haviland et al., 1994). On the other hand, these factors contribute to positive mood and an absence of psychological distress (Mann et al., 2004). Adolescence is a specific period of life when the perception of self is still developing and might be influenced by one's current emotional state. Indicators and predictors of adolescents' mental health are essentially connected with the present but also future health and health-related behaviour of adolescents (Galambos & Costigan, 2003). In the past as well as in recent years a number of studies and reports concentrating on various dimensions of mental health in adolescence, including psychological well-being and self-esteem, have been published (Jahoda, 1958; Taylor & Brown, 1988; Kling et al., 1999; Anderman, 2002; Konu & Rimpelä, 2002; Trzesniewski et al., 2006; Costello et al., 2008; Currie et al., 2008). Numerous studies suggest that psychological well-being and self-esteem are multifactor constructs which could cover several aspects of well-being and perception of self (Marsh, 1996; Werneke et al., 2000; French & Tait, 2004; Gao et al., 2004; Schmitt & Allik, 2005; Roth et al., 2008; Halama, 2008; Del Pilar Sánchez-López & Dresch, 2008). In addition, they can be used as individual multifactor constructs, as has been mentioned. At the same time their mutual association influences the development of mental health in adolescence. Therefore, our study focuses on mental health, especially on psychological well-being and self-esteem.

Psychological well-being is often operationalised as a mood, affect, trait, or experience which may last few moments or a few days. In comparison with mood, psychological well-being consists of changeable components which could dynamically influence the actual mental state (Hasmenn et al., 2000; Martin & Newell, 2005). Self-esteem, which can be defined as an overall sense of worthiness as a person, is one of the most frequently studied psychological constructs in personality (Rosenberg, 1979; Schmitt & Allik, 2005).

This study deals with protective and risk factors of psychological well-being and self-esteem and describes changes in psychological well-being and self-esteem over the period of adolescence. At the same time differences between countries were studied. Special attention is given to the influence of the school context. In this chapter, we explain the aims of the study, formulate related research questions and outline the structure of this thesis.

1.1.1 Psychological well-being and self-esteem in adolescence - protective and risk factors

It has been established that factors like school connectedness, good relationships with others, liking family and peers, closeness to others,

physical activity or healthy eating habits can protect young people and increase their psychological well-being (Marshall, 2001; Taylor & Turner, 2001; Allison et al., 2005; Rayle, 2005). Conversely, some factors, e.g. bullying, smoking, alcohol and drug use and unsafe sexual practices, tend to have a negative impact on psychological well-being (Cuijpers, 2002; Ethier et al., 2006; Kalina, 2007; Rigby et al., 2007).

Several previous studies have linked high self-esteem to many positive outcomes, including positive peer relationships (Goldstein et al., 2005), healthy social relationships (Murray et al., 2000; Neyer & Asendorpf, 2001; Trzesniewski et al., 2003), healthy subjective well-being (Trzesniewski et al., 2003) and positive perceptions by peers (Robins et al., 2001). Subsequently, low self-esteem has been linked to a number of problematic outcomes, including antisocial behaviour such as bullying, depressive symptoms and health problems (Ma, 2002; Veselska et al., 2009).

1.1.2 Psychological well-being and self-esteem in adolescence - changes over time

Though there are a variety of research fields presenting different opinions regarding the stability of psychological well-being and self-esteem over time during adolescence, this period is generally considered to be a time of increased mental problems and decreased psychological well-being and self-esteem (Mental Health Foundation, 1999; Jones & Meredith, 2000). Regarding psychological well-being, conclusive evidence on the changing patterns of psychological distress over time is lacking, as West and Sweeting (2003) mentioned. In addition, different findings on the stability of psychological well-being are related to the concept incorporated and measures used. Some studies have shown that health status changes over time during adolescence in the direction from worse to better with increasing age with exception of early adolescence, when psychological well-being is described as rather positive (Currie et al., 2004; Sleskova et al., 2005). Among the many changes experienced during adolescence, self-esteem shifts from rather high during early adolescence to lower in middle adolescence (Kling et al., 1999; Baldwin & Hoffmann, 2002; Impett et al., 2008), and these developmental processes of self-esteem are different for males and females (Baldwin & Hoffmann, 2002; Robins & Trzesniewski, 2005). Males more frequently have higher self-esteem than females during adolescence (Bolognini et al., 1996; Robins & Trzesniewski, 2005), but as Kling et al. (1999) mentioned, the confirmation of significant gender differences in self-esteem does not end this topic because several domains of the self should still be examined.

Concerning health in general, there are studies in which no changes in self-reported health among adolescents aged 11 to 21 years were found (Wade et al., 2002). On the other hand, a study by Salonna et al. (2008)

among boys and girls from 15 to 19 identified not only deterioration but also improvement and stability in self-reported health during this stage.

1.1.3 Psychological well-being and self-esteem in adolescence - differences between countries

The political, cultural and historical diversity of Europe and the population density, degree of population aging and differences in prosperity levels and lifestyle habits in the countries of the European Union certainly have an effect on its inhabitants. All of these factors have been shown to have links with mental health status (European Commission, 2004), and several reports have presented cultural differences on health, health-related behaviour and the social context of young people. One of them, the 2005/2006 HBSC cross-national study, identified differences in the mental health of young people across the USA, Greenland and Iceland, continental Europe and Israel (Currie et al., 2008). As findings from this report show, there are large cross-national differences not only in reported levels of fair or poor mental health in young people, with scores ranging in 11-year-old early adolescents from 4% (Greece) to 28% (Ukraine), in 13-year-olds from 5% (Macedonia) to 34 % (Ukraine) and in 15-year-olds from 6% (Macedonia) to 37% (Ukraine), but also in other health-related aspects of mental health (Currie et al., 2008). The findings of Bradshaw and Richardson (2009) on child well-being in Europe have shown that the highest personal well-being was reported by children from the Netherlands, Spain, Finland and Belgium, and lowest from Bulgaria, Romania, Latvia and Lithuania. Such studies suggest that significant differences between countries do exist.

The same has been shown in exploring the culture-specific features of global self-esteem (Schmitt & Allik, 2005). Findings from a study with 53 participating nations showed that while all individual nations scored above the theoretical midpoint of the Rosenberg Self-esteem Scale (sum score ranges from 10 to 40; a higher score means higher self-esteem), significant country differences were still present. Japan and other Asian countries scored relatively low (25.5) and the United States scored relatively high (32.21). The differences between Slovakia (28.94) and its neighbouring countries were also relatively marked (Czech Republic 28.47, Austria 31.78, and Poland 30.34). As the findings of Schmitt & Allik (2005) showed, generally positive self-evaluation may be culturally universal, with individual differences varying across cultures.

1.2 Mental health in the school context

In most European countries young people attend school for 10 years or more. School is one of the places where they develop an individual

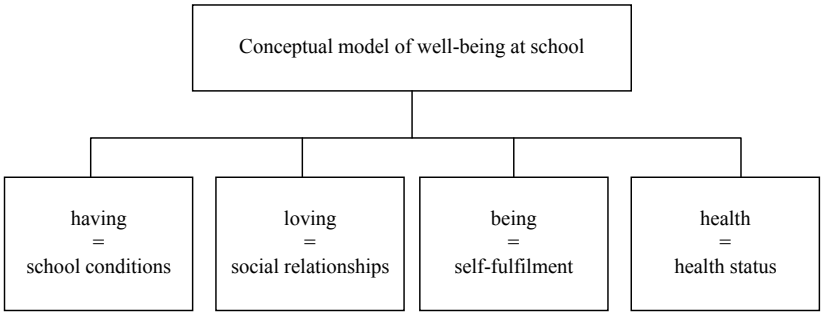
and a social personality. School can play, in conjunction with the family and significant others, an important role in shaping behaviour and life's values. In addition, school is a primary setting for health promotion, a place where the health of children and adolescents can be enhanced.

1.2.1 A model of well-being in the school environment

Previously, as several authors have presented, health and also well-being in school has been separated from other aspects of school life in many studies (Konu & Rimpelä, 2002). Therefore, the School Well-being Model of Konu and Rimpelä has also been used as a theoretical model in research (Konu & Rimpelä, 2002). This conceptual model is based on Allardt's sociological theory of welfare and assesses well-being as an entity in the school setting (Allardt, 1976; 1989). According to Allardt, well-being is a state in which it is possible for a human being to satisfy his/her basic needs. This model of well-being in school is connected with teaching and education and with learning and achievements. The concept of well-being is divided into four categories: school conditions (having), social relationships (loving), means for self-fulfilment (being), and health status (health).

School conditions (having) include the physical environment outside a school and the environment inside a school. This category deals with the learning environment, curriculum, group sizes, schedules of studies, punishments, school lunches, health care, trustee and counselling, as well as noise, ventilation, the number of students in a class, poor lighting, temperature, dust and dirt, unsuitable working spaces and unsuitable conditions like the toilets and bathrooms. **Social relationships** (loving) refer to the relationships between students and teachers and the students among themselves. This category is also related to group dynamics, bullying, cooperation between school and homes, decision-making in school and the atmosphere of the whole school organization. **Means for self-fulfilment** (being) is seen in this model as the way in which the school offers means for self-fulfilment. Each pupil should feel like a part of school and be considered as an equally important member of the school community. The means for self-fulfilment category includes work appreciation, attitudes towards education and school, getting help in studying, participation, encouraging and commending, self-esteem and orientation on the future. **Health status** (health) comprises physical and mental symptoms, common colds, chronic diseases and other diseases and illnesses. The categories described above are shown in Figure 1.1.

Figure 1.1 The School Well-being conceptual model according to Konu and Rimpelä (2002)



1.2.2 Social relationships and mental health of adolescents

In recent years, literature on **school connectedness** has emerged. Most of the previous studies indicate that close relationships and school connectedness are a cornerstone for successful adaptation and a reliable marker of individual adjustment in adolescence concerning positive academic, psychological and behavioural outcomes (Anderman, 2002; Laursen & Mooney, 2008). In addition, studies have shown that when students experience a supportive environment in school, they are more motivated for participating actively in school life; they are more likely to experience positive outcomes such as improved social skills or achievement (Battistich et al., 1997; Hughes & Kwok, 2007). On the other hand, deprivation of connectedness and relationships induce a variety of negative outcomes, including academic problems, emotional distress, health problems and a tendency to health risk behaviour (e.g. smoking, alcohol and drug abuse, bullying) (Baumeister & Leary, 1995; Anderman, 2002).

In the school environment, pupils are exposed to a wide range of new social situations, which compels them to learn and develop new social roles without the supervision of their parents (Inglés et al., 2005). Peer relationships play a critical role in the development of social skills such as **assertiveness** (La Greca & Lopez, 1998). Recent studies have explored the relationship between assertiveness and mental health in adolescence and have found certain variables which influence assertiveness, including culture (Eskin, 2003), self-esteem (Bijstra et al., 1994), psychological distress (Taylor et al., 2002), depression (Eskin, 2003), risk behaviour (Cuijpers, 2002) and gender (Bourke, 2002). Although some earlier studies showed that boys are more assertive than girls (Eskin, 2003), data from recent years indicate that girls have a significantly higher score on assertive

communication and independence (Bourke, 2002) or that there are no significant gender differences in assertiveness (Karagözoğlu et al., 2008).

Bullying in particular has been acknowledged as a serious problem over recent years in many countries as a common and widespread form of violence in the school context (Roland & Galloway, 2002). It has been defined as a form of aggression in which a student or students physically or verbally assault another student without being provoked. Bullying takes many forms, such as physical or verbal aggression, social isolation and recently also increased aggression via mobile telephones and email, with the deteriorative effect on both victims and offenders (Olweus, 1993; Ma, 2002; Correia & Dalbert, 2008). Effects of bullying include low self-esteem, increased frequency of depression, school failure (Hawker & Boulton, 2000), delinquency (Baldry & Farrington, 2000) and deteriorated well-being (Rigby, 2003; Perren & Hornung, 2005).

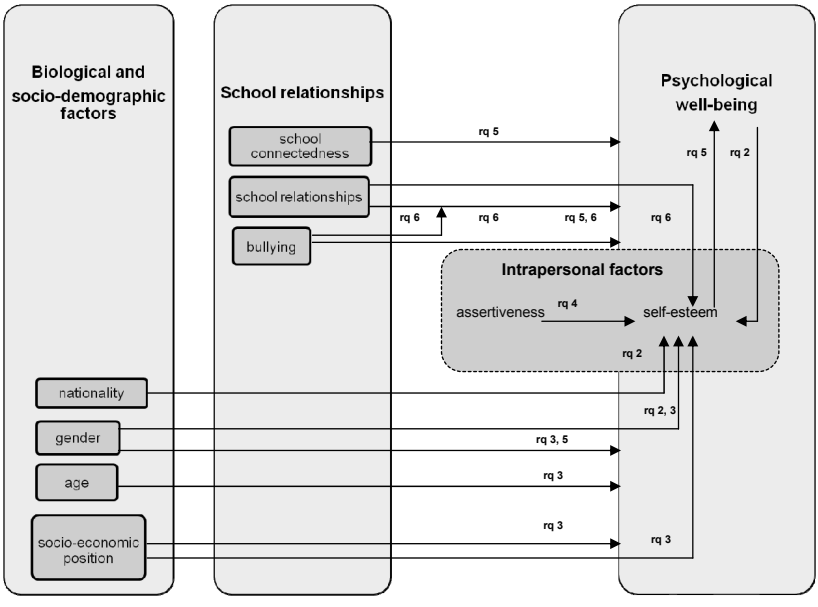
1.3 Aims of the study and research questions

Based on previous findings in this field, the present study focuses on psychological well-being and self-esteem among Slovak adolescents in the school context. The general aims of the study were:

- to unravel the factor structure of measures for psychological well-being and self-esteem;
- to explore determinants of psychological well-being and self-esteem at a certain moment in adolescence;
- to explore changes over time in psychological well-being and self-esteem.

The model of the relationships examined within this thesis is shown in Figure 1.2.

Figure 1.2 Model of the relationships examined within this thesis



Based on this model and on the previous literature, the following research questions have been developed.

Research question 1.
What are selected psychometric aspects of the GHQ-12 and RSE in Hungarian and Slovak early adolescents with regard to their factor structure? (Chapter 3)

Research questions 2.
Are there substantial differences in self-esteem among adolescents from Central Europe countries? Are there associations between native background and psychological well-being and self-esteem among young Hungarian and Slovak boys and girls in adolescence? (Chapter 4)

Research questions 3.
Is there change over time in psychological status from early (age of 11.5 years) to middle adolescence (age of 15 years)? Do gender and parental education play a role through answering questions if is there a difference in magnitude and direction (improved, stable or deteriorated) of change in the domains of psychological well-being and self-esteem between the age of 11.5 and 15 between boys and girls? Are gender and parental education predictors of psychological well-being and self-esteem at the age of 15? (Chapter 5)

Research question 4.
Does assertiveness influence adolescents' psychological well-being and self-esteem while controlling for gender? (Chapter 6)

Research question 5.
Do gender, bullying, school connectedness and self-esteem contribute to psychological well-being in Slovak adolescents? (Chapter 7)

Research questions 6.
Do school relationships influence psychological well-being and self-esteem? Are school relationships moderated by bullying? (Chapter 8)

1.4 Outline of the thesis

Chapter 1 provides an overall introduction to mental health in the adolescence period. The description of the constructs of psychological well-being and self-esteem and their associations with possible determinants (age, native background and school context) are included. The chapter ends with the general and also individual aims of the present thesis. **Chapter 2** describes the design of the studies, data collections, samples and statistical analyses used in this thesis. **Chapter 3** presents the psychometric characteristics of the key variables – the GHQ-12 and the RSE – in Hungarian and Slovak early adolescents with regard to their factor structure. **Chapter 4** explores differences in the self-esteem of adolescents among Central European countries. In addition, the associations between cultural background, psychological well-being and self-esteem among young Hungarian and Slovak adolescents are explored. **Chapter 5** deals with changes in psychological well-being and self-esteem between the ages of 11.5 and 15. The role of gender and parental education as determinants of psychological well-being and self-esteem at the age of 15 is also explored. The associations between assertiveness and the psychological well-being and self-esteem of adolescents are studied in **Chapter 6**. The influence of the distress dimension on psychological well-being and self-esteem, controlling for the performance dimension, is explored. **Chapter 7** investigates gender differences in bullying, school connectedness, self-esteem and psychological well-being in terms of their interrelations; it also explores the joint contribution of gender, bullying, school connectedness and self-esteem to psychological well-being in adolescents. The role of school relationships in adolescents' psychological well-being and self-esteem are studied in the **Chapter 8**. Finally, **Chapter 9** discusses the main findings and possible implications for future research and practice.

References

Allardt, E. (1976). Dimensions of Welfare in a comparative Scandinavian Study. *Acta Sociologica, 19*, 227-240.

Allardt, E. (1989). An updated indicator system: Having, loving, being. Working papers 48, Department of Sociology, University of Helsinki.

Allison, K.R., Adlaf, E.M., Irving, H.M., Hatch, J.L., Smith, T.F., Dwyer, J.J.M. & Goodman, J. (2005). Relationship of vigorous physical activity to psychologic distress among adolescents. *Journal of Adolescent Health, 37*, 164-166.

Anderman, E.M. (2002). School effects on psychological outcomes during adolescence. *Journal of Educational Psychology, 94*, 5, 795-809.

Arnett, J.J. (1999). Adolescent storm and stress, reconsidered. *American Psychologist, 54*, 5, 317-326.

Avinson, W.R. & Mcalpine, D.D. (1992). Gender differences in symptoms od depression among adolescents. *Journal of Health and Social Behavior, 33*, 77-96.

Baldry, A. C. & Farrington, D. P. (2000). Bullies and delinquency: Personal characteristics and parental styles. *Journal of Community and Applied Social Psychology, 10*, 1, 17-31.

Baldwin, S. A. & Hoffmann, J. P. (2002). The dynamics of self-esteem: A growth- curve analysis. Journal of Youth and Adolescence, 31, 101–113.

Battistich, V., Solomon, D., Watson, M. & Schaps, E. (1997). Caring school communities. *Educational Psychologist, 32*, 137-151.

Baumeister, R.F. & Leary, M. R. (1995). The need to belong: desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin, 117,* 497-529.

Bijstra, J. O., Bosma, H. A. & Jackson, S. (1994). The relationship between social skills and psycho-social functioning in early adolescence. *Personality and Individual Differences*, *16,* 767–776.

Bolognini, M., Plancherel, B., Bettschart, W. & Halfon, O. (1996). Self-esteem and mental health in early adolescents: Development and gender differences. *Journal of Adolescence*, 19, 233-245.

Bourke, R. (2002). Gender differences in personality among adolescents. *Psychology, Evaluation & Gender*, *4*, 31–41.

Bradshaw, J. & Richardson, D. (2009). An index of child well-being in Europe. Child Indicators Research. DOI 10.1007/s12187-009-9037-7, 319 – 351.

Correia, I. & Dalbert, C. (2008). School Bullying: Belief in a personal just world of bullies, victims, and defenders. *European Psychologist, 13*, 4, 248-254.

Costello, D.M., Swendsen, J., Rose, J. S. & Dierker, L.C. (2008). Risk and protective factors associated with trajectories of depressed mood from adolescence to early adulthood. *Journal of Consulting and Clinical Psychology, 76*, 2, 173-183.

Cuijpers, P. (2002). Effective ingredients of school-based drug prevention programs. A systematic review. *Addictive Behaviors, 27*, 1009 – 1023.

Currie, C., Roberts, C., Morgan, A., Smith, R., Settertobulte, W. & Samdal, O. (eds.) (2004). Young people's health in context: international report from the HBSC 2001/02 survey. Copenhagen: WHO Regional Office for Europe.

Currie C., Gabhainn, S.N., Godeau, E., Roberts, Ch., Smith, R., Currie, D., Picket, W., Richter, M., Morgan, A. & Barnekow, V. (2008). Inequalities in young people's health. Health behaviour in school-aged children (HBSC) study: International report from the 2005/2006 survey. Health Policy for Children and Adolescents, Issue 5, WHO Regional Office for Europe, Copenhagen.

Del Pilar Sánchez-López, M. & Dresch, V. (2008). The 12-Item General Health Questionnaire (GHQ-12): Reliability, external validity and factor structure in the Spanish population. *Psicothema, 20, 4,* 839-843.

Erikson, E.H. (1968). Identity: Youth and crisis. New York: Norton.

Eskin, M. (2003). Self-reported assertiveness in Swedish and Turkish adolescents: A cross-cultural comparison. *Scandinavian Journal of Psychology, 44*, 7–12.

Ethier, K.A., Kershaw, T.S., Lewis, J.B., Milan, S., Niccolai, L.M., & Ickovics, J.R. (2006). Self-esteem, emotional distress and sexual behaviour among adolescents females. *Journal of Adolescent Health, 38*, 268-274.

European Commission Report 2004. The State of Mental Health in the European Union.Luxembourg 2004. ISBN: 92-894-8320-2

French, J.D. & Tait, R.J.(2004). Measurement invariance in the General Health Questionnaire-12 in young Australian adolescents. *European Child & Adolescent Psychiatry, 13, 1*, 1-7.

Galambos, N.L. & Costigan, C.L. (2003). Emotional and Personality Development in Adolescence. In: Lerner RM, Easterbrooks MA, Mistry J, editors. Handbook of psychology, Vol. 6, Developmental psychology. NJ: John Wiley & Sons.

Gao, F., Luo, N., Thumboo, J., Fones, C., Li, S. & Cheung, Y. (2004) Does the 12-item General Health Questionnaire contain multiple factors and do we need them? *Health and Quality of Life Outcomes, 2,* 1-7.

Goldstein, S. E., Davis-Kean, P. E. & Eccles, J. S. (2005) Parents, peers, and problem behaviour: a longitudinal investigation of the impact of relationship perceptions and characteristics on the development of adolescent problem behaviour. *Developmental Psychology*, 41, 2, 401 – 413.

Halama, P. (2008). Confirmatory factor analysis of Rosenberg Self-esteem Scale in a sample of Slovak high school and university students. *Studia Psychologica, 50, 3*, 255-266.

Harter, S. (1990). Self and identity development. In S. S. Feldman & G. R. Elliott (Eds.), *At the threshold: The developing adolescent* (pp. 352–387). Cambridge, MA: Harvard University Press.

Hasmenn, P., Koivula, N, & Uutela, A. (2000). Physical exercise and psychological well-being: a population study in Finland. *Preventive Medicine, 30*, 17-25.

Haviland, J. M., Davidson, R. B., Ruetsch, C., Gebelt, J. L., & Lancelot, C. (1994). The place of emotion in identity. *Journal of Research on Adolescence, 4,* 503–518.

Hawker, D. S. J., & Boulton, M. J. (2000). Twenty years' research on peer victimisation and psychosocial maladjustment: s meta-analytic review of cross-sectional studies. *Journal of Child Psychology and Psychiatry, 41*, 441-455.

Hughes, J. & Kwok, O. (2007). Influence of Student- teacher and parent – teacher relationships on lower achieving readers' engagement and achievement in the primary grades. *Journal of Educational Psychology, 99*, 1, 39 – 51

Impett, E.A., Sorsoli, L., Schooler, D., Henson, J.M., & Tolman, D. L. (2008). Girls' relationship authenticity and self-esteem across adolescence. *Developmental Psychology, 44*, 3, 722-733.

Inglés, C. J., Hidalgo, M. D., & Méndez, F. X. (2005). Interpersonal difficulties in adolescence: a new self-report measure. *European Journal of Psychological Assessment*, *1*, 11–22.

Jahoda, M. (1958). Current concepts of positive mental health. *New Your: Basic Books*.

Jones, C.J. & Meredith, W. (2000). Developmental paths of psychological health from early adolescence to later adulthood. *Psychology and Aging*, 15, 351-360.

Kalina, O. (2007). Sexuálne správanie sa adolescentov, Psychológia zdravia. (*Sexual behaviour of adolescents. Psychology of health.)* Význam agentúry pre vedu a výskum pre rozvoj vedeckého bádania na Filozofickej fakulte Univerzity P. J. Šafárika v Košiciach. 1-1

Karagözoğlu, S., Kahve, E., Koç, Ö., & Adamişoğlu, D. (2008). Self-esteem and assertiveness of final year Turkish university students. *Nurse Education Today, 28*, 641–649.

Katreniakova, Z., Sarkova, M., Nagyova, I., & van Dijk, J.P. (2005). Contribution of bullying, school connectedness and self-esteem to psychological well-being in adolescents. *European Journal of Public Health, 15*, 170-170.

Keyes, C.L.M. (2006). Mental health in adolescence: Is America's youth flourishing? *American Journal of Orthopsychiatry, 7*, 3, 395-402.

Kling, K.C., Hyde, J.S., Showers, C.J., & Buswell, B.N. (1999). Gender differences in self-esteem: a meta-analysis. *Psychological Bulletin, 125*, 4, 470-500.

Konu, A. I. & Rimpelä, M.K. (2002). Well-being in schools: a conceptual model. *Health Promotion International*, 17, 1, 79–87.

La Greca, A. M., & Lopez, N. (1998). Social anxiety among adolescents: Linkages with peer relations and friendships. *Journal of Abnormal Child Psychology, 26*, 83-94.

Laursen, B. & Mooney, K.S. (2008). Relationship network quality: Adolescent adjustment and perceptions of relationships with parents and friends. *American Journal of Orthopsychiatry, 78*, 1, 47-53.

Lerner, R.M., Villarruel, F.A. & Castellino, D.R. (1999). Adolescence. In W.K. Silverman & T. H. Ollendick (Eds.), *Developmental issues in the clinical treatment of children* (pp. 125 – 136). Boston, MA: Allyn & Bacon.

Ma, X. (2002). Bullying in Middle School: Individual and School Characteristics of Victims and Offenders *School Effectiveness and School Improvement*, Vol. 13, No. 1, 63 – 89

Mahon, N.E., Yarcheski, A., & Yarcheski, T.J. (2003). Anger, anxiety and depression in early adolescents from intact and divorced families. *Journal of Pediatric Nursing, 18*, 4, 267 – 273

Mann, M., Hosman, C.M., Schaalma, H.P. & de Vries, N.K. (2004). Self-esteem in a broad-spectrum approach for mental health promotion. Health Education Research, 19, 357-372.

Marinoni, A., Degrate, A., Villani, S., Gerzeli, S. (1997). Psychological distress and its correlates in secondary school students in Pavia, Italy. *European Journal of Epidemiology*, 13, 779-786.

Marsh, H. W. (1996). Positive and negative global self-esteem: A substantively meaningful distinction or artefacts? *Journal of Personality and Social Psychology, 70, 4*, 810-819.

Marshall, S.K. (2001). Do I matter? Construct validation of adolescents' perceived mattering to parents and friends. *Journal of Adolescence, 24*, 473-490.

Martin, C. R. & Newell, R. J. (2005). The factor structure of the 12-item General Health Questionnairy in individuals with facial disfigurement. *Jounal of Psychosomatic Research, 59*, 193-199.

Mental Health Foundation. (1999). Bright futures: Promoting children and young people's mental health. *London: The Mental Health Foundation*.

Murray, S.L., Holmes, J.G., & Griffin, D.W. (2000). Self-esteem and the quest for felt security: How perceived regard regulates attachment processes. *Journal of Personality and Social Psychology*, *78*, 478 – 498.

Neyer, F.J. & Asendorpf, J.B. (2001). Personality-relationship transaction in young adulthood. *Journal of Personality and Social Psychology, 81,* 1190-1204.

Olweus, D. (1993). *Bullying at school: What we know and what we can do.* Malden, MA: Blackwell.

Perren, S., & Hornung, R. (2005). Bullying and delinquency in adolescence: victims' and perpetrators' family and peer relations. *Swiss Journal of Psychology*, *64*, 1, 51–64.

Rayle, A.D. (2005). Adolescent gender differences in mattering and wellness. *Journal of Adolescence, 28,* 753-763.

Rigby, K. (2003). Consequences of bullying in schools. *Canadian Journal of Psychiatry*, *48*, 9, 583-590.

Rigby, K., Slee, P.T., & Martin, G. (2007). Implications of inadequate parental bonding and peer victimization for adolescent mental health. *Journal of Adolescence, 30*, 801-812.

Robins, R.W., Hendin, H.M., & Trzesniewski, K.H. (2001). Measuring global self-esteem: Construct validation of a single item measure and the Rosenberg Self-esteem Scale. *Personality and Social Psychology Bulletin, 27*, 151-161.

Robins, R.W. & Trzesniewski, K.H. (2005). Self-esteem development across the lifespan. *Current Directions in Psychological Science, 14*, 158-162.

Roland, E. & Galloway, D. (2002). Classroom influences on bullying, *Educational Research*, *44*, 3, 299 – 312

Rosenberg, M. (1979). Conceiving the self. New Your: Basic Books

Roth, M., Decker, O., Herzberg, P. Y., & Brähler, E. (2008). Dimensionality and norms of the Rosenberg Self-esteem Scale in a German general population sample. *European Journal of Psychological Assessment, 24, 3*, 190-197.

Salonna, F., Middel, B., Sleskova, M., Madarasova Geckova, A., Reijneveld, S.A., Groothoff, J.W., & van Dijk, J.P. (2008). Deterioration is not only prospect for adolescents' health Improvement in self-reported health status among boys and girls from age 15 to age 19. *Croatian Medical Journal, 49*, 66-74.

Sarkova, M., Katreniakova, Z., Nagyova, I., Madarasova Geckova, A., Orosova, O., van Dijk, J.P., & van den Heuvel, W.J.A. (2005). The effect of social skills and smoking on the mental health of adolescents. *European Journal of Public Health, 15*, 170 – 170.

Schmitt, D.P., & Allik, J. (2005). Simultaneous administration of the Rosenberg Self-esteem Scale in 53 nations: Exploring the universal and culture-specific features of global self-esteem. *Journal of Personality and Social Psychology, 89*, 4, 623-642.

Sleskova, M., Salonna, F., Madarasova Geckova, A., van Dijk, J.P., & Groothoff, J.W. (2005). Health status among young people in Slovakia: comparisons on the basis of age, gender and education. *Social Science & Medicine, 61*, 2521-2527.

Steinberg, L. (1996). *Adolescence* (5th ed.). Boston: Mc Graw-Hill.

Taylor, S.E. & Brown, J.D. (1988). Illusion and well-being: A social psychological perspective on mental health. *Psychological Bulletin, 103*, 193-210.

Taylor, J.R. & Turner, R.J. (2001). A longitudinal study of the role and significance of mattering to others for depressive symptoms. *Journal of Health and Social Behavior, 42*, 310-325.

Taylor, C. A., Liang, B., Tracy, A. J., Williams, L. M., & Seigle, P. (2002). Gender differences in Middle School Adjustment, Physical Fighting, and Social Skills: Evaluation of a Social Competency Program. *The Journal of Primary Prevention, 23*, 259–272.

Trzesniewski, K.H., Donnellan, M.B., & Robins, R.W. (2003). Stability of Self-esteem across the Life Span. *Journal of Personality and Social Psychology, 84*, 1, 205-220.

Trzesniewski, K.H., Donnellan, M.B., Moffitt, T.E., Robins, R.W., Poulton, R., & Caspi, A. (2006). Low self-esteem during adolescence predicts

poor health, criminal behavior, and limited economic prospects during adulthood. *Developmental Psychology, 42*, 381-390.

Veselska, Z., Madarasova Geckova, A., Orosova, O., Gajdosova. B., van Dijk, J.P., & Reijneveld, S.A. (2009). Self-esteem and resilience: The connection with risky behavior among adolescents. *Addictive Behaviors, 34*, 287–291.

Wade, T.J., Cairney, J., & Pevalin, D.J. (2002). Emergence of gender differences in depression during adolescence: national panel results from three countries. *Journal of the American Academy of Child & Adolescent Psychiatry, 41*, 190-198.

Weare, K. (2000). *Promoting mental, emotional, and social health: a whole school approach*. London: Routledge.

Werneke, U., Goldberg, D.P., Yalcin, I. & Üstün, B.T. (2000). The stability of the factor structure of the General Health Questionnaire. *Psychological Medicine, 30*, 823–829.

West, P., & Sweeting, H. (2003). Fifteen, female and stressed: changing patterns of psychological distress over time. *Journal of Child Psychology and Psychiatry, 44*, 3, 399-411.

Williams, P.G., Holmbeck, G.N. & Greenley, R. N. (2002). Adolescent Health Psychology. *Journal of Consulting and Clinical Psychology, 70, 3*, 828 - 842

Zimmer-Gembeck, M. J. (2002). The Development of Romantic Relationships and Adaptations in the System of Peer Relationships. *Journal of Adolescent Health, 31*, 216 – 225.

Ybrandt, H. (2008). The relation between self-concept and social functioning in adolescence. *Journal of Adolescence, 31*, 1-16