UNIVERSITY OF TARTU
FACULTY OF EXERCISE AND SPORT SCIENCES
Institute of Sport Pedagogy and Coaching

Kenneth Ahlbäck

ESTONIAN AND FINNISH GRADUATING SENIORS’ OPINIONS AND MOTIVATION ABOUT PHYSICAL EDUCATION

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INTRODUCTION

Physical education (PE) is being viewed as an important means in promoting health and wellness that may, in turn, influence students to lead physically active lifestyles (Bibik et al., 2007).

There are several problems and open questions when discussing about the connection between the physical activity and the school physical education. Although the Surgeon General and other recognized authorities (e.g., ACSM and NASPE) have recommended increasing physical activity in physical education programs, little work has specifically addressed that task, or examined the prediction that increasing activity in physical education will have long term effects. What is clear is that present policies and approaches in physical education curricula do not seem to be having a positive impact with regard to facilitating the adoption of an active lifestyle. Because of this, it is important to explore ways to use physical education to increase physical activity and promote healthy lifestyles (Daigle and Hebert, 2005). Children and youth must learn healthful living habits while in school because many will not attend college or be able to afford fitness club memberships or expensive exercise equipments. Through participation in sports, students can develop positive personal traits, such as self-confidence and discipline, and social skills, such as teamwork and sportsmanship (Lumpkins, 2008).

Research’s has consistently demonstrated that enjoyment represents a key factor underlying the motivation for children and youth to maintain positive engagement in both physical activity and PE. In relation to school physical education, enjoyment represents a direct and tangible influence on students’ participatory behavior, providing immediate reward for being physically active. It is important, therefore, for researchers to acquire a clearer understanding of the motivational mechanisms that underlie the positive or negative affective outcomes of PE, such as enjoyment or anxiety (Yli-Piipari et al., 2009).

There haven’t been found any research for exploring possible differences in general feelings and opinions about leisure time physical activity and school physical education, as well as motivation in physical education between Estonian and Finnish male and female senior graduating students. Research is needed because this kind of knowledge could be useful for making PE classes more attractive and effective for school-aged Estonian and Finnish youth.
1. REVIEW OF THE LITERATURE

1.1 CHILDRENS PHYSICAL ACTIVITY, HEALTH AND ACADEMIC PERFORMANCE

Although the link between exercise and health has been established in adults, much less scientific documentation for such a relationship exists in youth. The means by which activity habits can be instilled and sustained in sedentary youth need to be development (Rowald, 2006). Childhood obesity and physical inactivity are increasing dramatically worldwide with detrimental effects on fitness, cardiovascular health and quality of life (Kriemler et al., 2009). Many children do not meet current recommendations of physical activity and studies have shown that cardio-respiratory fitness (CRF) has decreased among the least active children in the past decades. As low physical activity (PA) and CRF are related to development of fatness and life-style diseases, these changes may be a threat to the health of the up-coming adult population (Bugge et al., 2009).

In European children it has been found that as many as 15% of 9-y-old children had clustered risk. Most of the overweight and obese children are among these, but many of the children are lean inactive children, who may later become overweight because of insulin resistance. It can be concluded that there is a large potential for primary prevention of cardiovascular diseases (CVD) in European children, and lifestyle changes including increased physical activity as one of the key actions should be initiated (Froberg and Andersen, 2005).

A low level of PA and high paternal body mass index (BMI) were associated with higher systolic increased blood pressure (BP) in the Chinese American children. A low level of PA was also found to be a risk factor for higher low-density lipoprotein (LDL) and systolic BP in the children. The findings suggest that a low level of PA and high BMI are associated with increased risk of CVD in Chinese American children (Chen and Wu, 2008).

A number of studies have demonstrated that exercise can enhance bone gains in children and adolescents. Activities that impose high loads on bone seem most effective, and relatively brief bouts of such exercise are adequate. Exercise seems to be most effective during early puberty, and some benefit of childhood exercise seems to be retained longer term, whilst in adults exercise effects on bone seem to be reversed on cessation. Unfortunately, many children and adolescents (particularly adolescent girls) do not meet the recommended 60 minutes per day of exercise and it is unclear how many do adequate "bone-loading" exercise to optimize bone accrual. Increasing the amount of exercise, and
incorporating "bone loading exercise" may thus be beneficial in children and adolescents (Brooke-Wavell and Stensel, 2008).

Moderate intensity exercise intervention programs are beneficial for the skeletal development during growth. Adequate nutrition must accompany the exercise to achieve the most beneficial skeletal effects by exercise (Karlson et al., 2008). At least two hours of PA for 7-year-olds and at least one hour for 18-year-olds are the minimum recommendations. There should be 3 times a week a different PA for the muscles, motor skills, and bone health (Finnish Ministry of Education, 2008).

In Estonia, according to the cross-national research study of Health Behavior in School-aged Children (WHO, 2007) only 21% of 11-year old girls and 24% of 11-year old boys, 13% of 13-year old girls and 22% of boys, and 9% of 15-year old girls and 18% of boys reported at least one hour of moderate-to-vigorous activity daily. In Finland, according to the previous study (WHO, 2007), 37% of 11-year old girls and 48% of boys, 15% of 13-year old girls and 24% of boys, and 9% of 15-year old girls and 15% of boys reported at least one hour of moderate-to-vigorous activity daily.

Physical education, physical activity, and sports in schools all are associated with students’ better physical fitness (Story, 2009). Individual games provided less opportunity for activity than team games. The characteristics of movement activities and individual games respectively emphasize aesthetic appreciation and motor skill development. This can mean that opportunities to promote cardiorespiratory health may be less than in other activities. However, dance and gymnastics can develop flexibility, and muscular strength and endurance (Fairclough and Stratton, 2005).

The value of physical activity is not limited only to the body; it also contributes to sound mental health. Exercise makes a person feel better (Wuest and Bucher, 2006). Proposed mechanism for mental health change through physical activity fall into one of three diverse perspectives: biochemical, physiological, or psychological (Carless and Faulkner, 2003). Psychological well-being is particularly important for the prevention and management of cardiovascular disease, but it also has important implications for the prevention and management of other chronic diseases such as diabetes, osteoporosis, hypertension, obesity, cancer and depression (Darren et al., 2006).

A cross-sectional questionnaire study of 245 Finnish adolescents observed no association between PA level and school satisfaction and the trend to a weak correlation between PA level and problems at school was not statistically significant. However, PA was correlated with global school satisfaction and absence of a depressive mood state (Trudeau
In a meta-analysis of 44 studies, Sibley and Etnier (Trudeau and Shephard, 2008) concluded that PA was positively associated with better cognitive functioning in children. Some groups, particularly middle school students (grades 6–8, aged 11–13 years) and younger, seemed to benefit more from PA. When analyzed globally, the literature does not indicate any clear linkage between physical fitness (PF) and either academic achievement or intellectual performance. Extracurricular activities like sports or curricular PE are likely to increase attachment to school and self-esteem which are indirect but important factors in academic achievement. The literature strongly suggests that the academic achievement, physical fitness and health of our children will not be improved by limiting the time allocated to PE instruction, school PA and sports programs (Trudeau and Shephard, 2008).

1.2 PROMOTING CHILDREN’S PHYSICAL ACTIVITY

A wide range of predictors of children's active commuting behaviors was identified, including demographic factors, individual and family factors, school factors (including the immediate area surrounding schools), and social and physical environmental factors (Davison et al., 2008).

For young people physical educators, fitness leaders and sport coaches have a crucial role to play in developing both short-and long-term motivation to be physically active. Taking the perspective that activity itself is a neutral experience, and then the way it is presented can have a positive or negative impact. Teachers who embrace a philosophy that the central feature of education and schooling is the welfare, development and health of the child are more likely to make child-centered decisions and produce positive experiences regardless of the nature of the activity (Fox and Harris, 2003).

Physical educators need to find ways to promote physical education to parents, students, administrators, and fellow educators (Lumpkins, 2008). Parents who realize the importance of living fit lifestyle can demand that the schools help their children learn these habits. But, they must be convinced of the importance of developing the fitness parameters themselves; by making lifestyle changes at home, they can reinforce their children’s learning in school (Lumpkins, 2008).

One attractive approach to increasing physical activity in young people is providing activity through structured after-school programs. Although after-school programs have the potential to help children and adolescents engage in regular, enjoyable physical activity, the
research on these programs is limited and, in some cases, methodologically weak (Pate and O'Neill, 2009).

1.3 PHYSICAL EDUCATION

Physical education (PE) is being viewed as an important means in promoting health and wellness that may, in turn, influence students to lead physically active lifestyles (Bibik et al., 2007). PE provides a venue and an opportunity, in which all children who attend school may be physically active. Unfortunately, due to funding limitations and societal pressure to raise the standards in core subjects, curriculum time allocated to PE and the enrollment in PE lessons has reduced. While PE has many well established objectives such as the development of sport skills, sport knowledge, teamwork and social skills, it also provides significant opportunities for regular moderate to vigorous physical activity (MVPA). PE can therefore help youth meet established physical activity guidelines (Jago et al., 2009). The HEALTHY study investigators realized that, although school PE programs could not provide all the physical activities needed by youth, PE classes could have a considerable effect, particularly for the sedentary and over-weight youth who are at the greatest risk of developing type 2 diabetes (McMurray et al., 2009).

International evidence indicates that the level of activity that is obtained during PE classes is relatively low. Observational data indicate that 3rd grade students in the United States (US) spent only 36% of their PE lessons engaged in MVPA; with a similar proportion (35%) reported among Australian students. A recent paper from the US Trial for Activity in Adolescent Girls (TAAG) study group, which also used the same observational instrument as the studies listed above, reported that 6th grade girls spent an average of 37.9% of PE classes engaged in MVPA. Similarly, heart rate monitoring of activity in PE lessons in the United Kingdom (UK) indicated that 11-14 year old students spent an average of 34% of the lesson engaged in MVPA (Jago et al., 2009). Studies indicate that it is possible to increase MVPA in PE classes with interventions that focus on staff training, provision of equipment and enhanced curriculum materials (McMurray et al., 2009).

The positive attitude and perception of students towards physical activities are the main elements in evaluating the success of a particular Physical Education curriculum (Omar-Fauzee et al., 2009). Bibik et al., (2007), for example, studied High school students’ attitudes toward their physical education programs in the state of Delaware. When asked what they liked most about physical education, 31.4% mentioned specific sports or games. On the other
hand, 18.8% of the students liked running the least. Approximately 45% of the students indicated that in order to make physical education more enjoyable more sports and games should be offered. Suggestions from the remaining 55% included allowing more personal choice and more strength and fitness opportunities. Descriptive analyses revealed that 43.5% of both high school boys and girls rated physical activity to be important in their high school studies. The students' enjoyment of physical education is significantly correlated with attribution of team sports (such as basketball, baseball, floor hockey and volleyball), fitness activities (aerobic dance, weight training, bicycling), individual games (tennis, badminton, track, pickle ball), and self-defense (wrestling, karate, judo) in the physical education curriculum. Descriptive statistics revealed that approximately 21% of students responded that physical educators should teach more sports or games while approximately 13% indicated physical educators should teach more skills and strategies and 7.3% responded that students should learn more about fitness. Only 2.5% of the students responded that there was nothing they liked about physical education.

1.3.1 ROLE OF THE PHYSICAL EDUCATOR

Physical educators are key personnel to help young people achieve physical activity goals. As well as their teaching role they are well placed to encourage out of school physical activity, help students become independent participants and inform them about initiatives in the community. Also, they can have a direct impact by promoting increased opportunities for physical activity within the school context. These could include activities before school, during recess, as well as more organized extra-curricular activities at lunchtime and after school. Using time in this way would complement PE’s role by providing physical activity opportunities in a less structured and pedagogically constrained manner (Fairclough and Stratton, 2005). The Finnish education system requires the generation of subject marks for PE a pedagogical outcome which may impact on the externally regulated motivation of students to participate in PE classes (Yli-Piipari et al., 2009).

The first objective for effective pedagogical practice is to use class or practice time optimally. The good teacher is also prepared to handle management task and discipline problems with minimal loss of instructional and practice time. Each day should be sequentially structured to provide maximal opportunities to practice each new skill (Lumpkins, 2008). The second essential criterion of exemplary teaching focuses on helping students achieve success and challenge themselves to higher levels of skill development.
Specific, corrective feedback and positive reinforcing comments about proper execution of a skill or movement must be provided by the teacher. Only when each participant, within his or her individual limitations, enjoys learning will that person want to continue. A feeling of success is the key to this enjoyment. Using timeouts as punishments, rather than exercises or laps, teachers respect for the rules. Rewarding appropriate behaviors with the opportunity to participate in favorite activities is even more effective than punishments for most students (Lumpkin, 2008).

The findings in recent study have significant implications for educational practice in physical education. First, as the results have shown, students are more likely to adopt effective strategy use and be persistence when they believe they can accomplish a specific task or activity. Physical educators can and should help students maintain relatively accurate but high self efficacy, and assist them in the avoidance of perception of incompetence as well. To achieve this, physical educators should adapt learning to individual levels of ability, foster a sense of success and positive ability perceptions by helping students successfully complete the task, provide accurate and timely feedback during practice, and use role models to provide vicarious experiences. Second, students' perceived interest in physical education directly predicted their strategy use and persistence/effort. Considering that one of the important goals is to foster students' interest in physical education, it is crucial for physical educators to present learning activities in interesting, novel, and meaningful ways, and create a safe and caring learning environment to enhance students' situational interest in physical education. This will encourage students from a large variety of backgrounds and skill levels to be actively engaged in the physical education classes. Also, students' perceived usefulness of physical education showed significant prediction on strategy use. This finding implies that physical educators might emphasize the usefulness or utility of physical education throughout the course of middle school. To help students become more personally invested in the games or sport activities in physical education, teachers should make the activities meaningful for them, and positively reinforce task completion. Finally, given that students' self-reported strategy use predicted their persistence/effort, physical educators can help students select appropriate strategy use during the learning process, attempt to include more strategy instruction within a particular learning activity, incorporate timely teacher feedbacks into skill practice, help students organize tasks and focus on key points, have students work with one another on skill development, and emphasize hard work with specific practice strategy (Gao and Newton, 2009).
1.3.2 STUDENTS’ OPINIONS TOWARD PHYSICAL EDUCATION: GENDER DIFFERENCES

Attitudes toward physical activity and perceptions about physical education classes are important to understand as they can influence an individual's decision to begin or to continue participation in an activity (Bibik et al., 2007). A thorough understanding about students’ attitude towards physical activity will give an impact on the effectiveness of teachers and the planning of programs that cater for student needs in order to ensure the achievement of predetermined objectives and aims (Omar-Fauzee et al., 2009). Research on attitude toward physical education, suggests that achievement and success may lead to the development of positive attitude. In turn, positive attitude influences students' participation in physical activities in school and out-of-school programs. Furthermore, research in this area identifies curriculum content, classroom environment, and teacher behavior as the primary determinants of negative and positive attitudes toward physical education (Constantinou et al., 2009).

Carlson (1995) examined high school students' negative attitudes toward physical education and found that some students did not feel physical education filled a need in their lives and consequently did not find it valuable. Carlson (1995) concluded students who were less skilled felt isolated from their peers because they were not readily included in team activities or they were ridiculed for their lack of skill. Study also found students with negative attitudes felt uncomfortable or unsafe learning and practicing physical skills. These students did not participate in class or they used strategies to avoid conflict with the teacher.

These attitudes were the same regardless of gender. Peer influence was another factor affecting attitudes toward high school physical education. The students in the latter study appeared to engage in more active behavior in physical education classes when they received interest and positive reinforcement from their peers. Comfort in the locker room had a significant impact (p<.05) on their enjoyment of physical education with those feeling the most uncomfortable also enjoying physical education less (Bibik et al., 2007).

Previous findings have indicated that motivation to participate in PE programs declines over the school years. Number of students may demonstrate negative perceptions toward school based physical activity. It is important, therefore, for researchers to acquire a clearer understanding of the motivational mechanisms that underlie the positive or negative affective outcomes of PE, such as enjoyment or anxiety (Yli-Piipari et al., 2009). Girls tend to be habitually less active than boys and their levels of activity participation start to decline at an earlier age. Therefore, the importance of PE for girls as a means of them experiencing
regular health enhancing physical activity cannot be understated (Fairclough and Stratton, 2005). The University of Toronto and the University of Guelph analyzed data from the Ontario Student Drug Use Survey (OSDUS). This report describes the results of that analysis, which indicated a significant linear decrease from 1999 to 2005 in the percentage of students who were enrolled in PE. The overall percentage of students enrolled in PE decreased from 70.3% in 1999 to 60.3% in 2005 (CDC, 2007). Over the years, researchers have reported gender differences in children’s expectancy beliefs, but the differences seem to vary by activities or tasks (Lee, 1997). In general, research findings have consistently shown that boys are more likely to hold higher ability beliefs and expectancies for success than girls in most traditional sport activities and physical education (Eccles and Harold, 1991; Jacobs et al., 2002; Wigfield et al., 1997; Xiang et al., 2003, 2004, 2006). Researchers have proposed that gender-role stereotypes can influence the development of children’s competence beliefs, their expectations for success on various tasks, and their perceptions of value in various activities (Lee et al., 1999). Lee et al. (1999) further posited that a main reason for gender-role stereotypes is the need for children to feel socially accepted.

In school, boys spent proportionally more playtime in moderate-to-vigorous physical activity (MVPA), vigorous physical activity (VPA), large groups, sports activities, and antisocial behavior than girls. Girls spent proportionally more playtime standing, in small groups, active playground games, sedentary activities, locomotion and pro-social behaviors. Significant time effects were found for standing, active playground games, and physical and verbal antisocial behavior. Time spent standing and incidents of physical antisocial behavior increased across time. Meanwhile, participation in active playground games and incidents of antisocial verbal behavior decreased (Ridgers et al., 2009). Girls reported negative feelings toward participation in physical education when the boys’ behavior created physically or emotionally unsafe learning environments. Another contributor to girls' negative feelings toward participation in physical education was the boys' tendency to put girls down. According to the girls, boys belittle girls and show very little respect for girls' abilities. Many PE teachers are likely to already have certain perceptions about and expectations of what boys and girls are capable of doing in physical education. As girls were bomarded with stereotypic expectations, girls became marginalized and alienated in PE classes. They avoided participation and, thus, failed to see the connection between practice and success (Constantinou and Standage, 2009).

Many studies have reported that boys like sport more and place higher importance on participating in sport than do girls (Eccles and Harold, 1991; Fredricks and Eccles, 2002;
Some recent studies (Xiang et al., 2003, 2004, 2006), however, found that elementary school boys and girls did not differ in task values toward physical education (Gao et al., 2008). Large epidemiological studies in the United States, the Netherlands, and Finland indicate that the largest decrease in physical activity levels occurs during early adolescence. This trend parallels age-related declines in intrinsic motivation and other adaptive indices of motivation in compulsory school PE classes. Such decreases are problematic, given that positive experiences in school PE are related to physical activity participation during leisure time (Ntoumanis and Standage, 2009).

1.4 TYPES OF MOTIVATIONS

Self-determination theory (SDT; Deci and Ryan, 2000) is one of the most widely used theoretical frameworks to study motivation in PE, which is not surprising given that its major propositions and constructs are highly relevant to PE (Ntoumanis and Standage, 2009). Self-determination theory (Deci and Ryan, 1985, 1991) addresses the degree to which the motivation toward activities is deemed to be internal (i.e., degree of self-involvement) and how varying levels of this self-determination influence the selection of actions that render desired motivational outcomes. On the basis of the theoretical tenets of self-determination theory (Deci and Ryan, 1985, 1991), these different self-regulations are hypothesized to form a continuum ranging from high to low levels of self-determination and can be broadly categorized as intrinsic motivation, extrinsic motivation, and amotivation. From lower to higher levels of self-determination, they are amotivation, external regulation, introjected regulation, identified regulation, integrated regulation, and intrinsic motivation. External regulation and introjected regulation are considered to be controlling forms of motivation, whereas identified regulation, integrated regulation, and intrinsic motivation are viewed as self-determined forms (Standage et al., 2003).

At the self-determined apex of the continuum is intrinsic motivation. Intrinsic motivation refers to highly autonomous behaviors engaged in for the feelings of fun, pleasure, and satisfaction that stem from participation in an activity (Deci and Ryan, 1985; Ryan and Deci, 2000). Although previous research has studied the determinants and consequences of intrinsic motivation from a unidimensional approach (e.g., Deci, 1971; Vallerand and Reid, 1984), recent research has adopted a multidimensional perspective (e.g., Pelletier et al., 1995; Vallerand et al., 1993). Specifically, Vallerand and his colleagues (e.g., Vallerand et al., 1992, 1993) have proposed a tripartite taxonomy of intrinsic motivation, consisting of intrinsic
motivation to know (engagement in an activity to experience pleasure and satisfaction from learning, exploring, and attempting to understand something new), intrinsic motivation toward accomplishments (engagement in an activity for the satisfaction and pleasure experienced when attempting task master or in creating something new), and intrinsic motivation to experience stimulation (engagement in an activity for feelings of sensory pleasure, fun, excitement, and aesthetic enjoyment). These dimensions of intrinsic motivation have been found to be highly interrelated (Pelletier et al., 1995).

Whereas intrinsically motivated actions represent self-determined behaviors that are performed for the inherent pleasures that emanate from an activity, extrinsic motivation embraces a broad variety of behaviors that are characterized by an individual’s goal of action being governed by some separable consequence (Standage et al., 2003). External regulation refers to extrinsic motivation as posited by the traditional dichotomized studies of extrinsic versus intrinsic motivation (e.g., Deci, 1971; Lepper, et al., 1973) and describes nonautonomous behaviors that are governed by externally controlled constraints, such as rewards, threats, and payments. Four types of extrinsic motivation have been described by Deci and Ryan (1985, 1991): external regulation, introjected regulation, identified regulation, and integrated regulation. External regulation represents behaviors which are regulated through external means, such as rewards or punishment (e.g., 'I take part in PE because I'll get into trouble if I don't'). Introjected regulation refers to behaviors which are beginning to be internalized, but they are not fully self-determined. These behaviors can be performed, for example, in order to gain social recognition or avoid internal pressures and feelings of guilt (e.g., 'I take part in PE because I would feel bad about myself if I didn’t'). Cross-sectional research in the PE context has found no relationships between introjected regulation and effort or intentions to exercise (Ntoumanis, 2001; Standage et al., 2003). With identified regulation, behavior becomes more self-determined. The outcomes of the behavior are highly valued and the latter is performed with less pressure even if it is not particularly pleasant (e.g., 'I take part in PE because I want to improve my sport skills'). Lastly, integrated regulation represents the most self-determined form of the internalization process. It refers to behaviors which are performed out of choice in order to harmonize and bring coherence to different parts of the self (e.g., 'I take part in PE because it is very important for me to have a healthy life style') (Ntoumanis, 2001).

The final regulation embedded in the self-determination framework is termed amotivation and is assumed to be similar to learned helplessness (Seligman, 1975). Amotivation is manifested when individuals do not perceive contingencies between their
behaviors and subsequent outcomes (Seligman, 1975), do not value the activity (Ryan, 1995), or feel incompetent (Deci, 1975). Amotivated individuals lack the intention to act (Ryan & Deci, 2000) and are neither intrinsically nor extrinsically motivated. Cross-sectional research has indicated a negative relationship between students’ amotivation and their effort in PE (Ntoumanis, 2001).

Results indicated that self-determined motivation for PE promotes PA. Additionally, PE environments that provide students with opportunities to make choices are likely to further promote PA behavior amongst adolescents. Finally, the study contributes to the literature on motivation and adolescent PA by showing that self-determined motivation may be especially important when students are not directly supervised by their teacher. As such, promoting self-determined motivation may be an effective means by which to ensure that PE programs increase PA levels, foster self-initiated PA behaviors, and enhance adolescents’ health (Lonsdale et al., 2009) PE must provide an enjoyable experience such that students do not feel that they are taking part in PE because of external rules or feeling of guilt. The results of the study showed that, when students were more self-determined or intrinsically motivated, they enjoyed their PE experience more. These could be important in increasing their likelihood in physical activity participation. PE teachers should aim to promote more self-determined form of motivation and competence in their students during PE lessons. This, in turn, may foster intrinsic motivation to engage in physical activity outside PE lessons (Wang and Liu, 2007).

Taken together, many children do not meet current recommendations of physical activity. Because of increasing physical inactivity obesity, cardiovascular diseases and increased blood pressure are increasing dramatically worldwide among children and adolescents. PE gives an opportunity to promote children’s physical activity. Unfortunately, due to funding limitations and societal pressure to raise the standards in core subjects, curriculum time allocated to PE and the enrollment in PE lessons has reduced.

Opinions and feelings about PA and PE classes are important to understand as they can influence an individual’s decision to begin or to continue participation in an activity. The research review indicates that gender differences in children’s motivational beliefs (e.g., expectancy beliefs, task values) are found most often in gender-role stereotyped activities (Gao et al., 2008).

There are many research made about to study the opinions, feelings, and motivation of school age children toward physical education. As an author of this study, I have not found any similar studies made to compare the opinions, feelings, and motivational differences between the Estonian and the Finnish graduating seniors about physical education. Because
of that, research for exploring possible differences in general feelings and opinions about leisure time physical activity and physical education, as well as motivation in physical education between Estonian and Finnish male and female senior graduating students is needed.
2. THE PURPOSE OF THE STUDY

Purpose:

The purpose of this study was to investigate general feelings and opinions about health, leisure time physical activity and physical education, as well as motivation in physical education among senior graduating students in Estonia and Finnish.

The following specific aims were posed:

1. To explore possible differences in general feelings and opinions about health, leisure time physical activity and physical education Estonian and Finnish senior graduating students.

2. To examine and compare Estonian and Finnish senior graduating students’ motivation in physical education.
3. STUDY MATERIAL AND METHODS

3.1 BACKGROUND INFORMATION

The measurement of students’ opinions and feelings about physical education has accomplished employing quantitative method. There were 269 participants (N=140 Estonians and N=129 Finnish Graduating Senior’s) from 8 different high schools in Tartu (Estonia) and Tampere, Nokia (Finland). Permission to carry out the questionnaire in each school was obtained from the administration, headmaster and the physical education teachers. The anonymous questionnaire was administered in the classrooms. The purpose of the study was explained and the instructions were given for completing the questionnaire. It was emphasized that the questionnaire was designed to measure students’ general feelings and opinions about PE classes.

The questionnaire was divided in two different parts. The first part of the questionnaire examined students general feelings and opinions about their health, school, physical activity and physical education was compiled by the author of this thesis. The second part of the questionnaire examined students’ motivation with already developed appropriate instrument.

3.2 MEASUREMENTS

3.2.1 THE STUDENTS’ OPINIONS ABOUT THEIR PHYSICAL ACTIVITY AND HEALTH

The five questions were employed to measure students’ opinions about their physical activity. The questions asked participants to report the frequency and the intensity of their leisure time physical activity outside the school (How many times per week you are physically active?). Also students were asked to indicate their favorite ways and places of making sports (What is your favorite way of making sports?). Two questions asked about the health of participants (How would you grade your health?).

3.2.2 STUDENTS’ OPINIONS ABOUT SCHOOL AND PHYSICAL EDUCATION

Four questions asked about the participants’ school performance (What are your grades?). What are the feelings about going to the school (Do you like going to school?) and favorite
subjects in school (Name five subjects that you enjoy the most.). 16 questions asked about the physical education. Most of the questions asked participants to report their interests (Name five types of making sports that you enjoy the most.), needs (Do you like physical education?), comforts (Do you feel happy in physical education?), and conditions during the physical education classes (How would you describe the room conditions in the PE lessons?)

3.2.3 STUDENTS’ MOTIVATION TO PARTAKE IN PHYSICAL EDUCATION

Second part of the questionnaire examined students’ motivation in physical education. The Sport Motivation Scale (SMS), developed by Pelletier et al., (1995), which is adapted to physical education and translated into Estonian by Hein and colleagues (2004) and translated into Finnish by Jaakkola (2002) was used. The SMS consisted of 28 items examining participants’ motivation with three different types’ intrinsic motivation, extrinsic motivation and amotivation. However, the SMS assesses three different forms of intrinsic motivation, namely intrinsic motivation to know (For the pleasure of learning new techniques to complete tasks.), to accomplish (For the satisfaction I experience while I am perfecting my abilities in physical education), and to experience stimulation (I want to improve my weaknesses in physical education). Since all these three forms of intrinsic motivation have shown to be strongly correlated (Koka and Hein, 2005), the averaged scores of three forms of intrinsic motivation was used to characterize a global intrinsic motivation variable. Also, the SMS measures three different types of extrinsic motivation as well in depending on the degree of self-determination, namely identified regulation (Because in my opinion, physical education is one of the best ways to socialize with classmates), introjected regulation (Participating to physical education classes makes me feel good), and external regulation (It is important for me to show others how good I am in physical education). In this thesis, however, averaged scores of three types of extrinsic motivation were used to characterize a global extrinsic motivation variable. An example item of amotivation would be (I feel that I can't seem to achieve the goals that is set in physical education). Students responded to the items on a 7-point scale ranging from 1 = totally agree to 7 = totally disagree.

3.3 STATISTICAL ANALYSES

The data was analyzed using statistical package of SPSS 17.0. The cross tabulation analysis was used to examine the distribution of responses to the items asking students’ opinions about
their health, school, physical activity, and physical education. The chi-square statistics was utilized to determine whether the differences in distribution of responses were statistically significant. In order to determine differences in students’ motivation in physical education, independent samples t-test was used.

In this present study the focus was on determining the possible national differences between Estonian and Finnish senior graduating students. Specifically differences between Estonian and Finnish male senior graduating students, as well as Estonian and Finnish female senior graduating students were determined. Statistical significance was set at $p < .05$. 
4. RESULTS

4.1 RESULTS OF OPINIONS ABOUT PHYSICAL ACTIVITY AND HEALTH AMONG GRADUATING SENIORS IN FINLAND AND ESTONIA

In figure 1 is presented the results of Estonian and Finnish male students’ opinions about their health. 35.4% of Estonian boys and 33.8% of Finnish boys valued their health as “very good”. 53.2% of Estonian boys and 56.3% of Finnish boys valued their health as “good”. 11.4% of Estonian boys and 9.9% of Finnish boys valued their health as “moderate”. None of Estonian or Finnish boys valued their health as “poor”. Differences between the boys were not statistically significant: $\chi^2 (2, N = 150) = 0.180$, $p > 0.05$.

In figure 1 is presented results of Estonian and Finnish female students´ opinions about their health. 23.0% of Estonian girls and 8.6% of Finnish girls valued their health as “very good”. 60.7% of Estonian girls and 77.6% of Finnish girls valued their health as “good”. 16.4% of Estonian girls and 13.8% of Finnish girls valued their health as “moderate”. None of Estonian or Finnish girls valued their health as “poor”. Differences between Estonian and Finnish girls were not statistically significant: $\chi^2 (2, N = 119) = 5.194$, $p > 0.05$.

![Figure 1](image.png)

Figure 1. Estonian and Finnish students’ opinions about their health.

Results presented in figure 2 revealed that 16.5% of Estonian boys and 19.7% of Finnish boys valued their physical fitness as “very good”. 43.0% of Estonian boys and 43.7% of Finnish boys valued their physical fitness as “good”. 38.0% of Estonian boys and 29.6% of Finnish boys valued their physical fitness as “moderate” and 2.5% of Estonian boys and 7.0% of Finnish boys valued their physical fitness as “poor”. Chi-square test revealed that the percentage of these answers were not statistically significantly different among Estonian and Finnish boys: $\chi^2 (3, N = 150) = 2.630$, $p > 0.05$. 
Results for girls presented in figure 2 revealed that 9.8% of Estonians and 5.2% of Finnish students valued their physical fitness as “very good”. 63.9% of Estonian girls and 50.0% of Finnish girls valued their physical fitness as “good”. 23.0% of Estonian girls and 41.4% of Finnish girls valued their physical fitness as “moderate” and 3.3% of Estonian girls and 3.4% of Finnish girls valued their physical fitness as “poor”. The percentages of these answers were not statistically significantly different among Estonian and Finnish girls: $\chi^2 (3, N = 119) = 5.030, p > 0.05$.

**Figure 2.** Estonian and Finnish students’ opinions about their physical fitness.

Results presented in figure 3 revealed that 17.7% of Estonian boys and 15.7% of Finnish boys were physically active more than four times a week. 21.5% of Estonian boys and 31.4% of Finnish boys were physically active three to four times a week. 39.2% of Estonian boys and 24.3% of Finnish boys were physically active one or two times a week. 16.5% of Estonian boys and 24.3% of Finnish boys were physically active less than once a week. 5.1% of Estonian boys and 24.3% of Finnish boys reported that they are not physically active. Differences between the Estonian and Finnish boys were not statistically significant: $\chi^2 (4, N = 149) = 5.236, p > 0.05$.

For girls the results presented in figure 3 revealed that, 9.8% of Estonian girls and 19.0% of Finnish girls were physically active more than four times a week. 24.6% of Estonian girls and 24.1% of Finnish girls were physically active three to four times a week. 32.8% of Estonian girls and 34.5% of Finnish girls were physically active one or two times a week. 27.9% of Estonian girls and 19.0% of Finnish girls were physically active less than once a week. 4.9% of Estonian girls and 3.4% of Finnish girls reported that they are not physically active. Differences between the Estonian and Finnish girls were not statistically significant: $\chi^2 (4, N = 149) = 2.917, p > 0.05$. 

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Next the students were asked to indicate how many hours per week they are physically active on leisure time that causes sweating. Results presented in figure 4 showed that 21,5% of Estonian boys and 18,8% of Finnish boys were physically active more than five hours per week. 8,9% of Estonian boys and 13,0% of Finnish boys were physically active four or five hours per week. 22,8% of Estonian boys and 21,7% of Finnish boys were physically active three to four hours per week. 38,0% of Estonian boys and 29,0% of Finnish boys were physically active approximately one hour per week. 8,9% of Estonian boys and 13,0% of Finnish boys reported that they are not physically active at all. Differences between the Estonian and Finnish boys were not statistically significant: $\chi^2 (4, N = 148) = 3.713, p > 0.05$.

As for girls, 11,5% of Estonian girls and 12,1% of Finnish girls were physically active on leisure time that causes sweating more than five hours per week. 6,6% of Estonian girls and 3,4% of Finnish girls were physically active four to five hours per week. 23,0% of Estonian girls and 24,1% of Finnish girls were physically active three or four hours a week. 36,1% of Estonian girls and 41,4% of Finnish girls were physically active approximately one hour per week. 23,0% of Estonian girls and 19,0% of Finnish girls reported that they are not physically active at all. Differences between the Estonian and Finnish girls were not statistically significant: $\chi^2 (4, N = 119) = 1.039, p > 0.05$ (see figure 4).
Students were also asked to indicate where they exercise in their leisure time. Results indicated that 35.4% of Estonian boys and 37.7% of Estonian girls reported that training in sport clubs is the most popular way of doing sports after school. 38.6% of Finnish boys and 51.7% of Finnish girls were training most often with the friends without coaching. Differences between the Estonian and the Finnish boys were not statistically significant: $\chi^2 (4, N = 148) = 3.713, p > 0.05$. However, Chi-square test revealed that the percentage of answers was statistically significant between Estonian and Finnish girls: $\chi^2 (5, N = 119) = 11.381, p < 0.05$.

### 4.2 RESULTS OF OPINIONS ABOUT PHYSICAL EDUCATION AMONG ESTONIAN AND FINNISH GRADUATING SENIORS

Students were asked to indicate whether they like PE lessons. Results revealed that, 84.8% of Estonian boys and 84.3% of Finnish boys liked PE lessons. Chi-square test revealed that the percentage of these answers were not statistically different among Estonian and Finnish boys: $\chi^2 (1, N = 149) = 0.008, p > 0.05$.

For girls, 75.4% of Estonian girls and 71.9% of Finnish girls liked PE lessons and the percentage of these answers were not statistically different among Estonian and Finnish girls: $\chi^2 (1, N = 118) = 0.182, p > 0.05$.

Students were next asked to indicate whether they consider PE lessons as interesting. Results revealed that 75.9% of Estonian boys and 81.4% of Finnish boys rated PE lessons as
interesting. Chi-square test revealed that the percentage of these answers were not statistically significantly different between Estonian and Finnish boys: $\chi^2 (1, N = 149) = 0.661, p > 0.05$. For girls, 63.9% of Estonian girls and 63.8% of Finnish girls rated PE lessons as interesting and the percentage of these answers were not statistically significantly different between Estonian and Finnish girls: $\chi^2 (1, N = 119) = 0.000, p > 0.05$.

When asked about the importance of PE, 83.3% of Estonian boys and 80.3% of Finnish boys reported PE lessons are important. Chi-square test revealed that the percentage of these answers were not statistically significantly different between Estonian and Finnish boys: $\chi^2 (1, N = 149) = 0.233, p > 0.05$.

Answers from girls revealed that 80.3% of Estonian girls and 85.7% of Finnish girls though that PE lessons are important. Chi-square test revealed that the percentage of these answers were not statistically significantly different between Estonian and Finnish girls: $\chi^2 (1, N = 117) = 0.598, p > 0.05$.

When asked whether the students enjoy PE lessons results presented in figure 5 revealed that 75.6% of Estonian boys and 87.1% of Finnish boys enjoyed the PE classes. Differences between the boys were not statistically significant: $\chi^2 (1, N = 148) = 3.182, p > 0.05$. For girls, the results revealed that 70.5% of Estonian girls and 77.2% of Finnish girls enjoyed the PE classes. Differences between the Estonian and Finnish girls were not statistically significant: $\chi^2 (1, N = 118) = 0.683, p > 0.05$.

![Figure 5](image)

**Figure 5.** Estonian and Finnish (A) boys’ and (B) girls’ opinions about the enjoyment of PE lessons.

When asked about the students’ relationship with their PE teacher the results indicated that 49.4% of Estonian boys and 57.1% of Finnish boys having very good relationship with the
PE teacher. 44.3% of Estonian boys and about 38.6% of Finnish boys reported that they get well along with the PE teacher. Only 2.9% of Finnish boys and none of Estonian boys reported that they don’t get along with the PE teacher. Chi-square test revealed that the percentage of these answers were not statistically different among Estonian and Finnish boys: $\chi^2 (3, N = 149) = 7.362$, p > 0.05 (see figure 6A).

As for girls 57.7% of Estonian girls and 24.1% of Finnish girls reported that they get very well along with the PE teacher. 29.5% of Estonian girls and 72.4% of Finnish girls reported that they get well along with the PE teacher. 4.9% of Estonian girls and none of Finnish girls reported that they don’t get along with the PE teacher. Chi-square test revealed that the percentage of these answers were statistically different among Estonian and Finnish girls: $\chi^2 (3, N = 119) = 22.872$, p < 0.05 (see figure 6B).

Figure 6. Estonian and Finnish (A) boys’ and (B) girls’ opinions about the relationship with the teacher in PE

Figure 7A shows that 53.2% of Estonian boys and 52.9% of Finnish boys reported that they get very well along with the classmates in PE. 46.8% of Estonian boys and 38.6% of Finnish boys reported that they get well along with the classmates in PE. Only 2.9% of Finnish boys and none of Estonian boys reported that they don’t get along with the classmates in PE. Chi-square test revealed that the percentage of these answers were not statistically different among Estonian and Finnish boys: $\chi^2 (3, N = 149) = 7.362$, p > 0.05.

As for girls, 44.3% of Estonian girls and 25.9% of Finnish girls reported that they get very well along with the classmates in PE. 52.5% of Estonian girls and 69.0% of Finnish girls reported that they get well along with the classmates in PE. 3.3% of Estonian girls and 5.2% of Finnish girls reported that they don’t get along with the classmates in PE. Chi-square test
revealed that the percentage of these answers were not statistically different among Estonian and Finnish girls: \( \chi^2 (2, N = 119) = 4.445, p > 0.05 \) (see figure 7B).

![Figure 7](image)

**Figure 7.** Estonian and Finnish (A) boys and (B) girls opinion about the relationship with the classmates in PE.

When asked the Estonian and the Finnish graduating seniors if there was anything that bothers in the PE lessons 54.4% of Estonian boys and 88.6% of Finnish boys answered “Yes”. Differences between the Estonian and Finnish boys were statistically significant: \( \chi^2 (1, N = 149) = 20.788, p < 0.05 \). 49.2% of Estonian girls and 82.8% of Finnish girls thought that there is something that bothers in the PE. Differences between the girls were statistically different: \( \chi^2 (1, N = 119) = 14.844, p < 0.05 \). “PE classes are boring” was one of the main reasons why Estonian and Finnish boys and girls reported that there is something that bothers in the PE classes (see figure 8).

![Figure 8](image)

**Figure 8.** Students’ opinion when asked if there was anything that bothers in the PE lessons.
The results were following when graduating seniors answered “yes” or “no” to the question “Do you like the evaluation system in PE”. 72.2% of Estonian boys and 91.5% of Finnish boys answered “yes”. Chi-square test revealed that the percentage of these answers were statistically different between Estonian and Finnish boys: $\chi^2 (1, N = 150) = 9.267, p < 0.05$

For girls, 59.0% of Estonian and 83.6% of Finnish girls answered “yes”. Answers were statistically different among Estonian and Finnish girls: $\chi^2 (1, N = 116) = 8.461, p < 0.05$

Estonian and Finnish boys and girls reported that evaluation is based on too much on performing on general standards although evaluation should measure more individual development and how does the individual push during the PE classes (see figure 9).

![Figure 9](image)

**Figure 9.** Students’ opinion when asked about the acceptability of evaluation system in PE.

The results presented in table 1 revealed that 43.6% of Estonian boys and 60.6% of Finnish boys reported that there should be more PE lessons in schools. Chi-square test revealed that the percentage of these answers were statistically different between Estonian and Finnish boys: $\chi^2 (1, N = 149) = 4.288, p < 0.05$

From girls, 22.9% of Estonian girls and 44.6% of Finnish girls reported that there should be more PE lessons in schools. Chi-square test revealed that the percentage of these answers were not statistically different among Estonian and Finnish girls: $\chi^2 (1, N = 117) = 2.877, p > 0.05$ (see table 1).
Table 1. Students’ opinion when asked about should there be more PE lessons in schools (%).

<table>
<thead>
<tr>
<th></th>
<th>Estonian boys (N=78)</th>
<th>Finnish boys (N=71)</th>
<th>Estonian girls (N=61)</th>
<th>Finnish girls (N=56)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>56, 4</td>
<td>39, 4</td>
<td>70, 5</td>
<td>55, 4</td>
</tr>
<tr>
<td>Yes</td>
<td>43, 6</td>
<td>60, 6</td>
<td>22, 9</td>
<td>44, 6</td>
</tr>
</tbody>
</table>

Table 2 revealed that 75.9% of Estonian boys and 60.6% of Finnish boys reported that there should be more optional PE lessons for choosing in schools. Chi-square test revealed that the percentage of these answers were statistically different between Estonian and Finnish boys: $\chi^2 (1, N = 150) = 4.114, p < 0.05$.

82.0% of Estonian girls and 59.6% of Finnish girls reported that there should be more optional PE lessons for choosing in schools. Chi-square test revealed that the percentage of these answers were statistically different among Estonian and Finnish girls: $\chi^2 (1, N = 118) = 7.156, p < 0.05$.

Table 2. Students opinions when asked about should there be more optional PE lessons for choosing in schools(%).

<table>
<thead>
<tr>
<th></th>
<th>Estonian boys (N=79)</th>
<th>Finnish boys (N=71)</th>
<th>Estonian girls (N=61)</th>
<th>Finnish girls (N=57)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>24, 1</td>
<td>39, 4</td>
<td>18, 0</td>
<td>40, 4</td>
</tr>
<tr>
<td>Yes</td>
<td>75, 9</td>
<td>60, 6</td>
<td>82, 0</td>
<td>59, 6</td>
</tr>
</tbody>
</table>

When asked about the conditions to carry out the PE lessons, 7.9% of Estonians and 16.4% Finnish reported that the conditions are very good. 40.7% of Estonians and 60.2% of Finnish rated PE conditions as good. 39.3% of Estonians and 18.8% of Finnish rated PE conditions as moderate and 12.1% of Estonian and 4.7% of Finnish as poor (see figure 10). Chi-square test revealed that the percentage of these answers were statistically different between Estonian and Finnish student’s: $\chi^2 (3, N = 268) = 23.044, p < 0.05$. Figure10 shows also the differences between the Estonian and Finnish boys and girls.
Figure 10. Students’ opinion when asked about the conditions in PE (A) as taken answers from boys and girls together and (B) separately.

The results were following when asked about the sanitary conditions after physical education classes. The sanitary conditions rated as “Very good” 14,4% of Estonians and 14,8% of Finnish, as “Good” rated 18,0% of Estonians and 50,0% of Finnish, as “Moderate” rated 29,5% of Estonians and 31,3% of Finnish and as “Poor” rated 38,1% of Estonians and 3,9% of Finnish (see figure 11). The answers were statistically different between Estonian and Finnish students: $\chi^2$ (3, N = 267) = 56.495, $p < 0.05$. Estonian student’s reported that there were no enough showers for students or rooms were narrow, the condition of the locker room or the shower room was bad, locker rooms and shower rooms were dirty or smelly and there were frequently no warm water coming from the showers.

Figure 11. Students’ opinion when asked about the sanitary conditions after PE lessons.

The results were following when graduating seniors were asked to indicate the five most important subjects in school in their opinion. 35,4% of Estonian boys selected physical education as top five subjects and altogether physical education placed in the fifth place from
the point of most important subjects in school. Finnish boy’s opinions were that physical education is the sixth from the point of importance subjects with 32.4% (see table 3).

**Table 3.** Male students’ opinions when asked to indicate the five most important subjects in school (%)

<table>
<thead>
<tr>
<th>Estonian boys (%)</th>
<th>Finnish boys (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(N=79)</td>
<td>(N=71)</td>
</tr>
<tr>
<td>Mathematics</td>
<td>89.9</td>
</tr>
<tr>
<td>Estonian</td>
<td>75.9</td>
</tr>
<tr>
<td>English</td>
<td>73.4</td>
</tr>
</tbody>
</table>

24.1% of Estonian girls selected physical education as in top five subjects and altogether physical education placed in eighth place from the point of importance of all subjects. Finnish girls selected physical education also as for the eighth from the point of importance of subjects in school with 24.1% (see table 4).

**Table 4.** Female students’ opinion when asked to indicate the five most important subjects in school (%)

<table>
<thead>
<tr>
<th>Estonian girls (%)</th>
<th>Finnish girls (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estonian</td>
<td>82.0</td>
</tr>
<tr>
<td>Mathematics</td>
<td>80.3</td>
</tr>
<tr>
<td>English, Biology</td>
<td>75.4</td>
</tr>
</tbody>
</table>

Results presented in table 5 indicated the percentage of Estonian and Finnish boys who selected physical education as being among the five most enjoyable subjects in school.
Table 5. Male student’s opinion when asked to indicate the five most enjoyable subjects in school (%).

<table>
<thead>
<tr>
<th></th>
<th>Estonian boys (%)</th>
<th>Finnish boys (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical education</td>
<td>63,3</td>
<td>60,6</td>
</tr>
<tr>
<td>Mathematics</td>
<td>54,4</td>
<td>English</td>
</tr>
<tr>
<td>English</td>
<td>53,2</td>
<td>Mathematics</td>
</tr>
</tbody>
</table>

In Table 6 is presented Estonian and Finnish girls opinions about the five most enjoyable subjects in school. 47,5% of Estonian girls rated physical education as being among the five most enjoyable subjects and physical education placed on the second place in point of enjoyment. 39,7% of Finnish girls rated physical education and Finnish language on the fifth place as being among the five most enjoyable subjects in school.

Table 6. Female student’s opinion when asked the five most enjoyable subjects in school (%).

<table>
<thead>
<tr>
<th></th>
<th>Estonian girls (%)</th>
<th>Finnish girls (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>55,7</td>
<td>Music</td>
</tr>
<tr>
<td>Physical education</td>
<td>47,5</td>
<td>Art, English</td>
</tr>
<tr>
<td>History</td>
<td>45,9</td>
<td>Psychology</td>
</tr>
</tbody>
</table>

4.3 RESULTS OF MOTIVATIONAL DIFFERENCES TOWARDS PHYSICAL EDUCATION BETWEEN THE ESTONIAN AND THE FINNISH GRADUATING SENIORS

An independent-samples t-test was conducted to compare Estonians and Finnish graduating senior’s amotivation, intrinsic motivation and external motivation. There was no significant differences in amotivation between Estonian (M=2.5, SD=1.1) and Finnish boys (M=2.3, SD=1.3) [t(137)=0.96, p=0.34]; in intrinsic motivation between Estonian (M=4.3, SD=1.3) and Finnish (M=4.7, SD=1.3) boys [t(137)= -1.89, p=0.06]; nor in external motivation between the Estonian (M=3.8, SD=1.3) and Finnish (M=4.2, SD=1.3) boys: [t(137)= -1.58, p=0.12].

The motivational responses towards physical education among Estonian and Finnish girls revealed that there were no significant differences in amotivation between Estonian
(M=2.6, SD=1.3) and Finnish (M=2.5, SD=1.1) girls \([t(115)=0.3, p=0.76]\); nor in intrinsic motivation between Estonian (M=4.4, SD=1.3) and Finnish (M=4.2, SD=1.1) girls \([t(111)=1.04, p=0.3]\). There was, however, a significant difference in external motivation between the Estonian (M=4.0, SD=1.1) and Finnish (M=3.5, SD=1.0); \([t(115)= 2.39, p=0.02]\). The external motivation of Estonian girls was significantly higher compared to Finnish girls.
5. DISCUSSION

The aim of this study was to explore the possible differences in general feelings and opinions about health, leisure time, physical activity, and physical education as well as motivation in physical education between Estonian and Finnish male and female senior graduating students. The present study contains many interesting findings when examining the results and here are some major results to look over in three different categories;

1. Estonian and Finnish graduating seniors’ opinions about physical activity and health.
2. Estonian and Finnish graduating seniors’ opinions about physical education.
3. Estonian and Finnish graduating seniors’ motivational differences.

5.1 ESTONIAN AND FINNISH GRADUATING SENIORS’ OPINIONS ABOUT PHYSICAL ACTIVITY AND HEALTH

The Estonian and the Finnish girls rated their health as “moderate” and as “good”. However, Estonian and Finnish boys rated their health as “very good”. Fair or poor self-rated health tends to be more common among older children and girls (WHO, 2007). Although most of the Finnish girls did not rate their health as “very good” they reported the most highest percent when the frequency of leisure time physical activity were over four times a week. The minimum recommendations of daily PA for 18-year-olds are at least one hour (Finnish Ministery of Education, 2008), so results revealed that only a small group of Estonian and Finnish graduating seniors’ are reaching the limit of being physically active at least one hour per day. As Bugge et al. (2009) reported, many children do not meet current recommendations of physical activity and that may become a threat to the health of the up-coming adult population. Findings revealed that the most popular way of making sports among Estonian graduating seniors were training in sport clubs. Where as in Finnish graduating seniors the most popular way of making sports was with friends and without coaching. However the study revealed that there were no significant differences between the Estonian and Finnish pupils in health and in leisure time physical activity.
5.2 ESTONIAN AND FINNISH GRADUATING SENIORS’ OPINIONS ABOUT PHYSICAL EDUCATION

Findings revealed that more than half of the Estonian and Finnish boys and girls reported that PE lessons are important. Bibik et al., (2007) studied high school students' attitudes toward their physical education programs in the state of Delaware and descriptive analyses revealed that 43.5% of both high school boys and girls rated physical activity to be important in their high school studies. Compared findings above-mentioned Estonian and Finnish graduating seniors’ opinions were more positive about importance of PE. Estonian and Finnish students’ opinions about enjoyment and interest in PE were also very positive. Bibik et al., (2007) reported that, the students' enjoyment of physical education is significantly correlated with attribution of team sports (such as basketball, baseball, floor hockey and volleyball), fitness activities (aerobic dance, weight training, bicycling), individual games (tennis, badminton, track, pickle ball), and self-defense (wrestling, karate, judo) in the physical education curriculum. The positive attitude and perception of students towards physical activities are the main elements in evaluating the success of a particular Physical Education curriculum (Omar-Fauzee et al., 2009).

Because of opinions about enjoyment and interest toward PE, it may be possible that the Estonian and the Finnish students’ views PE as important. Findings revealed that there were no significantly differences in the opinions between the nations or between the Estonian and the Finnish boys or girls.

When it was asked about the students’ relationship with their PE teacher and classmates, findings revealed that Estonian boys opinions were a bit positive compared to Finnish boys. As for girls, Estonian girls reported a very good relationship with the PE teacher compared to Finnish girls. Opinions about the relationships to classmates were more equal between the Estonian and Finnish girls but Estonian girls opinions were however little bit positive. Bibik et al. (2007) wrote that the students in the latter study appeared to engage in more active behavior in physical education classes when they received interest and positive reinforcement from their peers. Finding in the present study is not similar, when referring to the Bibik et al. (2007) study, although Estonian girls’ relationships toward PE teacher and classmates are more positive, there are no significantly differences in the opinions about PE classes between the Estonian and the Finnish girls.

Compared to the Estonian boys and girls most of the Finnish boys and girls reported that there is something that bothers in PE classes. Many of Estonians and Finnish students
reported that PE classes are boring because they are doing all the time the same sports or exercise workouts. Considering that one of the important goals is to foster students' interest in physical education, it is crucial for physical educators to present learning activities in interesting, novel, and meaningful ways, and create a safe and caring learning environment to enhance students' situational interest in physical education (Gao and Newton, 2009). Findings are similar to the findings of Bibik et al., (2009), who revealed that approximately 21% of students responded that physical educators should teach more sports or games while approximately 13% indicated physical educators should teach more skills and strategies and 7.3% responded that students should learn more about fitness. Only 2.5% of the students responded that there was nothing they liked about physical education. Findings revealed that compared to Estonian graduating seniors, many of the Finnish graduating senior reported that they don’t like the evaluation system in PE. Finnish boys and girls but also Estonian boys and girls reported that evaluation is based too much on performing of general standards although evaluation should measure more individual development and how individual pushes during the PE classes.

Compared to Estonian students, Finnish students’ opinions were more positive when asked about should there be more PE lessons in schools. Estonian girls had the most negative opinions about extra PE classes. However, findings revealed that most of the Estonian girls were ready to have more optional PE lessons for choosing in schools. Also Estonian boys had positive opinions for having more optional PE lessons. Reason why Estonian boys and girls have so positive feelings about having more optional PE lessons for choosing in school is probably, because High Schools in Finland it is already possible to choose more PE classes.

One of the strongest findings indicated that there was a significant difference between the Estonian and Finnish graduating seniors when asking about the conditions to carry out the PE lessons and the sanitary conditions after PE lessons. Estonian student reported conditions to carry out PE lessons as “moderate” and as “good”. Most of the Finnish student reported conditions as “good”. Most of the Estonian students reported sanitary conditions as “poor” or as “moderate”. Finnish students reported the sanitary conditions as “good”. Comfort in the locker room had a significant impact (p<.05) on their enjoyment of physical education with those feeling the most uncomfortable also enjoying physical education less (Bibik et al., 2007). Research in this area identifies curriculum content, classroom environment, and teacher behavior as the primary determinants of negative and positive attitudes toward physical education (Constantinou et al., 2009).
There were not any significant differences when Estonian and Finland male and female students reported their opinion when asked to indicate the five most important subjects in school. Estonian and Finnish boys reported PE near the top five most important subjects and Estonian and Finnish girls’ top eight important subjects in school. The Estonian and the Finnish male student’s opinion where the same when asked to indicate the five most enjoyable subjects in school. Physical education was on the first place. Also Estonian girls reported PE on the first place but Finnish girls’ opinions were different. PE was on the fifth place in the report of Finnish girls. In generally, Estonian and Finnish boys opinions were the same when reporting the five most important or most enjoyable subjects in school.

5.3 ESTONIAN AND FINNISH GRADUATING SENIORS’ MOTIVATION DIFFERENCES

The study revealed that there were no significant differences in amotivation, intrinsic or in extrinsic motivation between Estonian and Finnish boys. The motivational responses towards physical education among Estonian and Finnish girls revealed that there were no significant differences in amotivation or in intrinsic motivation between Estonian and Finnish girls. The study revealed however a significant difference in external motivation between the Estonian and Finnish girls. The external motivation of Estonian girls was significantly higher compared to Finnish girls. There are several reasons to external motivation. In this study it revealed that the one of the main reasons for higher external motivation might be because of poor to moderate conditions of sanitary and classrooms. As mentioned before findings revealed that Estonian girls had very good relationships to PE teachers and classmates. Therefore the reasons for the Estonian girls high extrinsic motivation might be that they avoid confrontation from the PE teachers or they feel that they should participates in PE because of that is what “good students” do. PE must provide an enjoyable experience such that students do not feel that they are taking part in PE because of external rules or feeling of guilt (Wang and Liu, 2007).

Large epidemiological studies in the United States, the Netherlands, and Finland indicate that the largest decrease in physical activity levels occurs during early adolescence. This trend parallels age-related declines in intrinsic motivation and other adaptive indices of motivation in compulsory school PE classes. Such decreases are problematic, given that positive experiences in school PE are related to physical activity participation during leisure time (Ntoumanis and Standage, 2009).
The results in the cross-cultural study by Caune and Hein (2011) revealed that the comparison of the types of motivation showed that Estonian children evaluated all motivation types higher than Latvian children. As mentioned, results in the present study revealed that there are no significant differences about the types of motivation between Estonians and Finnish students compared to Estonian and Latvian students.
CONCLUSION

This study investigated the general feelings and opinions about health, leisure time physical activity and physical education, as well as motivation in physical education among senior graduating students in Estonia and Finnish.

1. Findings revealed that Estonian and Finnish graduating seniors’ had similar opinions about their health. And the patterns in physical activity were also similar between the male and female students. However, findings indicated that Estonians prefer training in a sport clubs and Finnish prefer training with their friends without coaching.

2. Findings revealed that compared to the Finnish girls Estonian girls had a better relationship with their teacher and classmates in PE.

3. Many of the Finnish graduating senior reported that there is something that bothers in PE classes (PE classes are boring). Finnish and Estonians reported that evaluation is based on too much performing of general standards although evaluation should measure more individual development and how individual pushes during the PE classes.

4. When comparing boys, Finnish boys were more interested in having more PE in schools. However most of the Estonian graduating students reported that there should be more optional PE lessons for choosing in schools.

5. Most of the Estonian students reported that conditions during and especially after PE classes needed improvements.

6. Additionally the study revealed that the external motivation of Estonian girls was significantly higher compared to Finnish girls.
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Gao Z, Xiang P, Lee AM, Harrison L.Jr. Self-efficacy and outcome expectancy in beginning weight training class: Their relations to behavioral intentions and actual behavior over time. Research Quarterly for Exercise and Sport 2008; 79(1).


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Uurimustöö eesmärk oli välja selgitada ja võrrelda Eesti poiste (N=79) ja tüdrukute (N=61) ning Soome poiste (N=73) ja tüdrukute (N=57) arvamusi enda tervise, kehalise aktiivsuse, kehalise kasvatusse tundide kohta, samuti uurida kehalise kasvatusse motivatsiooni. Uurimustulemusi analüüsiti soolis- ning rahvustunnuste alusel.


Töö tulemuste põhjal võib teha järeludus:
1. Arvamused enda tervise ja kehalise aktiivsuse kohta olid üldiselt sarnased Eesti ja Soome abiturientidel. Ligi ~30% nii Eesti kui Soome abiturientide kehaline aktiivsus ei vasta tervise edendamiseks soovituslikele normatiividele.
2. Läbisaamine kehalise kasvatusse tunnis õpetaja ning kaasõpilastega oli Eesti tüdrukutel parem.

5. Oluliselt enam Eesti abiturientite arvas, et kehalise kasvatus läbiviimise tingimused on kehvad. Sama tendents ilmnes arvamustes kooli pesemisvõimaluste kohta.

6. Eesti tütarlaste väline motivatsioon oli oluliselt kõrgem võrreldes Soome tütarlastega.
APPENDIX
APPENDIX 1.

The anthropometrics results of Estonian (N=140) and Finnish (n=123) graduating seniors.

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Height (M / St)</th>
<th>Weight (M / St)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estonia boys</td>
<td>79</td>
<td>183,22 / 5,528</td>
<td>76,56 / 13,403</td>
</tr>
<tr>
<td>Finnish boys</td>
<td>70</td>
<td>179,54 / 6,301</td>
<td>73,54 / 9,805</td>
</tr>
<tr>
<td>Estonian girls</td>
<td>61</td>
<td>169,30 / 5,374</td>
<td>58,95 / 7,257</td>
</tr>
<tr>
<td>Finnish girls</td>
<td>53</td>
<td>166,55 / 5,144</td>
<td>58,02 / 10,146</td>
</tr>
</tbody>
</table>
APPENDIX 2.

Selle küsimustikuga soovime teada Sinu kehalise kasvatusse tundides osalemise motiivide ja põhjuste kohta. Siin ei ole õigeid ega valesid vastuseid, seega vasta palun üle võimalikult kõige enam Sinu arvamusega.

<table>
<thead>
<tr>
<th>Olen täiesti nõus</th>
<th>Olen nõus</th>
<th>Pige min nõus</th>
<th>Pige min nõus kui mitte</th>
<th>Ei ole min nõus</th>
<th>Ei ole üldse nõus</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Ma naudin haaravaid ja huvitavaid elamusi, mida pakub osalemine kehalises kasvatuses</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>2. Mulle meeldib igas kehalise kasvatus tunnis saada juurde uusi teadmisi</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>3. Varem olid mul kehalises kasvatuses osalemiseks head põhjused, ent nüüd neid enam pole</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>4. Mulle meeldib avastada uusi võtteid harjutuse sooritamiseks</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>5. Ma tunnen, et ei suuda kehalises kasvatuses enam edukas olla</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>6. Kehalises kasvatuses osalemine aitab mul olla klassikaaslaste silmis tunnustatud</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>7. Kehaline kasvatus on parim tund klassikaaslaste suhtlemiseks</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>8. Mulle meeldib saavutada keeruliste harjutuste sooritamisel meisterlik tase</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>9. Kehaline kasvatus aitab mul püsida heas kehalises vormis</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>10. Kehalises kasvatuses osalemine on prestiižne</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>11. Kehaline kasvatus on üks paremaid vahendeid ka minu teiste omaduste arendamisel</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>12. Mulle meeldib täiustada enese nõrku külgi kehalises kasvatuses</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>13. Ma naudin elevust, mida pakub osalemine kehalises kasvatuses</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>14. Kehalises kasvatuses osalemine võimaldab mul tunda ennast hästi</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>15. Mulle meeldib täiustada enese oskusi kehalises kasvatuses</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>16. Klassikaaslaste arvates on kehalises kasvatuses osalemine oluline selleks, et püsida heas kehalises vormis</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>17. Kehalises kasvatuses võib õppida asju, mis võivad olla</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Kasulikud ka teistes elu valdkondades</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
</tr>
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</tr>
<tr>
<td>18. Ma naudin rohkeid emotsioone, mida pakub osalemine kehalises kasvatuses</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>19. Ma tunnen, et kehaline kasvatus pole enam minu jaoks</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>20. Mulle meeldib sooritada keerulisi harjutusi</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>21. Kehalisest kasvatusest puudumine põhjustab halba enesetunnet (süütunne)</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>22. Minu jaoks on oluline klassikaaslastele näidata kui hea ma kehalises kasvatuses olen</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>23. Mulle meeldib öppida uusi harjutusi, mida pole varem veel proovinud</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>24. Kehalises kasvatuses osalemine võimaldab mul säilitada häid suhteid klassikaaslastega</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>25. Ma naudin tunnet olla täielikult haaratud kehalise kasvatus tunnist</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>26. Ma tunnen kohustust osaleda kehalises kasvatuses regulaarselt</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>27. Mulle meeldib avastada uusi taktika variante harjutuse sooritamiseks</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>28. Ma tunnen, et ei suuda enam saavutada kehalises kasvatuses püstitatud eesmärke</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
</tr>
</tbody>
</table>
Hea õpilane!


1. Sugu: M N
2. Kui pikk Sa oled? ............... (cm)
3. Kui palju Sa kaalud? ............. (kg)

4. Kuidas Sa üldiselt iseloomustad oma tervist? Palun vali vaid üks vastus!
   (1) väga hea
   (2) hea
   (3) rahuldatav
   (4) halb

5. Kuidas Sa üldiselt iseloomustad oma kehalist vormi? Palun vali vaid üks vastus!
   (1) väga hea
   (2) hea
   (3) rahuldatav
   (4) halb

6. Kuivõrd Sulle meeldib koolis käia?
   (1) meeldib väga
   (2) pigem meeldib
   (3) pigem ei meeldi
   (4) üldse ei meeldi

7. Milline on Sinu õppeedukus? (viimase semestri/poole aasta vältel)
   (1) põhiliselt 5 / 9-10
   (2) põhiliselt 4-5 / 8-9
   (3) põhiliselt 3-4 / 6-8
   (4) põhiliselt 2-3 / 4-6

8. Palun nimeta Sinu arvates 5 olulisemat kooli õppeainet?
   (1) ...................................................
   (2) ...................................................
   (3) ...................................................
   (4) ...................................................
   (5) ...................................................

9. Palun nimeta Sinu arvates 5 meeldivamat kooli õppeainet?
   (1) ...................................................
   (2) ...................................................
   (3) ...................................................
   (4) ...................................................
   (5) ...................................................
10. Palun loe alljärgnevad vastusevariandid läbi ja märgi ära (ristikesega x) 5 moodust kuidas Sa oma vaba aega tavaliselt veedad.

Tavaliselt ma veedan oma vaba aega …

<table>
<thead>
<tr>
<th>Tegevuse kategooriad</th>
<th>Moodust</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pilli mängides või muusikat kuulates</td>
<td>x</td>
</tr>
<tr>
<td>Televiisorit / videot vaadataes</td>
<td></td>
</tr>
<tr>
<td>Arvutiga tegeled (surfates, jne)</td>
<td></td>
</tr>
<tr>
<td>Töötades ja raha teenides</td>
<td></td>
</tr>
<tr>
<td>Sõprade seltsis ringi liikudes</td>
<td></td>
</tr>
<tr>
<td>Armsamaga aega veetes</td>
<td></td>
</tr>
<tr>
<td>Lugedes (raamatuid, ajakirju jms.)</td>
<td></td>
</tr>
<tr>
<td>Võistlusporti tehes</td>
<td></td>
</tr>
<tr>
<td>Õppides (lisaks koduste ülesannelist)</td>
<td></td>
</tr>
<tr>
<td>Pidudel käies</td>
<td></td>
</tr>
<tr>
<td>Omaette olles (lõõgastudes, unistades)</td>
<td></td>
</tr>
<tr>
<td>Kinos, teatris, koncertidel käies</td>
<td></td>
</tr>
<tr>
<td>Ühisvõistlused, vabatahtlikku tööd</td>
<td></td>
</tr>
<tr>
<td>Kodustes majapidamistöödes abiks olles</td>
<td></td>
</tr>
<tr>
<td>Noorte klubides käies</td>
<td></td>
</tr>
<tr>
<td>Tervisesporti tehes</td>
<td></td>
</tr>
<tr>
<td>Arvutit-/videomänge mängides</td>
<td></td>
</tr>
<tr>
<td>Midagi muud tehes (pane kirja)</td>
<td></td>
</tr>
</tbody>
</table>

11. Väljaspool koolitunde tegeled spordiga tavaliselt:

   (1) mitte kunagi
   (2) vähem kui kord nädalas
   (3) 1-2 korda nädalas
   (4) 3-4 korda nädalas
   (5) üle 4 korra nädalas

12. Väljaspool koolitunde tegeled spordiga, nii et hingeldad ja higistad nädalas kokku tavaliselt?

   (1) mitte kunagi
   (2) umbes 1- tundi
   (3) umbes 3-4 tundi
   (4) umbes 4-5 tundi
   (5) üle 5 tunni

13. Kas kõige sagedamini spordid:

   (1) kooli juures töötavates rühmates
   (2) spordiklubis
   (3) harjutan sõpradega ilma kellegi juhendamiseta
   (4) harjutan üksi
   (5) perega
   (6) ma ei spordi

14. Kas Sa arvad, et Sinu kehalise aktiivsuse tase on piisav hoidmaks Sind tervena ja kehaliselt heas vormis?

   (1) jah
   (2) ei
   (3) ma ei tea

15. Palun loetle, millised spordialad ja liikumise vormid meeldivad Sulle kõige rohkem?
16. Kas Sulle üldiselt meeldivad kehalise kasvatusse tunnid?
(1) jah  
(2) ei  

17. Kas kehalise kasvatusse tund on Sinu jaoks huvitav ja mitmekülgset arendav?
(1) jah  
(2) ei  
kui ei, siis täpsusta  
miks……………………………………………………………………

18. Kas sa tunned kehalise kasvatusse tundidest rõõmu?
(1) jah  
(2) ei  
kui ei, siis täpsusta  
miks……………………………………………………………………

19. Sinu läbisaamine kehalise kasvatusse öpetajaga on?
(1) väga hea  
(2) hea  

20. Sinu läbisaamine kaasõpilastega on?
(1) väga hea  
(2) hea  
(3) halb  
(4) ei oska öelda

21. Kas on midagi, mis häirib Sind seoses kehalise kasvatusse tunniga?
(1) ei  
(2) jah;  
kui jah, siis täpsusta  
miks……………………………………………………………………

22. Kui oled kehalise kasvatusse tundidest puudunud, siis peamiselt missugustel põhjustel?
(1) haiguse või vigastuse tõttu  
(2) ei taha osaleda  
(3) mingi muu põhjus;  
täpsusta………………………………………………………………

23. Kui paljudest kehalise kasvatusse tundidest oled Sa sel õppeaastal osavõtnud?
(1) ei ühestki  
(2) vaid mõnest üksikust
24. Nimeta 5 spordiala, millega oled kooli kehalise kasvatuse tundides kõige rohkem tegelenud?

(1) .................................................................
(2) .................................................................
(3) .................................................................
(4) .................................................................
(5) .................................................................

25. Kas on veel mõni spordiala, millega Sa tahaksid kehalise kasvatuse tundides tegeleda?

(1) .................................................................
(2) .................................................................
(3) .................................................................

26. Kas sulle meeldib kehalise kasvatuse hindamissüsteem?

(1) jah
(2) ei;
kui ei, siis täpsusta miks ....................................................... 

27. Millised on Sinu arvates teie kooli kehalise kasvatuse tunni läbiviimise tingimused?

(1) väga head

28. Millised on Sinu arvates teieis peale kehalise kasvatuse tundi pesemisvõimalused?

(1) väga head
(2) head
(3) rahuldavad
(4) halvad
kui on halvad, siis selgita miks ...............................................

29. Kas kehalise kasvatuse tund on Sinu arust tähtis?

(1) jah
(2) ei

30. Kas Sinu arvates peaks kehalise kasvatuse tunde olema rohkem?

(1) jah
(2) ei

31. Kas Sinu arvates peaks olema võimalus valida lisaks tavapärastele kehalise kasvatuse tundidele täiendavalt kehalise kasvatuse tunde?

(1) jah
(2) ei