Intrapersonal factors, social context and health-related behavior in adolescence

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Chapter 1

Introduction

This study deals with health-related behaviors and tries to contribute to the understanding of possible determinants associated with these behaviors. Its main focus is on the intrapersonal dimension (perception of self) and on the additional contribution of factors from other dimensions (interpersonal and socio-cultural). This chapter covers the theoretical background of this study, describes the aim of the study and the theoretical model used and presents the research questions and the structure of this thesis.

1.1 Health-related behavior in adolescence

Health-related behaviors have traditionally been defined as behaviors undertaken by individuals that affect their health (Kasl & Cobb, 1966). These behaviors can be further distinguished between health-compromising behaviors (e.g. smoking, alcohol consumption, cannabis use, and unprotected sex), which have an undesired effect from a public health perspective on health, and health-enhancing behaviors (e.g. physical activity, healthy eating), which have a desired effect on health from a public health perspective. Patterns of health-compromising behaviors and their initiation and progression in adolescence are generally considered to be predictive of later involvement in such behaviors and exposure to their harmful consequences (Tucker, Ellickson, Orlando, Martino, & Klein, 2005). Healthy lifestyle patterns that include health-enhancing behaviors can be also traced back to childhood and adolescence (Hallal, Victora, Azevedo, Wells, 2006).

Previous research (Van Nieuwenhuijzen et al., 2009; Lam, Stewart, & Ho, 2001; Jessor, 1991) shows that the mentioned behaviors cluster together and therefore might have similar patterns of determinants. Empirical evidence supports the existence of organized patterns in adolescent health-related behaviors with several domains of influence (Petraitis, Flay, Miller, 1995; Jessor, 1991), which are described in more details in Table 1.1. Based on these models it is possible to distinguish the following domains of influence: genetics (e.g. a family history of addiction), intrapersonal factors (e.g. low self-esteem), interpersonal factors (e.g. family and/or peer support) and sociocultural (e.g. socioeconomic status) factors. Understanding factors related to health-related behaviors is essential for

developing effective and successful strategies that contribute to health promotion not only in adolescence (present health) but also in adulthood (future health).

Table 1.1 A matrix of types and influences on health behavior (Petraitis, Flay, Miller, 1995 – modified)

Level of influence	Type of influence		
	Cultural/attitudinal	**Social/interpersonal**	**Intrapersonal**
Ultimate	Constructs: local crime and employment rates; inadequate schools; poor carrier and academic options; negative evaluations from teachers; availability of substances weak public policies	Constructs: infrequent opportunities for rewards from family members; lack of parental warmth, support or supervision; negative evaluations from parents; home strain; parental divorce or separation	Constructs: impaired cognitive functions; genetic susceptibility; temperamental personalities; impulsivity; aggressiveness; emotional instability; extraversion; sociability; risk-taking; thrill-seeking; external locus of control
Distal	Constructs: weak commitment to conventional values, school, and religion; social alienation and criticism; weak desire for success and achievement, rebelliousness; desire for independence from parents; deviance	Constructs: weak attachment to and weak desire to please family members; strong attachment to and strong desire to please peers; greater influence from peers than parents; risky behavior; specific attitudes and behaviors of role models	Constructs: low self-esteem, temporary anxiety, stress, or depressed mood; poor coping skills; weak academic skills
Proximal	Constructs: expected costs and benefits of risky behavior, evaluation of costs and benefits of risky behavior, attitudes towards risky behavior by others, attitudes towards risky behavior by self	Constructs: prevalence estimates; motivation to comply with others; beliefs that important others encourage risky behavior	Constructs: refusal skills, use self-efficacy; refusal self-efficacy

1.2 Intrapersonal and interpersonal factors and health-related behaviors

As already mentioned, health-related behaviors are associated with factors from several domains of influence. In the next section, the focus will be on the role of factors from the intrapersonal and interpersonal domains.

1.2.1 Perception of self and health-related behavior

Adolescence, as the period of transition from childhood to adulthood, is a critical time for the development of lifelong perceptions, beliefs, values and practices. This period is related to making that transition and to coping with several challenges. Adolescents struggle with the developmental tasks of establishing an identity, accepting changes in physical characteristics, learning skills for a healthy lifestyle and separating from family (Susman, Dorn & Schiefelbein, 2003; Burt, 2002). Adolescents' family, peers, neighborhood environment, school and other associations can help them complete these tasks or can pose significant barriers that many youths will not be able to overcome on their own. During adolescence, youths continue with developing their perception of the self and face the task of establishing a satisfying self-identity (Burt, 2002; Anderson & Olnhausen, 1999).

Self-esteem is an evaluative and affective aspect of the self. It is also considered as equivalent to self-regard, self-estimation and self-worth (Harter, 1999). It refers to a person's global appraisal of his/her positive or negative value (Markus & Nurius, 1986). Self-esteem has well-known consequences not only for current physical and mental health and health-related behaviors, but also for future health and health-related behaviors during adulthood (Mann et al, 2004). Positive self-esteem is a basic element of mental health, but it also contributes to better health through its role as a buffer against negative influences. Conversely, negative self-esteem can play a critical role in the development of several internalizing (depression, anxiety) and externalizing (violence, substance use) problems (Mann et al., 2004). Self-esteem is closely connected with self-efficacy and plays an important role in what are currently the most frequently used cognitive models of health-related behavior, such as the Theory of Planned Behavior (TPB) (Ajzen, 1991), the Attitude-Social influence-self-Efficacy (ASE) model (De Vries & Mudde, 1998), the Theory of Triadic Influence (TTI) (Flay & Petraitis, 1994) and the Precede-Proceed model (Green & Kreuter, 1999). Based on the review by Mann et al. (2004), self-efficacy in behavioral domains, according to the TPB, influences self-esteem or the evaluation of self-worth. At the same time, according to other models such as the ASE or TTI, self-esteem could be considered as a distal factor influencing self-efficacy in specific behavioral domains.

Self-esteem has been repeatedly associated with health-compromising and health-enhancing behaviors in past research. Recent studies have confirmed the connection between higher self-esteem and regular physical activity (White, Kendrick & Yardley, 2009; Penedo & Dahn, 2005; Parfitt & Eston, 2005). Evidence about the association between smoking or cannabis use and self-esteem is more contradictory but still suggests a connection between higher self-esteem and lower engagement in smoking and cannabis use (Kokkevi, Richardson, Florescu, Kuzman, & Stergar, 2007; Wild, Flisher, Bhana, & Lombard, 2004; Carvajal, Wiatrek, Evans, Knee, & Nash, 2000).

Self-efficacy, defined as beliefs in one's capabilities to organize and execute the courses of action required to manage prospective situations (Bandura, 1995), has a central role in socio-cognitive theories, e.g. Ajzen's (1988) theory of planned behavior or Bandura's (1986) social cognitive/learning theory. People's beliefs in their own efficacy influence the choices they make, their aspirations, how much effort they mobilize in given behaviors and how long they persevere in the face of difficulties (Bandura, 1991). Behavior-specific self-efficacy is therefore generally considered as an important determinant of the practice of health-related behaviors.

Specific beliefs about self-efficacy are considered to have the most immediate and direct association with health-related behaviors like regular smoking, cannabis use and physical activity. Low perceived self-efficacy has been repeatedly connected with a higher prevalence of smoking behavior (Engels, Hale, Noom, & De Vries, 2005; Kim, 2004; Engels, Knibbe, de Vries & Drop, 1998) and a lower prevalence of physical activity (White, Kendrick & Yardley, 2009; Annesi, 2006).

Self-competence and self-liking were defined by Tafarodi & Swann (1995) as constructs emerging from global self-esteem. Self-competence is defined as the evaluative experience of oneself as an intentional being with efficacy and power. Self-liking, on the other hand, is defined as the evaluative experience of oneself as a good or bad person according to internalized criteria for worth. These two dimensions could also be extracted from the Rosenberg Self-esteem Scale, as has been confirmed in other studies (Schmitt & Allik, 2005; Tafarodi & Milne, 2002). There is a lack of studies exploring self-liking and self-competence in association with health-related behaviors. However, both mentioned aspects of self are closely related to the concept of self-esteem and it can be assumed that they are associated with health-related behaviors in a similar way (Tafarodi & Swann, 1995).

1.2.2 Health-related behaviors and other intrapersonal and interpersonal factors

Based on the comprehensive social-psychological framework for explaining health-related behaviors proposed by Petriatis, Flay, & Miller (1995) and Jessor (1991), other intra- and interpersonal factors can be expected to contribute to the association between the perception of self and health-related behaviors. Their headings are also presented in Table 1.1 and Figure 1.1. From the intrapersonal domain, factors like personality, affectivity, mental health and resilience have been associated with health-related behaviors in previous research (Markey et al., 2006; Curry & Youngblade, 2006; Windle & Windle, 2001; Gordon Rouse, Ingersoll, & Orr, 1998). From the interpersonal domain, family and peers factors are the most studied determinants of health-related behaviors (Tomcikova et al., 2009; Mistry et al., 2009; Peters et al., 2009). To be able to fully explore health-related behaviors and their determinants, it is important to look for the expected contribution of factors from different domains.

1.3 Socioeconomic background of adolescent health-related behaviors

Socioeconomic background is probably an important cause of adolescents' health-related behaviors, but evidence on its role is not yet conclusive. There are some differences regarding type of health-related behaviors and some country differences as well. Different types of health-related behaviors do not associate similarly with socioeconomic status, and differences in the association between socioeconomic status and health-related behaviors were also found across countries (Richter et al., 2009; Currie et al., 2008). Regarding smoking, some studies found that socioeconomic differences in adolescent smoking are not present or not as pronounced as in adult smoking (Richter et al., 2009; Tuinstra et al., 1998), while other studies revealed consistent socioeconomic differences regarding this type of health-related behavior (Piko & Keresztes, 2008; Salonna et al., 2008; Goodman & Huang, 2002; Madarasova Geckova et al., 2005). Consistent socioeconomic differences can be found in health-enhancing behaviors like physical activity or consumption of fruits and vegetables. Higher socioeconomic status was associated with more frequent physical activity and a higher frequency of fruits and vegetables consumption (Richter et al., 2009; Vereecken, Maes & De Bacquer, 2004).

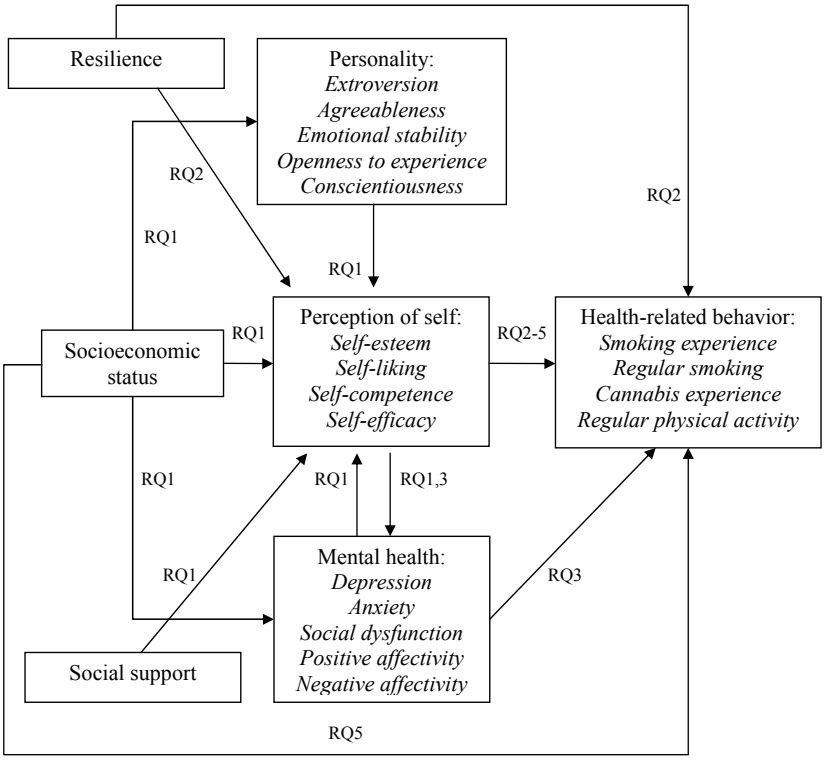
Geckova (2002) provided several explanations for these contradictory findings: (a) differences in the socio-cultural context; (b) differences in the measurements of socio-economic status; (c) differences in the measurements of health-related behaviors and (d) differences in the

samples. Differences in the socio-cultural context are very likely to occur and influence the findings. Therefore, they need to be taken into account in the process of explaining the results. In addition, differences in measurements of health-related behaviors might be more pronounced than differences in measurements of socioeconomic status since there is more variety in the questionnaires used for measuring various types of health-related behavior. A fifth explanation for these discrepancies could be the period of life in which these behaviors are established. For instance health-enhancing behaviors like physical activity are usually established in childhood when parental influence is much stronger than in adolescence (Richter et al., 2009). Therefore, socioeconomic status defined by the educational level of parents might be associated more strongly with such health-enhancing behaviors. In contrast, health-endangering behaviors like smoking are established more intensively in adolescence when the influence of parents is less pronounced and the influence from peers is growing. This might explain the less consistent findings about the connection between the socioeconomic status of parents and health-endangering behaviors like smoking in this period of life. These inconsistent findings also support the assumption made by Petraitis, Flay, & Miller (1995) that health-related behaviors in adolescence need to be explored with regard to factors from different domains of influence (intrapersonal, interpersonal and socio-cultural) which might contribute to the connection between socioeconomic status and health-related behaviors and which were not fully explored in the above mentioned studies.

1.4 Aims of the study and research questions

The general aim of this thesis was to examine the association between the perception of self (e.g. self-esteem, self-liking, self-competence and self-efficacy) and health-related behavior (e.g. smoking behavior, drunkenness, cannabis use and physical activity) among adolescents. A further aim of this thesis was to explore the contribution of other intrapersonal factors (e.g. personality, mental health and resilience) to the above mentioned association. Additionally, we were interested in the role of socioeconomic status as a background variable. The model of the relationships examined within this thesis is presented in Figure 1.1.

Figure 1.1 Model of the relationships between key constructs examined in the thesis



Five main research questions were formulated based on previous studies.

Research question 1:

Do personality, mental health and social support contribute to the relationship between socioeconomic status and self-esteem (Chapter 3)?

Research question 2:

Does self-esteem, along with resiliency factors, influence selected types of health risk behavior (smoking experience, regular smoking, and cannabis experience) among adolescent boys and girls (Chapter 4)?

Research question 3:

Does affectivity contribute to the association between self-efficacy and selected types of health risk behavior (smoking experience, regular smoking) in young adolescence (Chapter 5)?

Research question 4:

Do aspects of self-perception (self-esteem, self-liking, self-competence, and self-efficacy) associate with different levels of physical activity among adolescent boys and girls (Chapter 6)?

Research question 5:

Does self-esteem contribute to the relationship between socioeconomic status and physical activity (Chapter 7)?

1.5 Structure of the thesis

This thesis is divided into eight chapters.

Chapter 1 provides a general introduction to the associations between the key theoretical constructs of this thesis: perception of self (self-esteem, self-liking, self-competence, and self-efficacy), other intrapersonal factors (e.g. personality, mental health and resilience), socioeconomic status and health-related behavior (e.g. smoking behavior, cannabis use and physical activity). The primary aim and research questions of the thesis, along with the model of studied variables, are presented.

Chapter 2 provides information about the design of the study. It describes the data collection and the study samples used in this thesis. Furthermore, it provides a short description of the measures and analysis used.

Chapter 3 explores the association between socioeconomic status and self-esteem in adolescence with possible contributions of personality, mental health and social support.

Chapter 4 focuses on the influence of self-esteem and resilience on heath-related behavior (smoking experience, regular smoking, and cannabis experience) among adolescent boys and girls.

Chapter 5 explores the association between self-efficacy and heath-related behavior (smoking experience, regular smoking) in adolescence with the possible contribution of affectivity.

Chapter 6 focuses on the associations between the perception of self (self-esteem, self-liking, self-competence, and self-efficacy) and different levels of physical activity among adolescent boys and girls.

Chapter 7 explores the association between socioeconomic status and physical activity in adolescence with the possible contribution of self-esteem.

Chapter 8 presents and discusses the main findings of this thesis as well as its strengths, limitations and also its implications for practice and further research.

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