The project centers around the question: how the relation of adults to their bodies influences the trans-generational transmission of body esteem and care as well as what is the path of the attitude towards own and others' physicality development in preschool and school age children in the context of this transmission.

Three principal issues:

- 1. assessment of physical attractiveness by 5-year-old and subsequently 7-year-old children and adults
- 2. stereotypical perception of body by adults and relation between this process and assessment of physical attractiveness by adults themselves and by their 5-year-old and then 7-year-old children
- 3. involvement of parents and children in body-focused health-promoting practices.

One's relationship with his/her body starts to be defined as early as during early childhood, however initially it is mainly an outcome of parental influences. These are adults who are responsible for nutrition and physical fitness of their offspring. Also parents determine relation between their children and physical attractiveness, both indirectly and directly, and point to its role in social life. During its first years, a child develops its own body scheme, a coherent sense of its body and beliefs concerning body image which are then used to describing one's appearance A breakeven point occurs at the age of five years, when children are able to distinguish between attractive and non-attractive individuals, but still do not compare their self-image to any of these patterns. Majority of preschoolers are generally satisfied with their appearance, but manifest significant preferences concerning the appearance of adults. At the age of seven children begin to relate the beauty standards of the adult appearance to themselves. The sense that one's body can be imperfect can lead to dissatisfaction with body image.

Adults themselves have various attitudes to their bodily sphere. There are two predominant aspects of one's attitude to his/her body: one associated with its beauty and another one related to health. Gender is one of the main determinants of one's relation to his/her body. Men and women differ in both content and degree of body dissatisfaction and body change behaviors. Exposing a female body to permanent evaluation is directly related to perceiving **body-as-an-object**, that is, the sum of relatively independent elements, the value of which is their beauty. With respect to male attractiveness indicator, the musculature, its relationship with the **body-as-a-process** perspective is clearly noticeable. The level of muscularity is associated with the efficiency and strength of the body and therefore is desirable, however it is not connected with excessive value when assessing the image of male's body. Women's increased attention to their bodies as the objects of beauty is likely to be a key factor in explaining their more negative body esteem as compared to men. These distinct perspectives of attitude towards one's body are reflected in gender stereotypes.

Research carried out in developmental perspective revealed, that during adolescence the perception of a body as a process or as an object is already clearly noticeable. However, one can find no research indicating early foundation of this process and its relationship with pedagogical influences of caregivers.

Creation of an ideal of beauty takes place during the process of socialization; during development, many of child's skills are acquired by observation. Their first models are parents or caregivers; their behaviors, attitudes, or ways of emotional responding are to a large extent acquired by their children. Moreover, these are mothers and fathers who are the first models providing behavioral patterns consistent with social and gender roles and prototype of parental care; furthermore, they are the first determinants of the canons of beauty. Parents express directly their approval or disapproval for the appearance of other people, media celebrities, or their own children.

Feeding represents the earliest form of parental influence. Preschool children are not able to take care of their diet themselves; these are parents who prepare, serve, and control ingested foods. The experiences gained during this period are vital for the development of proper nutritional behaviors in future. Growing number of research points to the relationship of emotional aspect of feeding children (ie, treatment of food as reinforcement) with the emotional reaction to stress of parents themselves. Using food as an award or feeding in response to emotional reactions increases the risk that in future the child will eat from other reasons than being hungry. Furthermore, methods parents use to motivate their children to the appropriate eating differ with respect to gender. Girls are expected to hold a balanced diet because of concern about their looks (e.g. to be slim and have beautiful hair), however boys are encouraged to do so as to be strong. Of course, the characteristics of a child being a subject of interactions alter their effectiveness. Difficult temperament of a child is connected with adverse methods of feeding employed by parents, treating food as a mean for inducing obedience.

The modeling role of parents is also invaluable with regards to physical activity. Both competitive and recreational physical activity of parents determines health-seeking behaviors of their offspring. Undertaking recreational physical activity can result from various motivations, associated with both health-seeking and pathological behaviors. Parental motivation to active recreation is frequently reflected by developing similar motivation by their children. Individual differences between children cannot be neglected in this regards: there's no doubt that the temperamentally high-reactive children manifest different reactions when being encouraged to undertake physical activities. Parallelly, in case of feeding parents often encourage daughters to start physical activity in order *to be slimmer*, and sons - *to be more fit* – again this depends on whether the body is treated as an object or as a process. Defining proper attitude of young children to their bodily sphere becomes of vital importance in view of the fact declaring obesity as a global epidemic by World Health Organization. The worldwide prevalence of obesity has nearly doubled between1980 and 2008. An alarming increase in the number of overweight and obese individuals was documented in Poland as well: overweight was documented in 8.5% of children aged 13 to 15, and 4.5% of children from this age category are obese.

Our project combines research problems and methodologies specific for developmental psychology, gender psychology, and health psychology. Such approach represents an innovation as to date, the issues associated with body stereotyping were

extensively analyzed by gender psychologists who emphasized its negative consequences leading to objectifying of body, especially in women; this can be reflected by eating disorders, depressive disorders, or dysmorphophobia. Modern standards of physical attractiveness represent one of gender stereotype manifestations. However, we lack research conducted from developmental psychology perspective, identifying mechanisms behind the trans-generational transmission of body objectifying. Furthermore, we lack research indicating the role of parental early influence (direct and indirect) on emerging child's first self-evaluation of his/her body and on the ways how he/she should treat it.

Consequently, this project will focus on a model of interrelationships between parent's attitude to their bodies, appearance esteem methods transferred to their 5-year-old children, and determination attitude of the latter to physical attractiveness and its value in social life. Additionally, we will examine how the attitudes of 5-year-olds are translated onto the level of adequacy of the emerging image of their own body at the age of seven. Moreover, we will search for relations between health-seeking practices of adults and the practices used by them during feeding their children and involving them in physical activity, with attention paid to the moderating role of body objectifying.

The research is **longitudinal**, with the same data collection being repeated carried out twice. The first stage of the project will include examination of 300 5-year-old children, their parents and preschool teachers. An individual examination of each child regards to knowledge of healthy diet, and dietary habits, esteem of body attractiveness and stereotypical perception of body. Parents are asked about their own attitude to their bodies and stereotypical perception of men-women relations (from a gender psychology perspective), involvement in health-promoting practices (from a health psychology perspective), attitudes to their children (parental attitudes, feeding strategies, involvement of children in health-seeking practices) – from a developmental psychology perspective. Teachers serve as a source of information about health-promoting practices implemented at a kindergarten (from a health psychology perspective) as well as perception of children by their teachers (from a developmental psychology perspective).

The next stage includes reaching for children at the age of 7 years, former participants of first stage of the study. Also, survey at primary schools will be carried out, regarding perception of children by their teachers (from a developmental psychology perspective) and health-promoting practices implemented at school (from a health psychology perspective). Our aim is collection full set of data (from both stages) from at least 200 children. During the second stage information regarding: knowledge of healthy diet and dietary habits, esteem of body attractiveness, esteem of own body, as well as stereotypical perception of body, will be gathered from children. Survey at primary schools centers around health-promoting practices implemented at school (from a health psychology perspective) and perception of children by their teachers (developmental psychology perspective).

The study participants will be examined with the carefully chosen, instruments e.g. Body Esteem Scale (BES), Ambivalent Sexism Inventory (ASI), Gender-Specific System Justification Questionnaire (SJT), EAS-C Temperament Questionnaire, The Children's Eating Behavior Questionnaire (CEBQ), Mini-COPE, Inventory of Healthy Behavior, Parental Feeding Style Questionnaire (PFSQ), Body Composition Analyzer as well as instruments developed by project authors (Dietary Knowledge and Habits, Health & Beauty) supported by semi-structured interviews.

The results of the study will be published in research papers submitted to journals indexed in JCR. Moreover, the findings will be presented during national and international specialist conferences and in a publication of test manual for tools aimed at assessing awareness of health behaviors and gender stereotypes among children: *Dietary Knowledge and Habits*, and *Health & Beauty*.