

# MEANING IN LIFE AS PROTECTIVE FACTOR FOR ADOLESCENT'S HEALTH BEHAVIOR

PhD Theses  
**László Brassai**

Semmelweis University of Medicine  
School of Mental Health Sciences



Supervisor:

Opponents:

President of the final exam committee:

Members of the final exam committee:

Bettina Pikó, PhD

Zsolt Demetrovics, PhD

Mária Hoyer, PhD

István Bitter, DSc

Emőke Bagdy, CSc

Zsuzsanna Czenner, CSc

Budapest, 2011

## **Introduction**

Adolescence is a critical life period in the perspective of health behavior. This life period is marked by the crystallization of the health related behaviors and their integration in the youth's lifestyle. In consequence, health related habits exercise immediate influences on youth development, and have a long term health benefit as well. In the developmental process youth experimentation is tried in certain health-demanding behaviors through which behaviors have a functional benefit to follow adult lifestyle, but if they become regular routines can have a harmful effect on youth health. Empirical results revealed that the experience of health risk behaviors can be considered non adaptive but not maladaptive in adolescence. For example, youth who experimentalize psychoactive substances – in comparison with abstainers – dispose personality characteristics which can contribute positively to the success of psychosocial development. Thus in the evaluation of adolescent's health risk behavior we can ignore the normative aspect of the development, highlighted by the prominent health theoreticians. However, in parallel with the health risk behaviors the consolidation of the health enhancing behaviors can be of crucial importance. Although in this developmental period health risk behaviors increase and health preventive behaviors decrease, healthy eating and adequate diet control, regular physical activity, equilibrate slipping behavior, seatbelt use and oral hygiene are behaviors with serious health protective effects despite the presence of health risk behaviors. In the perspective of lifestyle, health risk and health enhancing behaviors are marked by sets of individual, interpersonal and transpersonal influences with risky or protective effects. The mechanism of the psychosocial health indicators can often be characterized by age-specific differences. For this reason the identification of this mechanism which may reduce the health related harms in adolescence acquires special importance for health sciences, representing the start point in the elaboration of positive youth developmental interventions and programs. In this sense, if the preoccupation with detecting the today well known health preventive factors starts with the development of the humanistic psychology, the intention for identifying new protective factors from the

spiritual/existential domain of personality becomes the dominant preoccupation with health sciences only today. The role of religiosity as factor of optimal personality functioning in adolescence was revealed a long time ago, but over the past decade, interest in the youth's capacity to be resilient and to maintain a positive development has been increased. Among others, spirituality and searching for a coherent meaning in life have long been proposed to be a resilience factor in adolescent development. Although most of the attention paid to existential aspects of human life has focused on adults and the elderly, several recent arguments have been made for the centrality of existential issues in adolescents' lives as well. Empirical results justify the presence of the interest related to the existential themes from childhood and early adolescence to the latest years of adolescence. The making-meaning mechanism plays an important role in the processes of searching for own authentic identity, and searching for meaning is an integral part of identity achievement in adolescence. Study results show that mature identity can be defined only in the relations to meaningful purposes and life plans. In the most dynamic developmental period of adolescence the normative aspects of development become extremely active along with the existential orientation of personality, the role of searching for meaning in life having a special developmental connotation.

The special attention in empirical works given to spiritual needs in adolescence and to personal-existential aspects as well reveal the protective role of meaning in life. In adolescence meaning in life is negatively associated with the occurrence of the psychosomatic symptoms, and with health risk behaviors. On the other hand, experiencing higher level of meaning in life is positively associated with psychological well-being and with other positive indicators of optimal psychological functioning, and with the most frequently health maintaining behaviors.

Psychological theory has long distinguished between the presence of meaning and the search for meaning in life. Searching for meaning in life is a prior human need. Human beings have a strong desire to understand themselves and the world around them. Initially, in Frankl's writings, searching for meaning in life was viewed as a promotional motivational force directed to finding personal meaning and purpose of life. Despite the apparent importance of meaning in

life during the early developmental stages – not taking into account the logotherapy and the empirical results of the existential analysis – up until Steger’s works the importance of search for meaning in life has been neglected. On the one hand, because meaning-in-life theorists argued for a dysfunction-guided definition suggesting that the search for meaning is the expression of existential frustration associated with the negative experience of meaning in life. In consequences, search for meaning in life has been found to show correlation between negative mental health states and psychological functioning such as depression and anxiety. At the same time the serious critiques regarding the psychometric properties of the search for meaning measures distorted even more the positive appreciation of this psychological construct. The first empirical result which shows positive relation between the presence of and the search for meaning is to be found in a collectivistic culture very similar to the Transylvanian culture, which I studied (Szekler Land).

### **The aims and hypotheses of the present investigations**

In general there exists an accentuated need for clear empirical evidences in reinforcing the health protective role of the meaning in life in adolescence and other empirical dates related to the differentiation of these two distinct empirical constructs (presence of and search for meaning in life). What also needs to be elucidated is the protective role of searching for meaning in life in preventing, maintaining and enhancing the health behavior among adolescents. Some important observations should be mentioned. While in adult population some empirical findings suggest one expected positive association between presence of and search for meaning in life, and there exists one clear empirical evidence in this direction, in adolescence no empirical results attest this relationship.

The aim of the main research is related to the following research question: we need empirical evidences concerning the accentuated attention oriented to examine the question whether the data regarding the meaning in life provided damning results only because the

research was exclusively focused on the presence of meaning in life – which at this age is rather small anyway - instead of focusing on the search for meaning – which is more typical of this developmental period. The main research question has special significance concerning mental health in two aspects. On one hand, it holds empirical results regarding the health protective role of both meaning in life dimensions: presence of and search for meaning in life. On the another hand, it reveals the importance of searching for meaning in life as an independent factor in the application and evaluation of meaning in life construct in health related research protocols.

## **Methods**

### ***Studied samples***

In our dissertation, the data of four empirical investigations were analyzed. Data of the first two cross sectional research design were collected among a representative Transylvanian adolescent sample (N = 1977,  $M_{\text{age}} = 16.8 \pm 1.2$ , respectively N = 940,  $M_{\text{age}} = 16 \pm 1.1$ ). Data for the third study were collected from a representative sample of Szekler Land adolescents (Transylvanian subregion) (N = 512,  $M_{\text{age}} = 16,2 \pm 0.7$ ). Finally, the forth study data were based on a third study respondents 13 month after the first data collection, permitting longitudinal data analysis. (N = 445,  $M_{\text{age}} = 17.5 \pm 0.6$ ).

### ***Measures***

In the first study six types of risk behavior were examined: smoking, binge drinking, illegal drug and sedatives use, lack of exercise and lack of diet control. Binge drinking and the use of sedatives were measured with relevant questions from Health Behavior in School-aged Children Study. Smoking and illegal drug uses were measured using items form Youth Risk Behavior Surveillance Survey. The measure of physical activity was focalized to lack at least 30 minutes of physical activity/day. Diet control, that is, nutrition behavior control, was measured with the following

question: “During the past month how much did you try to watch for what you ate, that is, tried to maintain a healthy diet?”

The psychosomatic symptom scale included the following self-reported symptoms: lower-back pain, tension headache, sleeping problems, chronic fatigue, stomach pyrosis, tension diarrhea, and heart palpitation. This measure was used in order to obtain information on the frequency of these symptoms during the last 12 months.

Psychological well-being was measured using the frequency of the positive emotional states (forceful, optimism, and happiness) and three negative emotional states (exhausted, irritable, and disappointed) in the last 12 months.

Quality of life was measured with the WHO Five Well-being Index. The scale includes items referring to positive mood (good spirits, relaxation), vitality (being active and waking up fresh and rested), and general interests (being interested in things).

Meaning in life was measured by the “Life meaning” subscale of the Brief Stress and Coping Inventory developed by Rahe and Tolles. This coping scale presents eight questions regarding aspects of subjects’ lives that make their “lives worth living”.

In the second study two health risks (alcohol and illegal drug use) and two health protective (physical activity and diet control) behaviors were used as dependent variables, and six psycho-social indicators of health (meaning in life, self-efficacy, self-regulated behavior, future orientation, satisfaction with parents social support, parental responsiveness and demandingness).

Regarding alcohol and illegal drug use, it was measured during a three-month prevalence using items from Gerrard and collaborators health behavior rating scale.

Regarding independent variables, meaning in life was measured with previously presented Life meaning subscale from Brief Stress and Coping Inventory by Rahe és Tolles. Self-efficacy was measured with Schwarzer`s General Self-Efficacy Scale, self-regulated behavior with Luszczynska et al.`s Self-Regulation Scale, future orientation with Strathman et al.`s Consideration of Future Consequences Scale, satisfaction with social support with Turner and Mario`s Measures of Perceived Social Support Scale, and finally for

measure parental responsiveness and demandingness we use the Jackson et al.'s Authoritative Parenting Index.

In the third study two types of problem behaviors (aggressive/antisocial behavior and academic school failure) and two health enhancing behaviors (healthy eating and physical activity) were measured. The presence of meaning in life, search for meaning in life and hopelessness were regarded as independent variables.

For measuring health related risky behaviors we use the Cognitive Appraisal of Risky Activities Inventory by Fromme and collaborators, and health preventive behaviors were measured with Jessor et al.'s Survey of Personal and Social Development.

The two dimensions of meaning in life, presence and search for meaning in life were assessed using Steger and collaborators Meaning in Life Questionnaire, whereas hopelessness was measured with Hopelessness Scale of the Lester's Helplessness, Hopelessness, Helplessness Inventory.

In the fourth study the influence of four protective psycho-social indicators (presence and search for meaning in life, health-as-value and positive quality of life) on two types of health maintaining behaviors (healthy eating and physical activity) were analyzed. New data were collected only regarding the occurrence of healthy eating and physical activity (with Jessor et al.'s Survey of Personal and Social Development). Data regarding the studied independent factors are provided from the third study data collection. In this sense meaning in life variables were measured with Steger's Meaning in Life Questionnaire, positive quality of life was measured with WHO-Five Well-being Index, and finally health-as-value was measured with Ritt-Olson and collaborator's Health-as-Value Scale.

All the used instruments in the studies were well known in health science research, validated in international and Hungarian native speaker's studies.

## **Results**

According to the data of the first investigation, a higher level of meaning in life was inversely associated with a lower likelihood of

health risk behaviors (e.g. illegal drug and sedatives use, exercise, diet control), and poor psychosocial health (e.g. occurrence of psychosomatic symptoms, poor psychological well-being and quality of life). At the same time, when the relationship between meaning in life and health outcomes was studied simultaneously with other well known individual and interpersonal protective factors (such as self-efficacy, self-regulated behavior, future orientation, satisfaction with parents social support, parental responsiveness and demandingness), the predictor effect of meaning in life was confirmed in alcohol use, diet control and physical activity.

If most of the studies conducted in adolescence regarding the relationship between life meaning and health related behaviors focalize on the presence of meaning in life, our study results revealed the relative importance of searching for meaning in life in adolescence. Our findings show opposite relation patterns between search for meaning in life in one hand, respectively hopelessness and health-risk behaviors in the other hand. Likewise the health related behaviors predictor structure of search for meaning was more extended than the predictor structure of presence of meaning in life. The association of search for meaning in life with the future perspective of health-related behaviors can be considered to be a new result. Searching for meaning in life was a most strongly predictor of anticipated future frequency of physical activity and eating behavior. In other words, adolescents with higher tendency for search for meaning in life have higher expectations toward the occurrence of health preventive behaviors in the future. Main research results confirm the association of the health maintaining behaviors in adolescence with a complex planning-regulating mechanism. Thus the youth are capable of searching for more meaning in their lives in a manner that is not driven by a loss or lack of meaning, but rather as part of a healthy developmental process of fulfilling their own personal potential. Under ideal circumstances, search for meaning should be a natural, healthy part of life, a deep, intrinsic motivation for opportunities and challenges, and understanding and organizing one's experiences.

If the distinction between presence of meaning and search for meaning in life are empirically revealed, the relationship between them is more complex. In our study sample presence of and search



for meaning in life has been detected as independent predictors. But in some condition -- regarding healthy eating among boys and physical activity among girls--, greater level of searching for meaning in life strength the protective influence of presence of meaning in life.

Finally, longitudinal results confirm the protective effect of both presence and search for meaning in life on the occurrence of healthy eating and physical activity. The special significance of this result is revealed by the fact that in adolescence the relationship between life meaning and health maintaining behaviors was demonstrated only concerning the construct of the sense of coherence, and not the more specific measuring of the psychological construct of the meaning in life. In the light of our findings, having meaning in life seems to be a stronger health protective influence for physical activity, while searching for meaning in life seems to have a stronger protective effect for healthy eating.

Although our research provides important empirical findings regarding the protective role of meaning in life in the occurrence of health-related behaviors, highlighting significant gender differences, the results do not inform us about the possible mediator effect of age and social status. Likewise data were collected from a specific Hungarian native speaker adolescents living in Romania, socio-cultural differences may limit the generalizability of our findings.

## **Conclusions**

In the light of the present study results we can confirm that meaning in life seems to be a good indicator of optimal personality functioning in adolescence. It is negatively associated with health risk and positively associated with health preventive behaviors. In addition, findings reinforce the health protective role of meaning in life not only in adulthood and elderly – such as previous empirical results attests –, but in adolescence as well.

While previous studies have focused only on the presence of meaning in life, our results point in novel ways to the role that searching for meaning in life might play in adolescence positive

health functioning. While evaluating the role of meaning in life, we cannot ignore the effort people put into the search for meaning. According to the developmental theory, although adulthood and later life are marked by the consolidation of meaning (akin to presence of meaning), from childhood to late adolescence, processes and aims consistent with search for meaning of life are more typical. Our findings show that searching for meaning in life, rather than presence of meaning in life was strongly correlated with health protective behaviors in adolescence. The present results confirm our hypothesis that the youth are capable of searching for more meaning in their lives in a manner that is not driven by a loss or lack of meaning, but rather as part of a healthy developmental process of fulfilling their own personal potential. Under ideal circumstances, search for meaning should be a natural, healthy part of life, a deep, intrinsic motivation for opportunities and challenges, and understanding and organizing one's experiences. Thus, in this sample, the search for meaning pointed to healthy adolescent functioning.

Protective effects are often mediated by gender differences. While the prevalence of searching for meaning is higher among girls, health behaviors related protective structure were characterized by gender differences. Among boys search for meaning in life is strongly associated with healthy eating whereas among the girls searching for meaning is more strongly associated with physical activity.

It seems that even in teen ages the spiritual/existential domain of the personality can decrease the likelihood of health risk caused by everyday life stress, developmental conflicts and non-functional life skills. The meaning of the presented empirical results for the applied health sciences can be the following: if we can strengthen adolescents' making-meaning processes, supporting adolescents to perceive life as comprehensible and meaningful, we may contribute to the development of important healthy life habits.

## List of publications

### *Publications connected to the dissertation*

- Brassai L, Piko B, Steger MF (2011) Meaning in life: Is it a protective factor for adolescents' psychological health? *Int J Behav Med*, 18: 44-51.
- Brassai L, Pikó B (2011) Searching for meaning in life and prosocial behavior as protective factors against adolescent substance use. (*In Hungarian*) *Mentálhigiéné és Pszichoszomatika*, 12: 17-34.
- Brassai L., Pikó B. (2010) The significance of existential/spiritual attitudes in adolescent health preventive and risk behaviors. (*In Hungarian*) *Magyar Pszichológiai Szemle*, 65: 597-611.
- Brassai L. Response to risk society: the meaning in life. (*In Hungarian*) T3 Press, Sepsiszentgyörgy, 2010.
- Piko B, Brassai L (2009) The role of individual and familial protective factors in adolescents' diet control. *J Health Psychol*, 14: 810-819.
- Brassai L, Piko BF. The role of parent-adolescent connection in child welfare: A study of high school students in Transylvania, Romania. In: SJ Quintero (Ed.) *Child welfare issues and perspectives*. Nova Publisher, 2009: 55-76.
- Brassai L, Pikó B (2008) The role of personal and familial psychological factors in regularity of adolescents' physical activity. (*In Hungarian*) *Alkalmazott Pszichológia*, 10: 5-20.
- Brassai L, Pikó B (2008) Focalize on healthy eating: eating habits among Transylvanian adolescents. (*In Hungarian*) *Egészségfejlesztés*, 49: 10-15.
- Brassai L (2008) Gender differences in health enhancing behavior in adolescence. (*In Hungarian*) *Erdélyi Pszichológiai Szemle*, 9: 237-255.
- Brassai L, Pikó B (2008) The role of personal, interpersonal and transpersonal factors in adolescent's diet control. (*In Hungarian*) *Mentálhigiéné és Pszichoszomatika*, 9: 165-181.

- Piko B, Brassai L (2007) Values and health-related behavior. A comparison of youth in Hungary and Transylvania. *Eur J Mental Health*, 2: 171-181.
- Brassai L, Pikó B (2007) The role of protective psychological variables in adolescents` health-related behaviors. (*In Hungarian*) *Mentálhigiéné és Pszichoszomatika*, 8: 211-227.
- Brassai L, Pikó B, Keresztes N, Unger J (2007) Some cultural aspects of health and problem behaviors. (*In Hungarian*) *Alkalmazott Pszichológia*, 9: 31-45.
- Brassai L, Pikó B, Keresztes N, Unger J (2006) Cross-cultural study of cultural values among university students. (*In Hungarian*) *Pszichológia*, 26: 265-274.
- Brassai L. The social disposition and health behavior of Transylvanian youths. In: Pikó B (Ed.) *Youth, addictions and health in modern society. (In Hungarian)* L`Harmattan Press, Budapest, 2005: 152-167.
- Brassai L, Pikó B (2005) Study of substance use and family related factors among high school students. (*In Hungarian*) *Addictologia Hungarica*, 4: 7-28.
- Brassai L, Pikó B (2005) Sociodemographic, individual and behavioral variables in adolescent`s substance use. (*In Hungarian*) *Mentálhigiéné és Pszichoszomatika*, 6: 77-93.

### ***Other publications***

- Brassai L. Building personality in school setting. (*In Hungarian*) T3 Press, Sepsiszentgyörgy, 2003.
- Brassai L. Psychological and career counseling – teacher`s practical guide. (*In Hungarian*) T3 Press, Sepsiszentgyörgy, 2001.
- Brassai L. The language of body – the images of soul. (*In Hungarian*) T3 Press, Sepsiszentgyörgy, 2000.