

# **CHANGES IN PHYSICAL ACTIVITY AND SPORTING HABITS VIA GENERATIONS IN CYPRUS**

**PhD thesis**

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## ABBREVIATIONS

- ANOVA: Analysis of Variance  
CNOA: Cyprus National Olympic Academy  
COC: Cyprus Olympic Committee  
CSO: Cyprus Sports Organization  
CPI: Cyprus Pedagogical Institute  
EC: European Commission  
EU: European Union  
IOA: International Olympic Academy  
MoEC: Ministry of Education and Culture  
NBA: National Basketball Association  
PA: Physical Activity  
PE: Physical Education  
SFA: Sport for All  
SSR: Statistical Service of the Republic  
SPSS: Statistical Package for the Social Sciences  
UEFA: Union of European Football Associations

# 1. INTRODUCTION

## *1.1 Justification of the choice of the topic*

The world society is in a constant process of evolution and in a continuous changing. All societies are going through changes and sport as a social subsystem is mirroring these changes in its own context. According to Bryant and McElroy [13] and Lappas [39], the world of sport is a microcosm of society; therefore the changes that occur in the value system of societies are generating changes also in sport.

Sport is a cultural phenomenon and thus a part of the larger society in which it is embedded. Sport, even before it got its name, was used as a means for coping with primal instincts, such as survival, adaptation and defense [9]. Nowadays people use sport for several purposes, among others: for having fun, perfecting the human body, improving health, competing or making profit. The reasons leading people to get involved in sports are constantly changing, following the dominating values and norms of the given societies. In this thesis the focus is on the populations' involvement in leisure sport and the changes that occurred in the last decades in their sporting habits and in their customs related to daily physical activity, such as walking, gardening and other household duties.

In the 21st century the search for higher income and the increasing flexibility of work time led to less leisure time and less personal time control. Sport as a social subsystem is also affected, since people have less physical activity in their daily life. The latter phenomenon resulted in significant changes of their sporting habits. The mutual influence of the individual societies on each others also contributed to these changes. The sweeping economic and social changes in the global village have different impact on the populations' sporting behavior in the different continents and in the individual countries. For instance, in Europe neither the increasing cost nor the lack of infrastructure prevents many Europeans from practicing some sports. However, a decrease can also be noticed which is mostly due to the constraints of the typical way of living in modern society, for instance to lacking time, working hard and having family responsibilities. Nevertheless, for a large majority of the European Union citizens (86%) playing sport is a sufficiently attractive alternative to distract them from sedentary

lifestyle [54]. According to Todosijević and Enyedi [63], in modern Europe a considerable decline in conformity and religiosity can be observed, and more emphasis is given on self-realization and on leisure activity. In a comparative study Fügedi et al. [23] stressed that people attribute more and more importance to a good quality of life and as an element of it to physical activity and sport in their leisure.

Since the author of this thesis spent most of his life in Cyprus, he witnessed that relatively many Cypriots are not familiar with the importance of sport and act accordingly. He also realized that there is hardly any scientifically based information about the changes related to sport in his country. Therefore as a doctoral candidate he decided to carry out an empirical investigation in connection with this topic. His decision was supported by the unfavorable findings of the European studies on sport. Since Cyprus became a member in the EU in 2004, she was not included into the sample of the survey the result of which were published in 2004 since the data collection were occurred in 2003 [54].

Nevertheless, the country was invited to participate in the survey on the populations' sporting and physical activity which was carried out in the EU member states at the end of 2009, and published in 2010 [20]. The results of the latter survey showed that the Cypriot population is less active physically than the population in most other EU member countries. However, since there was not research findings from investigations carried out earlier, the trend of the changes in the Cypriot populations' sporting habits and physical activity could not be registered.

Sport is more than a binding element of society. It is not enough to define sport solely as a physical activity. Just to mention a few social functions, it also serves to shape and to reinforce identity; it brings people together but at the same time it excludes others. This complexity of sport was not paid much attention in Cyprus for long. Parallel with the slowly increasing importance of sport in Cypriot society, some research have been carried out only recently about social issues in the national sport but the long term changes in the people's sporting values and behaviors as well and in their daily physical activities have not been studied yet. Therefore the author decided to deal with this topic in his thesis and, based on his research, to discover the major differences which occurred in Cyprus in the last three generations' sport.

## ***1.2 Review of the related literature***

### *1.2.1 Sport and society: Sport involvement in the global village*

Sport as a societal subsystem reflects the changes that occurred in societies throughout the centuries. As McNamee [43] states; it is necessary to recognize the load that sport bears nowadays. If we consider that this load is multi-faceted then we cannot deny the strong ties between global development, society and sport.

Due to the advancements in science and technology, occupational physical activity has been diminishing and the modern way of life requires everyday compulsory physical activities less and less. Physically inactive elements in the way of life have been growing worldwide, that is why the importance of physical activity is evolving globally. Relevant research are conducted both on international and national levels. Researchers deal, among other others, with the changes in work conditions [18], with the individuals' preferences concerning mental or intellectual job letting behind them manual workloads and therefore aiming to achieve a higher education [28], with the relationship between physical activity and health [28], and with sedentary behavior as a predictor of the adolescents' health [60].

Sport scientists examined sport as a social practice, a social formation, or as social text with the purpose of understanding both sport and society [9]. Important questions have been raised concerning the role of traditions and structural continuities in sport and in society over time. Struna [59] emphasized the necessity to understand the functions of sports in a given period and across time, and to specify what a given generation learns, borrows and adapts from the past.

A small part of leisure time is devoted to individual happiness. The question of how somebody uses that fraction of time and what options are offered by the wider society in this context were also examined. It was found that parallel with the transformation of traditional values into modern, then postmodern values, the quality of life improves rather through the preferred leisure activities than via the obligatory duties (Figure 1).

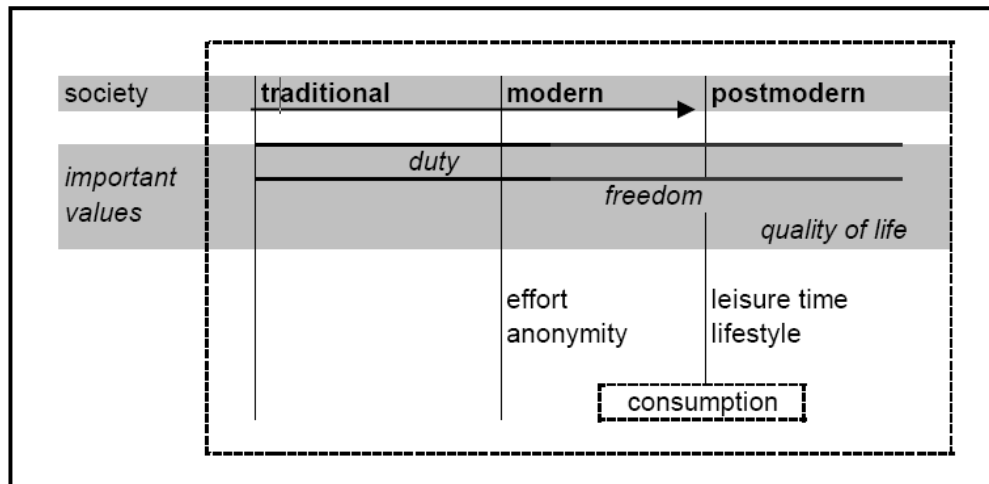


Figure 1 Change of values via societal transition [47]

Modern societies have been undergoing changes which have an effect on the individuals' behaviors. According to [18] the standard of living has increased considerably since the 1950's and it led to individualization and to the diminishing of the significance of traditions directing behavior and cultural norms. Nowadays globalization has a strong impact on the individual societies. Knoppers et al. [35] state that in many European countries the changes in societal values and norms are visible in education, public health and also in sport. De Knop and Harthoorn [37], underline that due to a number of recent developments, such as demand driven services, the lack of fair play and the failure to accept differences, the need for an adequate supply of information and knowledge has actually increased. This increase has occurred in almost all sectors of society, but especially in the rapidly growing areas and in those which are gaining social importance, such as the sport sector. De Knop and Harthoorn [37] mention three reasons why the changing societies affect the sport sector. Firstly, social changes take place more rapidly than formerly, which means that knowledge about the effects of social developments on sport becomes outdated more quickly.

Secondly, the heterogeneity of modern societies is increasing. Therefore, sports policies must satisfy a greater variety of wishes and needs of individuals and groups than earlier. Thirdly, societies are becoming more and more complex. Developments in society and developments in sport are increasingly interrelated, they are bound more firmly together and they have an increasing international character.



As a consequence of the above mentioned features, there is an important modification in the composition of the participants. Here the example of the Netherlands is mentioned. According to Elling et al. [19] sport participation and watching sports are among the most popular leisure activities of the Dutch population: many men and women with different ages and socioeconomic backgrounds are involved in sport, not only wealthy young men, as it used to be.

Not only the sport population has become more differentiated in the last decades, the structure and organization of sport have also changed. For instance, there used to be a relatively small number of sports which were organized in sport clubs. Nowadays a wide range of individual and team sports exist which are practiced not only in sport clubs but in different kind of organizations, like commercial sport centers or even in public squares. Following the development of modern sport, with the increased participation in sport over the last decades, nowadays there are more possibilities to work in the sport sector as teacher, instructor, coach, manager, journalist, researcher etc. Elling et al. [19] emphasizes that most sports are leisure activities in which people with very different social backgrounds voluntarily engage. The specific leisure context and the pursuing of similar goals together are seen as an important means to stimulate social contacts between people both with similar and different social background. To establish social relationships is an important motivation for many people to participate in sport. Knoppers and Elling [36] make a special distinction between the western competitive sports and the recreational or leisure sports. The first group is considered as a cultural practice which is formally organized along gender lines and on the basis of performance principle; the latter are based on the principle of enjoyment and sometimes can be gender mixed.

Nowadays competitive sport is no longer the most frequent form of sport participation. Other forms of sport, such as recreational sports, fitness, extreme and adventure sports have also been developed remarkably and became popular and alternative forms of sport.

Another remarkable, maybe one of the most important changes which occurred in sport is in connection with the need and expectations of people and the influence they get from the global environment related to sporting values.

Sport nowadays is on the front pages of newspapers, it is often present at the dinner tables as a main topic of discussions, and it runs through pubs, cafes and even in the streets of cities and villages. Several contemporary sports were present also half a century ago but in different form. In these days many traditional sports fail to meet the different new needs of the individuals, and not only with the young generations.

To follow the rules, not to break them, not to spoil the spirit of the games, and above all playing fair had more concern in the past. In contemporary societies sport is frequently a tool of social or economic policy. From a larger perspective sport is a complex social practice in which several values are manifested. Steenbergen [57] identified a dramatic change in sporting values and movement culture in society. Sport nowadays has become a “variously shaped reality” in which new concepts can be recognized. According to Boessenkool [10] sport does not stand outside of the context of social development but it is an integral part of it and it contributes to its determination.

Buisman and Rossum [12] identified some important values concerning sport, such as achievement, caring, companionship, equity, health, showing skill and winning. Timmers and De Knop [62] also mention the importance of values like “a sound mind in a healthy body”, honesty and sportsmanship. It is significant how the sporting values influenced the individuals’ participation in sport in different periods and how much weight was given to certain values by different generations.

Volkwein [66] states that while the time for leisure activities has been maybe reduced during the last decades, the influence of sport and generally the quest for physical fitness has grown tremendously, and not only in the western world. In another side of the world China is a good example. She has been undergoing developmental changes which, according to Jones [32], have had an impact both on the Chinese society and on the sport sphere. Chinese sport was totally under governmental control until the start of structural reforms which took place in 1992-93 [32] and the political detente resulted in a slight detente also in the sport sector.

Referring to another Asian example, the findings of a survey conducted by Sagawa [51] in a province in Thailand revealed that the participation in sports by children was changing from generation to generation. In particular, the frequency of the engagement in traditional sports decreased. On the other hand, Theeboom [61] called

the attention to the spreading of the Asian martial arts worldwide; they were among the top ten most practiced sports in the 2000s. With regard to organized sport, they came second after soccer, and their popularity was regarded as one of the most important new trends in sport participation. The popularity of the Asian martial arts in the West is rooted in a number of factors, first of all in the growing economic power and international prestige of Japan and some other East Asian countries.

De Knop and Harthoorn [37] discuss the polarization of the world of sport. They divide sport in two groups both internationally and nationally placing top sports in one category and recreational sports and traditional sports and games in the other. According to their conclusion, both globalization and localization have a tremendous impact on the organization of sport because of the increasing differentiation in sport. It can be concluded that sport as an institution is going through changes which are detected both at international and at national level. National sports tend to change partly according to their tradition and to the national appreciation of sport, and partly due to international changes and policies [2]. The sport related customs are changing globally and sooner or later most countries follow these changes more or less. This development leads to a homogenized world culture which derives from globalization.

According to Anthonissen [5] competitive amateur sport clubs in the Netherlands are facing new challenges. Social changes and economic growth are producing various tensions within and between the clubs. The multi-cultural nature of several contemporary European societies and the impact of the international trends on them are leading to confrontation between historically determined club cultures and the new demands set up by people with heterogeneous culture. Sport organizations are becoming more complex and more dynamic. The number and the type of sports have been increasing internationally, but this trend is not always noticed nationally. Anthonissen [5] pointed out that in the Netherlands the total number of participants in sport has remained the same but at the same time the average age of club members has risen.

Sport federations and sport clubs refer first of all to the concept of sport as a physical activity, whereas national and local government sporting bodies emphasize primarily the social significance of sport.

According to Boessenkool [10], the process of managing and organizing sport clubs is a by-product of the people's wish to engage in sport. Like other sectors, sport is

confronted by important changes. It is affected by the appearance of market oriented thinking, the processes of individualization, commercialization, and bureaucratization; as well as political, social and economic developments, demographic changes, e.g. the increase of the people's educational level, modification in the way the people's use their leisure time and by the changes within sport itself. As a result of the above changes new paradigms appeared in the context of sport. Modern lifestyle, in contrast to a half century ago, offers a large alternative to spend time in a sedentary way, such as internet, high definition televisions, video games which can easily keep anybody busy on a comfortable position on a couch. The technological advantages that modern society offers to its members are admirable but in certain context they are disadvantageous. During the last years the adolescents in modern societies typically spent more than five hours a day in front of electronic media, and at the same time there has been a dramatic decline in physical activity [28]. Nowadays, as a result of the negative impact of the sedentary lifestyle on the population's health status, health related issues, prevention, rehabilitation play a significant role in the motivations for sport participation. In the Netherlands there is broadly used term "movement poverty". It refers to a cultural awareness indicating that the older generations were much more active physically in their childhood and youth than the present electronically mailing and surfing young generation.

On the other hand, the popularity and the development of the media, especially the televised sport events, have raised the people's interest in sport. The media has gained tremendous power during the last decades and they influence all aspects of social life, including sports as well [24]. This might be a factor that pushes individuals for consuming sport. The media create mostly sport consumers and not sport participants which already led to a new paradigm.

People can change their social status both intragenerationally and intergenerationally. The sporting habits of the individuals might also change because their social mobility might modify the needs and the motivations for sport.

According to Standeven and De Knop [56] sport comprises a whole range of competitive and not competitive physical activities in which human beings engage at their own level of skill, either for enjoyment or for improving their performance. Sport has taken the form of a broad, popular movement and has become a powerful driving

force in society. Sport has become the biggest voluntary organization in many countries and therefore it is regarded as De Knop et al. call it, a “new binding agent for society” [38, page 358]. In the Northern and Western European countries the governments are putting an ever-increasing amount of money into recreational and elite sport emphasizing the role of sport as the new binding agent.

According to Guttman [26], it is a question whether sport has entered already the postmodern era or not. Traditional sports and modern sports have existed side by side for several decades; today they share the global sports arena with “les sports californiens” which are actually extreme sports. Additionally, modern sports cannot be identified with competitive sport alone, but with a wide range of new sports called “sports modi”, such as fitness, adventure sports and some health related sports [41]. It can be stated that the term postmodern sport is relatively new and its meaning has not been determined yet precisely, but it is a fact that a new ground has been appeared in the landscape of sport. De Knop et al. [38] suggest that the responsible sporting bodies should strengthen the position of sport as a multi-faced popular movement and driving force in society and stimulate critical reflection on the meaning of specific sporting values for the benefit of individuals and for that of society.

Movement has always been an essential aspect of life for all people. However, during the process of civilization movement has become a less significant component of the everyday life. In contrast to the beginning of the 20th century, the evolution of modern technology made it possible to live and work without much physical effort or movement. The relationship between movement and human body seems to have a paradoxical character. On the one hand, sport can contribute to a good quality of life. On the other hand, there is no other field in society where health can be put at risk so explicitly and voluntarily as in sport. Consequently, movement has grown into a concept with different meanings and dimensions. Many people passionately try to compensate the lack of physical acclivity with an expanding variety of exercises and sports. Some of them collectively perform the same bodily movements by participating in activities such as running, swimming and aerobics. At the same time, in the same society more and more people might climb mountains, explore caves, and dive from high cliffs and bridges. Hilvoorde sets the question, “Is there a sociological relation between these extremes of conformism of movement on the one hand and on the other

hand the cultivation of boundless contempt of speed, height, and other activities that the public in large will associate with perilous adventure?" [29, page 58]. In modern societies a person who participates in activities such as jogging or aerobics collectively practices these activities with a double purpose: to see and to be seen. Nevertheless, a solitary person who rides snowboard or climbs mountains does the same if he/she prepares photos and stories of his adventures. According to Hilvoorde [29], although research on the consequences of physical activity was initially done because an adverse influence between sport and life spam was expected, afterwards the conviction grew that sport and physical exercise have a broader spectrum of influence.

Adventure sports offer a way of escaping from the routines of life. Alternative and extreme sports are becoming formal sports, although such classification is not absolute [6]. Youngsters are looking for unconventional activities such as snowboarding, in-line skating, since they want to practice without the interference of undue authority. For example the core members of an in-line skating informal group claimed that they initiated their participation themselves because it was something they could do by themselves, it didn't require the adults' supervision and these circumstances were challenging [57].

The peer's motivational climate is of great importance in sport participation [45]. The quest for freedom, the socialization among the peer groups and the mature consciousness that the youngsters develop while doing these sports, promote their participation; they have a good time and they enjoy what they do without paying much attention to the health benefits. Young participants are looking for alternative sports with central values such as: freedom, experiences of excellence, and they create an own sport culture. Participants in alternative sport adopt new attitudes; new styles of dress, their speech and behavior are different of those accepted by previous sub-cultures.

According to Biesta et al. [8], although there is an observed multiversity in contemporary sport and an extreme manifestation, the young people do not engage in sport activities or do not become a member of a sport club in order to get an education. When fun has somehow been transformed into work also in alternative sports and organized competitions appeared here as well, there were more and more complains. Martelaer et al. [41] refer to some participants in alternative sports according to whom sport authorities, coaches, managers, organizing committees, corporate sponsors and

media people started invading alternative sports, and when they put the stress on competition and winning; the very nature of the original sporting activity disappears. In this respect it is important to understand that changes are not pre-destined in sport either by fate or supernatural forces. It is created by the collective actions of human beings. This means that the future of sport will not just happen according to some predicted patterns. Instead, it will be shaped by people making choices about what they want sport to be in the future. Those choices will be limited by existing social conditions and guided by people's perceptions and evaluations of what sport is today.

### *1.2.2 Sport and society: Sport involvement in the island of Cyprus*

Like societies all around the world Cypriot society is changing constantly. Studying just briefly the modern history of Cyprus, we can see the contradictory nature of these changes. On the one hand, Cypriot society became more urbanized in the second part of the 20<sup>th</sup> century, after the country gained her independence, that is, later and slower than most European societies. Thereby, at the beginning, most ill effects of a transition to city life could be avoided. Ties to the countryside remained strong. In general, the Republic of Cyprus has been modernized, the long time existing feudal system which can be characterized as a kind of a caste system switched to a class system and it lasted under different regimes and political changes [53].

On the other hand, in the 21st century Cyprus has undergone radical changes during a relatively short amount of time, and the changes touched most areas of life. Previously Cypriot society was somewhat isolated; it could preserve traditional positive values until recently. For instance negative social phenomena, such as prejudice or discrimination only started to appear to a higher degree in the last years, probably due to the large migration waves from Eastern countries. In the independent Cypriot society most people have been living under good economic circumstances and there has been a relatively acceptable social equality for long. In 2004 Cyprus became a member of European Union and the borders were opened. Since that time the standard of living has started decreasing, partly as a result of growing migration to the country. This process became faster due to the worldwide economic crises. Since the Cypriot economy also has been in very close connection with the Greek one the collapse of the latter had a grave impact on the life on the island in much respect.

The most radical transformation occurred in the families. A few decades ago women had not jobs; the Cypriot families could be characterized as patriarchic. Gender roles in families have been changed just recently, the younger generation of women is employed since two salaries are needed for keeping the standard of living in the families. The former big families disappeared; they were transformed into nuclear or less extended families.

In principle, the possibilities being involved in sports were always given in Cyprus. Although the geographical circumstances were not ideal for all kind of sport, they offered several alternatives. The fact that in such a small country somebody could chose snowboard in the morning and kite-surf in the afternoon is only one of the good examples to justify this statements. However, the poor sporting legacy and the low sport culture in the country prevented to make use of these possibilities. The actual opportunities for being a participant were rather limited some decades ago.

Following the history concerning sports in Cyprus, the first sport federation was founded in the country at the beginning of 20th century, but sport has been promoted only since the late 1960s. In 1969 the government set up the Cyprus Sport Organization<sup>1</sup> (CSO). The CSO is responsible for a wide range of activities including supervising of out-of-school sports, financing the construction and maintenance of sports stadia and other sporting facilities, giving technical assistance to sport clubs, supporting Cyprus' participation in international meetings and above all promoting the population's physically active lifestyle [72].

The Cyprus Sports Organization develops plans for promoting mass sports, improving infrastructures and for constructing new facilities. Nevertheless, in spite of the CSO efforts, physically inactive elements in the people's way of life are growing, and the school physical education is generally underestimated. The review of the related literature revealed that 77% of the Cypriots citizens believe that physical exercise can serve as a mean of improving health [54; 20]. At the same time they do not consider physical education (PE) class as a real discipline at school. This approach puts Cyprus

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<sup>1</sup> The Cyprus Sport Organization is a semi-governmental organization enacted by the 1969-1996 laws upon the Cyprus Sport Organization acting as the Supreme Authority in the Republic of Cyprus. Since then every athletic and sports activity and development comes under the jurisdiction of the Organization. Its main objectives are to develop sports outside schools, coordinate the sport life in the country, cultivate the Olympic ideal and promote Cyprus on the international sport scene.



in the box of those countries where PE as a subject has less importance even today than other academic subjects at schools [16].

The Ministry of Education of Cyprus also has a certain responsibility for this situation since it does not employ physical education experts in the elementary school, instead teachers without special qualification teach the subject. Besides, when the youngsters support their education with additional lessons after school, they seldom chose sport related courses. Since classes both at primary and secondary school finish shortly after midday; children attend a number of lessons in the afternoon such as music, foreign languages and art. Just a few of them are involved in sports and mostly not at school but in private sport academies or sport clubs [40].

The study by Loucaides et al. [40] revealed that kids from urban areas attend various private lessons which do not involve physical activity. After school time they prefer to play video games. Rural school children have more sporting equipments which can be used at home, and they are more active physically both in summer and winter than children living in towns. Rural school children have access to more space and to safer neighborhoods, and these circumstances probably drive them to outdoor playing.

According to Bathrellou et al. [7], the major demographic changes and the rapid urbanization which occurred during the last decades had a tremendous impact on the Cypriot population way of life, including their working conditions. In the labor market there are more and more jobs requiring mental or intellectual skills and less and less which need physical abilities. People are motivated to study more, many of them graduate at higher education institutions. The above mentioned changes considerably contributed to the decreasing of physical activity in their everyday life.

At the same time the necessity for physical activity has been growing and people give new answers to the new challenges. In the past it was unthinkable to publicly jogging or cycling in sports clothing in Cyprus, nowadays this custom is completely acceptable. This means that at least a few people are searching for solutions. This leads to further questioning of how the responsible sport authorities of Cyprus deal with the growing of cities the expansion of which unavoidably results in the decrease of free outdoor spaces available for physical activity.

Kartakoullis et al. [34] observed an increase in participation in Sport for All program (SFA)<sup>2</sup>. They noticed that the program is utilized as a tool to improve the quality of life of Cypriot citizens. Therefore the further development of SFA to both at national and local level might be a kind of a solution to stop the spreading of a sedentary lifestyle [29].

In addition to and parallel with the changes in Cypriot society, traditional games were transformed into sports and they started to play a more and more important role. For instance, in the past, in Nicosia, the capital of the island, several traditional games were organized during Eastern or national holidays separately for children and for adults. These events take place also nowadays next to the Venetian walls of the city in a renewed form. In the coastal cities, holidays such as “Kataklimos” offer opportunity for celebrations of traditional games which are complemented today by various physical activities at the sea. People of all ages participate in these games and sports. During Eastern in certain villages in the mountain regions people are not missing the chance to revive traditional games and sports attributing to their continuity. The playful atmosphere during these festivals led to the first step of Sport for All movement in Cyprus [14]. These were the first non-institutionalized Sport for All events which later on became official programs [33]. When in the mid-1970s the Council of Europe officially recognized the Sport for All movement, the Cyprus Sport Organization brought the program in operation [70]. The Program aimed at involving people in sports in a healthy way for joy, recreation, and fitness. Related to this program, research findings call the attention to an important issue, namely that the increased need for physical activity and the awareness of health benefits by Cypriot people should be taken more into consideration by sport institutions and by decision makers [15].

### *1.2.3 Generational differences*

Since the members of societies are replaced by new members continuously, generational changes occur over time in all areas of social life, including sport. Likewise in other fields of society only some of the social norms values, traditions, and

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<sup>2</sup> In 1975 the Council of Europe recognized the movement “Sports for All” as a social service. The Cyprus Sport Organization brought the Program into operation in 1985 following the suggestion of Mr. Kyriacos Neocleous, then president of the Organization. The Program aimed at involving people in sports in a healthy way for joy, sensibility, recreation, fitness and health.

behavioral patterns are transmitted from generation to generation more or less unaltered, some others of them are abandoned or/and replaced by new ones also in sport. Everyday experiences suggest that the younger generations have been more interested in sport than their seniors since modern sport emerged at the end of the 20<sup>th</sup> century. Notwithstanding, generational differences have been rarely investigated in connection with sport. The few research works one can find reference to were related to sport administration [67], coaching [42], sport fans' motivations [31], and sporting values [21], and they only examine generational changes between two generations. According to our knowledge the sole sport sociological study dealing with the development and transmission of sporting traditions through three generations was carried out at the turn of the 1960s and 1970s in a Housing Estate in Warsaw [48]. The major conclusions of the latter emphasized the social nature of sport and the decisive impact of the social, political and economic systems the members of the three generations were living in and the mechanism of the transmission. The social functions of sport broadened, and the set of motivational agents for sport participation became more complex [45]. Nowadays many people do sport and exercise because of different reasons or for different purposes than their predecessors.

Generational differences were seldom approached from scientific perspectives in Cyprus, they are lacking not only from sport related literature but from the other area of social sciences. As an exception, Zopiatis et al. [69] investigated occupational differences and similarities between two generations that are currently active in the hospitality workplaces. The findings of this research helped understand some elements of the existing generational gaps in contemporary Cypriot society but it could not be used as references to the results presented in this thesis.

### ***1.3 Theoretical background***

#### *1.3.1 Clarifying the concept of sport and physical activity*

When people refer to sport and to physical activity they usually have some specific events or actions in their mind. If we put the question to common people what sport is and what physical activity is we might receive two similar, if not the same

answers. Steenbergen [57] identifies that sport in common language can be translated through three concepts which include one paradigmatic and two borderline cases. Taking the paradigmatic component which is called physical games we spot two criteria that separate sport from other activities, the game and the physical skill that it is involved. In the interpretation of physical skill it is important to distinguish between bodily movements and motor actions. The concept of bodily movements considers human movement in terms of displacement of certain parts of the body. In view of an adequate description of human movement, and as a result also sport, the concept of bodily movements should carefully and explicitly be distinguished from that of motor actions. The concept of intentionality necessarily implies directness towards the environment. Walking for instance is always walking on or over something and such a relational specification should not be confused with descriptions in terms of displacements of the legs with respect to the hip or trunk. Thus unlike bodily movements, motor actions imply that the environment is a defining element in its description. If physical activity is interpreted in terms of motor actions an important differentiation can be made between two members of the sports family, physical games and non-physical games. In physical games the goal of the activity is defined in terms of a movement problem, in which movement must be described in terms of certain movement actions. Most of the activities called sport in our ordinary language are games in which the goal of the activity is characterized as the way in which the displacing is realized in a certain environment: to be the fastest in swimming, skating and running, to score more points in basketball, football or volleyball, to jump further or higher etc. These physical games can be considered as the hard core of activities which are called sport in ordinary language.

Another member and also a borderline case of the sport family, according to Steenbergen [57], is physical activity. Physical activity is defined by the World Health Organization [68] as any bodily movement produced by skeletal muscles that require energy expenditure. Physical inactivity has been identified as the fourth leading risk factor for global mortality causing an estimated 3.2 million deaths globally [73]. Measuring the degree of the individuals' physical activity provides vital data which help understand the changes in their needs at societal and individual levels. By observing and researching the degree of the individuals' physical activity helps detect physical

inactivity early, and thus it can start modifying the individuals' behavior in order to create a more active lifestyle. Examining the differences between generations in this respect can lead to further development regarding the diminishing of physical inactivity.

It is a well-known fact that there is a decline in physical activity from childhood to adolescences due to external and internal factors, such as family environment, friends' influence, social support to exercise, trends in physical activity, desire to compete in sport etc [4]. Another important factor is the guidance that is given or not to the individuals by physical education experts since childhood. Education and promotion of awareness of physical health should be provided by trained personal that should emphasize the importance of physical activity for school children and should improve physical education programs.

Physical activity is a borderline case because of the lack of the game elements. Game is a rule bound, goal directed activity in which the rules are agreed upon the limit of the permissible means of goal attainment. For example, fitness and health related sport can be considered as such borderline cases; simply because they lack competition and they are inherently instrumental. If we suppose that sport is a game, then the movements are fundamentally compelling. In activities, such as fitness sport one's principal concern is not connected with the movements themselves but with the extrinsic consequences of the movements

Steenbergen et al. [58] suggest that physical games and non-physical games are members of the sport family but there is a third member of the autonomous sport family, namely, physical activity. Steenbergen [57] mentions that the games and so sport have a gratuitous logic which indicates to the logical inefficiency that is characteristic to sport practices and games. Physical activities have an instrumental logic, a search of the most direct ways to achieve the goal. Therefore physical activities must be distinguished from sports because they belong to a fundamentally different order. Although physical activities lack the game elements, they possess a special element, they are physical but they are not physical games. In physical activities physical means intensive bodily movements and the effect of these bodily movements on muscle power, endurance, heart rate and muscular tonus. Attempting to create one concept of sport we found three concepts, that of physical games, non-physical games and that of physical activities.

A very common interpretation of what sport might mean or what it used to mean is that it is an activity involving physical exertion and skill in which an individuals or teams compete against each other. All sports involve physical and mental activities that are pursued for more than simply utilitarian reasons. For instance, running as a sport is practiced for more reasons than moving from one place to another. Values are gained from this activity, even when it is conducted simply for one's own sake.

Generally speaking sport can be viewed as an institution and as a component of culture. A few decades ago the term sport was unambiguous; it could mean school sport, elite sport, military sport or leisure sport. Digel [18] compares that meaning of sport with its today's meaning. He outlines that the term of sport used to be clear and easy to grasp. In the contemporary society the term sport is a considerably larger concept which is still growing. Trying to clarify a concept of what sport is or what sort of concept sport is, Steenbergen [57] identifies two extreme positions in the clarification procedure; essentialism and non-essentialism. Both positions concerning the possibility to define sport reveal a different view about the type of the concepts.

There are a lot of questions that can be raised concerning the nature of sport. One of the most important ones is how sport can be distinguished from other human activities. Most authors emphasize that instead of one single concept of sport, today it is necessary to speak about different concepts. Concepts of new sports, such as fitness sport, health related sport, adventure sport, show sport, commercial sport or private sport do not include any more the classical principle of *citius – altius – fortius*. Contemporary sport is multi-dimensional; it means much more than just competitive sport. The offer in sport is also diversified and so are the participants. Different new groups of people enter sport nowadays, disabled, elderly and much more women.

Following Steenbergen's [57] point of view, the emphasis is put on the so called "autonomy of sport" based on certain characteristics or elements of which sport can be sharply separated from non-sport. In this procedure of defining, characterizing or classifying sport one presupposes that sport has a describable essence. From this position sport is considered as having certain necessary and sufficient conditions, for example, an activity is sport only if this activity is: i) physical, ii)competitive, iii)rule governed, iv)a game, v)institutionalized, vi)globalized. These conditions of the concept are the criteria for belonging to the group of activities designated as sport. If the

activities such as football, basketball, chess, fitness sport and health related sport are considered to be sport, it becomes clear that there is not one group of features based on which concise boundaries can be drawn between these sports and other activities. Basketball and soccer are competitive sports, but this is not the case with activities such as fitness sport and health related sport. These sporting activities can be regarded as non-competitive concepts of sport. Steenbergen's [57] research shows that in the German literature particularly these non-competitive concepts of sport are considered as alternative concepts of sport. The tendency to have a wider view on sport does not exist in the Anglo-Saxon literature. Fitness and health related sports are not considered to be sport since they are not based on competitions. Conventionally they are thought to be certain forms of movement the primary objectives of which are not a competition between contestants but to be fit, to have flexibility, and muscular endurance, or to increase the circulatory capacity. As Baar [6] states, there are many theories about what sport really is, why children play sports and how sports can be classified.

It is not easy to distinguish physical activities from sporting activities when the concepts are discussed. Physical skill is an element that is proposed as a criterion for distinguishing sport from other fields of action. Sport with respect to this characteristic is at least partially distinguishable from other domains because of its physical character, if this element is considered as a necessary element of sport practices; activities such as chess are not included in the category of sport because they lack the characteristic of physical skill. According to Steenbergen [57] there is no a single common element or a group of elements in virtue of which a sharp line can be drawn between sports and other, not sport like activities. Sport is an elusive concept which reveals certain openness and as a consequence it seems impossible to set out essential criteria for sport in its entirety.

Values and norms manifest themselves implicitly and explicitly in different ways at individual, structural and at cultural levels. For example, at an individual level an athlete may behave according to the stated and assumed norms. Concerning the structural level these values and norms are often built in the way sport is organized and not according to the type of culture that created them. Values and norms are not static but dynamic; they are constructed by individuals based on their experience, emotions, power and privilege. According to Knoppers et al. [35] explicit and implicit values and

norms function as guidelines for practice and for policies and as subjects for debates. Some of these guidelines change rapidly, and some of these changes are part of ongoing struggles, because many people resist accepting them. One can notice the example of girls and women participation in football. Knoppers et al. [35] mentions the case of the Netherlands where there was a strong resistance against the females' participation in football, since it was and still it is primarily valued as a male activity. According to the Dutch literature, the change in societal values and norms that is visible in education, public health and in sport is a major political topic in the Netherlands, Belgium and many Western European countries.

### *1.3.2 Sport motivation and self-determination theory*

The changing of values manifests itself also in the diverse and new motives of sport participants. The changing values in sport are also revealed in the ranking of sport in the cultural value structure. Sport is valued higher than it used to be. Sport has become so important that it seems to be moved from the margin to the center of society, therefore we can discuss about a sportified society.

The changing in the needs and expectations of people also are visible in the diverse and new motives of the participants in sport. Boessenkool [10] underlines that participation in organized sport activities is increasing including elderly people and immigrants. The specific leisure context and the pursuing of similar goals together are seen as important aspects to stimulate social contacts between people with similar and with different social backgrounds in sport. Apart from performance and health, sociability is an important motivation for many people to participate in sport. The western competitive sports are more and more separated from sports at a recreational level [36].

According to Steenbergen [57] traditional values and motives for participation, such as competition, discipline and achievement are accompanied by new values such as health, adventure, pleasure and excitement. Hilvoorde [29] points out that, in contrast to what health professionals say, the most important motives for the modern sport practice are the competition with others, the comparison of achievements, the desire to beat fear and the intention to maintain health.



Based on self-determination theory [49], individuals are motivated for sport participation intrinsically or extrinsically. They are motivated intrinsically when they engage in an activity for the inherent satisfaction that they derive from the activity. Accordingly, they are motivated extrinsically when they engage in an activity for separable outcomes that they obtain through the activity, whether it means rewards attained or punishments avoided [65]. Other authors [52] revealed that extrinsic goals might push individuals to put extra effort in exercise activity. In addition, studies on female adolescent from a social perspective discover that participation in sport is influenced by enjoyment and interest [3]. In the same context it is pointed out that adults show somewhat different motivation than young people, having fun and enjoyment motivate them less often [22]. Furthermore, it is of a great importance to understand the motives of the individuals whose sporting behavior is autonomous [27; 30; 55]. Brunel [11] makes a reference to the achievement goal theory underlying that people engage in an activity to demonstrate competence or ability. Supporting self-determination theory Ntoumanis [46] states that throughout their lives individuals strive to achieve integration and cohesion of new ideas. Therefore the changes in sports and in inspirations regarding sporting activities are a foreseeable actuality that happens in the way of life. The self-determination theory consists of elements out of which the active organism is the most important, in other words it is of great significance how the people integrate new experiences intrinsically. Humans are often described as active organisms [50]. This would be ideal but it is often not an accurate description of modern persons. Whereas our ancestors may have been required to get up and move, people in modern cultures are often required to do just the opposite, that is to sit still. In our increasingly cognitive societies school recesses are full with more and more instruction, and adults spend their working day more and more frequently staring at computer screens [50]. These trends are reflected in the changing sporting habits as well.

## **2. OBJECTIVES**

### ***2.1 Research aims***

The review of the literature revealed that the character of sport is changing globally together with the integrated values and functions. It was also discovered that men and women of varying ages and socioeconomic status participate in sport in a higher rate than they used to be. Studies carried out at an international level showed that the sporting population has become more differentiated and the structure and organization of sport also changed over time. In addition, the impact of these changes led to the diversification of the individuals' motivations related to sport.

During the last two decades, and especially in the period in which Cyprus became a member of the European Union, the society of the island went through radical social, political, economic and institutional changes [1]. With EU acting as a catalyst for change and modernization, it could be rightly assumed that, like to wider societies, radical changes also occurred in national sport and in the people's everyday physical activity. The everyday experiences suggest that competitive sport is no longer the most frequent form of participation, generally speaking people show more interest in recreational sport and they are less active physically. However, there is not scientifically based information about these problems. Although sport related social sciences have been developing recently, these issues have never been approached from a social perspective. With the intention of filling the above gap, the main objectives of this thesis are

- to discover the generational changes which occurred in the life cycle of the last three generations in connection with their sport related knowledge, behavior, habits and motivations and with their customs related to physical activity, and
- to reveal how some major socio-cultural aspects of sport involvement and physical activity have been modified in the same period.

## ***2.2 Research questions***

In order to attain the objectives of this thesis an empirical research was carried out in Cyprus among selected members of today's secondary school children, their parents and their grandparents with the aim of answering the following research questions:

- To which extent are the members of the individual generations familiar with sports?
- What are the major differences between the three generational groups regarding their opinion about the role of sport in the life of Cypriots?
- What are the major differences between the three generational groups regarding the frequency and the level of their primary and secondary sport participation?
- What are the major socializing agents which influenced the three Cypriot generations to get involved in sports as participants and as consumers?
- What are the major differences between the three generations' motivations in connection with sport at present and what were their motivations like at the age of 12-18?
- What are the major differences between the three generational groups regarding their everyday physical activity?

## ***2.3 Hypotheses***

At the start of the research the following hypotheses were formulated:

H<sub>1</sub>. It is assumed that Cypriots "tasted" and practiced mostly traditional sports but are not familiar with "sports modi".

H<sub>2</sub>. It is assumed that significant differences exist between the three generational groups regarding their opinion about the role that sport plays in the life of Cypriots.

H<sub>3</sub>. It is assumed that significant differences exist between the three generational groups regarding the frequency and the level of their primary and secondary sport involvement and the reasons for their non participation. It is also assumed that the students' economic background has a decisive impact on their participation in sport at all levels.

H<sub>4</sub>. It is assumed that significant differences exist between the three generational groups regarding the role played by the various socializing agents in their sport involvement.

H<sub>5</sub>. It is assumed that significant differences exist between the three generations regarding their motivation for sport participation at present and their motivations when they were at the age of 12-18.

H<sub>6</sub>. It is assumed that significant differences exist between the three generational groups regarding their everyday physical activity.

## ***2.4 Delimitations***

This study investigates the changes in sporting activities and in everyday physical activities that occurred via three generations in Cyprus. The research population consisted only of secondary school students, their parents and their grandparents. Neither other students (pre-elementary and elementary school students as well as university students) nor other adults (except the secondary school students' parents and grandparents) were involved in the study.

Furthermore, the way of data collection was different with the three generations. The students answered the questions at their school in the presence of the author, the parents and grandparents completed the questionnaires at home, individually. Consequently, the answering rate also was different, 100 per cent with the students, 77.4 per cent with the parents, and 65.5 per cent with the grandparents.

### 3. METHODS

In order to carry out this research basically survey method was used. It was complemented by in-depth interviews and by analysis of documents.

#### 3.1 Survey method

##### 3.1.1 Population and sample

The investigation was built on survey method. The students attended Cypriot secondary school in the academic year of 2007-2008, their parents and grandparents were regarded as the total population of the research.

In Cyprus there are two degrees of secondary school, Gymnasium (lower secondary school from age 12 to 15) and Lyceum (Eniaio Lykeio, upper secondary school from age 15 to 18). During the school year of 2007-2008, 27 530 pupils attended Gymnasiums, 23 242 pupils attended Lyceums and 780 pupils were in the evening school. The number of pupils at Gymnasiums and Lyceums decreased in comparison with the previous years. The evening school students' age were 18+, therefore the evening school did not constitute a component of the first scheme of the total population (Table 1).

Table 1 Number of secondary school pupils in the school years between 2001 and 2007

School Year	Gymnasio		Lykeio		Total Gymnasio/Lykeio		Evening Gymnasio		TOTAL
	N'	%	N'	%	N'	%	N'	%	N
2001-2002	29 005	55.3	22 840	43.5	51 845	98.8	620	1.2	52 465
2002-2003	28 874	54.6	23 230	43.9	52 104	98.5	800	1.5	52 904
2003-2004	28 854	54.4	23 367	44.0	52 221	98.4	840	1.6	53 061
2004-2005	28 050	53.7	23 303	44.6	51 353	98.3	888	1.7	52 241
2005-2006	27 965	53.5	23 526	45.0	51 491	98.5	809	1.5	52 300
2006-2007	27 697	53.1	23 696	45.4	51 393	98.5	771	1.5	52 164
2007-2008	27 530	53.4	23 242	45.1	50 772	98.5	780	1.5	51 552
<b>TOTAL</b>	<b>197 975</b>	<b>54.0</b>	<b>163 204</b>	<b>44.5</b>	<b>361 179</b>	<b>98.5</b>	<b>5 508</b>	<b>1.5</b>	<b>366 687</b>

At first the students' sample was selected gradually by stratified sampling according to regions (mainland, coastal and mountain areas of Cyprus), the type of the secondary schools (gymnasiums and lyceums) and the gender and the grade of the students. The relevant data presented in this chapter was provided by the Cyprus Ministry of Education and Culture (MoEC). Beside, information by the Statistical Service of the Republic of Cyprus was used.

In the academic year of 2007-2008 there were 111 secondary schools in Cyprus (Table 2).

Table 2 Regional distribution of secondary schools in the school year of 2007-2008

	Lyceum		Gymnasium	
	N	%	N	%
Nicosia	14	35.0	24	33.8
Limassol	13	32.5	21	29.6
Larnaka	6	15.0	12	16.9
Famagusta	2	5.0	4	5.6
Paphos	5	12.5	10	14.1
<b>TOTAL</b>	<b>40</b>	<b>100.0</b>	<b>71</b>	<b>100.0</b>

Regarding the first sub-population ( $n_1=50\ 772$ ), the pupils' district, school, gender and grade were regarded as the sampling variables (Table 3 and 4).

Table 3 Distribution of Gymnasium pupils according to district, grade and gender

	1 <sup>st</sup> Grade				2 <sup>nd</sup> Grade				3 <sup>rd</sup> Grade				Total			
	M	%	F	%	M	%	F	%	M	%	F	%	M	%	F	%
Nic.	1447	32.0	1484	34.7	1595	33.9	1589	34.6	1596	33.6	1616	34.5	4638	33.2	4689	34.6
Lim.	1320	29.2	1212	28.4	1343	28.5	1296	28.2	1431	30.1	1359	29.0	4094	29.3	3867	28.5
Larn.	863	19.1	803	18.8	889	18.9	924	20.1	894	18.8	887	18.9	2646	18.9	2614	19.3
Paph.	616	13.6	529	12.4	584	12.4	506	11.0	562	11.8	593	12.7	1762	12.6	1628	12.0
Fam.	270	6.0	243	5.7	300	6.4	279	6.1	273	5.7	227	4.8	843	6.0	749	5.5
<b>TOTAL</b>	<b>4516</b>	<b>100.0</b>	<b>4271</b>	<b>100.0</b>	<b>4711</b>	<b>100.0</b>	<b>4594</b>	<b>100.0</b>	<b>4756</b>	<b>100.0</b>	<b>4682</b>	<b>100.0</b>	<b>13983</b>	<b>100.0</b>	<b>13547</b>	<b>100.0</b>

*Table 4* Distribution of Lyceum pupils according to district, grade and gender

	1 <sup>st</sup> Grade				2 <sup>nd</sup> Grade				3 <sup>rd</sup> Grade				Total			
	M	%	F	%	M	%	F	%	M	%	F	%	M	%	F	%
Nic.	1197	36.9	1467	35.0	1316	37.8	1511	34.4	1301	37.4	1629	36.6	3814	37.4	4607	35.3
Lim.	963	29.7	1261	30.1	1054	30.3	1319	30.0	1041	29.9	1385	31.1	3058	30.0	3965	30.4
Larn.	542	16.7	739	17.6	556	16.0	786	17.9	546	15.7	709	15.9	1644	16.1	2234	17.1
Paph.	381	11.7	477	11.4	357	10.2	474	10.8	407	11.7	515	11.6	1145	11.2	1466	11.2
Fam.	160	4.9	244	5.8	200	5.7	304	6.9	183	5.3	218	4.9	543	5.3	766	5.9
<b>TOTAL</b>	<b>3243</b>	<b>100.0</b>	<b>4188</b>	<b>100.0</b>	<b>3483</b>	<b>100.0</b>	<b>4394</b>	<b>100.0</b>	<b>3478</b>	<b>100.0</b>	<b>4456</b>	<b>100.0</b>	<b>10204</b>	<b>100.0</b>	<b>13038</b>	<b>100.0</b>

As a first step, out of the five districts that represent the whole free part<sup>3</sup> of the island, two districts were selected according to the level of industrialization and geographical characteristics: an industrial mainland district, Nicosia and a touristic coastal district, Limassol. As the second step, every third school was selected from the urban and from the rural areas of each of the two districts according to the level of urbanization of the place the schools were situated (Table 5).

*Table 5* Number of selected schools in the two regions according to the level of urbanization

	Gymnasium				Lyceum			
	Rural	Urban	N=71		Rural	Urban	N=40	
	area	area	Cyprus	Nicosia/Limassol	area	area	Cyprus	Nicosia/Limassol
			(%)	(%)			(%)	(%)
<b>Nicosia</b>	1	4	7.0	20.8	1	2	7.5	21.4
<b>Limassol</b>	1	3	5.6	16.7	1	2	7.5	23.1

In the region of Nicosia the names of the schools as well as the number of the students according to grade and gender are shown in Tables 6 and 7. As it concern the region of Limassol, the names of schools and the number of the students according to grade and gender are shown in Tables 8 and 9.

<sup>3</sup> The 37% of the country is under the Turkish occupation since 1974

*Table 6* Name of the selected Gymnasiums in the region of Nicosia and the number of the students according to grade and gender

Nicosia Gymnasiums	1 <sup>st</sup> Grade				2 <sup>nd</sup> Grade				3 <sup>rd</sup> Grade			
	Male	%	Female	%	Male	%	Female	%	Male	%	Female	%
Agiou Stylianou	80	22.4	83	22.3	86	22.6	90	21.6	86	21.2	80	18.6
Archaggelou	99	27.7	109	29.2	109	28.7	131	31.5	111	27.3	127	29.5
Stavrou	78	21.8	92	24.7	82	21.6	85	20.4	80	19.7	106	24.7
Akropolis	56	15.7	57	15.3	61	16.1	65	15.6	78	19.2	57	13.3
Soleas	44	12.3	32	8.6	42	11.1	45	10.8	51	12.6	60	14.0
TOTAL	357	100.0	373	100.0	380	100.0	416	100.0	406	100.0	430	100.0
		0		0		0		0		0		0

*Table 7* Name of the selected Lyceums in the region of Nicosia and the number of the students according to grade and gender

Nicosia Lyceums	1 <sup>st</sup> Grade				2 <sup>nd</sup> Grade				3 <sup>rd</sup> Grade			
	Male	%	Female	%	Male	%	Female	%	Male	%	Female	%
Ethn. Kyprianou	90	40.5	127	43.2	106	39.1	108	34.6	109	38.5	148	43.0
Soleas	38	17.1	47	16.0	37	13.7	51	16.3	31	11.0	56	16.3
Ag. Georgiou	94	42.3	120	40.8	128	47.2	153	49.0	143	50.5	140	40.7
TOTAL	222	100.0	294	100.0	271	100.0	312	100.0	283	100.0	344	100.0

*Table 8* Name of the selected Gymnasiums in the region of Limassol and the number of the students according to grade and gender

Limassol Gymnasiums	1 <sup>st</sup> Grade				2 <sup>nd</sup> Grade				3 <sup>rd</sup> Grade			
	Male	%	Female	%	Male	%	Female	%	Male	%	Female	%
Laniteio	75	29.3	60	27.5	71	29.0	94	34.6	77	23.3	78	24.7
Polemision	87	34.0	60	27.5	93	38.0	75	27.6	86	26.1	82	25.9
Ag. Varvaras	64	25.0	64	29.4	53	21.6	72	26.5	119	36.1	119	37.7
Agrou	30	11.7	34	15.6	28	11.4	31	11.4	48	14.5	37	11.7
TOTAL	256	100.0	218	100.0	245	100.0	272	100.0	330	100.0	316	100.0



*Table 9* Name of the selected Lyceums in the region of Limassol and the number of the students according to grade and gender

Limassol Lyceums	1 <sup>st</sup> Grade				2 <sup>nd</sup> Grade				3 <sup>rd</sup> Grade			
	Male	%	Female	%	Male	%	Female	%	Male	%	Female	%
Laniteio B'	103	41.2	103	34.1	97	37.6	119	39.4	77	35.5	126	35.8
Polemidion	127	50.8	167	55.3	137	53.1	157	52.0	109	50.2	184	52.3
Agrou	20	8.0	32	10.6	24	9.3	26	8.6	31	14.3	42	11.9
TOTAL	250	100.0	302	100.0	258	100.0	302	100.0	217	100.0	352	100.0

In the 15 selected schools the number of the students was 7406. Out of them 10 per cent was selected randomly in the individual schools, according to the students' school, gender and grade (Table 10, 11, 12 and 13).

*Table 10* Nicosia Gymnasium pupils' sample according to school, grade and gender

Nicosia Gymnasiums	1 <sup>st</sup> Grade		2 <sup>nd</sup> Grade		3 <sup>rd</sup> Grade	
	Male	Female	Male	Female	Male	Female
Agiou Stylianou	8	8	9	9	9	8
Archaggelou	10	11	11	13	11	13
Stavrou	8	9	8	8	8	11
Akropolis	6	6	6	6	8	6
Soleas	4	3	4	4	5	6
TOTAL	36	37	38	40	41	44

*Table 11* Nicosia Lyceums pupils' sample according to school, grade and gender

Nicosia Lyceums	1 <sup>st</sup> Grade		2 <sup>nd</sup> Grade		3 <sup>rd</sup> Grade	
	Male	Female	Male	Female	Male	Female
Ethn. Kyprianou	9	13	11	11	11	15
Soleas	4	5	4	5	3	6
Ag. Georgiou	9	12	13	15	14	14
TOTAL	22	30	28	31	28	35

*Table 12* Limassol Gymnasium pupils' samples according to school, grade and gender

Limassol Gymnasiums	1 <sup>st</sup> Grade		2 <sup>nd</sup> Grade		3 <sup>rd</sup> Grade	
	Male	Female	Male	Female	Male	Female
Laniteio	7	6	7	9	8	8
Polemision	9	6	9	7	9	8
Ag. Varvaras	6	6	5	7	12	12
Agrou	3	3	3	3	5	4
TOTAL	25	21	24	26	34	32

*Table 13* Limassol Lyceums pupils' sample according to school, grade and gender

Limassol Lyceums	1 <sup>st</sup> Grade		2 <sup>nd</sup> Grade		3 <sup>rd</sup> Grade	
	Male	Female	Male	Female	Male	Female
Laniteio B'	10	10	10	12	8	13
Polemision	13	17	14	16	11	18
Agrou	2	3	2	3	3	4
TOTAL	25	30	26	31	22	35

The identification of the students' sample was followed by a snowball selection for the parents' and grandparents' sample, via the students. The second sub-population consisted of the secondary school students' parents. Their number was based on an estimation supposing that all students still have both of their parents. The third sub-population included the secondary school students' grandparents. The age of the grandparents' generation was estimated to 70-80 year. According to the Statistical Service of the Republic of Cyprus (SSR) life expectancy in the country is 77 years for males and 81 years for females. Based on this life expectancy it was assumed that out of the four grandparents all students might have at least two of them.

Taking into consideration the size of the first sub-sample ( $n_1=741$ ), as a consequence, the size of the second sub-sample (the students' parents) was the double of the first one ( $n_2=1482$ ). The size of the third sub-sample, which consists of the students' grandparents, was the same ( $n_3=1482$ ). The sample of the three sub-populations is shown in Table 14.

Table 14 Sample of the three sub-populations

GROUP	Sub-sample	Distributed questionnaires	Returned questionnaires	
	N	N	N	%
Sub-Population 1 Students	741	741	741	100.0
Sub-Population 2 - Parents	1482 <sup>1</sup>	296 <sup>2</sup>	229	77.4
Sub-Population 3 - Grandparents	1482 <sup>1</sup>	148 <sup>3</sup>	97	65.5

<sup>1</sup> If both parents/grandparents are alive

<sup>2</sup> Every 5<sup>th</sup> people have got questionnaire

<sup>3</sup> Every 10<sup>th</sup> people have got questionnaire

Finally the research sample consisted of three stratification schemes or sub-samples, more specifically 741 students, 229 parents and 97 grandparents. Due to the gradual, stratified and random sampling methods which were used, all three sub-samples are heterogeneous with regards education and other socioeconomic characteristics. The students' sample is representative of the total students' population regarding the region, the type of the secondary school, the gender and the grade of the students. The parents' and the grandparents' sub-sample followed the students' sample but they were not representative according to gender. The mean age of the three groups was the following: mean age<sub>students</sub>=15 (SD=3), mean age<sub>parents</sub>=45 (SD=8), mean age<sub>grandparents</sub>=75 (SD=5).

### 3.1.2 Data collection

The data were collected by questionnaires which consisted of 3 open-ended, 16 multiple-choice and 12 semantic differential scale questions.

Some questions were based on the Special Eurobarometer 213 [54] on the EU and sport. In that research the people's physical activities were measured by the frequency, the duration and the intensity of a few selected elements of their daily living and health related physical activities. Based on the concept by Bryant and McElroy [13], out of the

daily activities physical activities in the house (household duties, gardening, etc.), indoor walking and walking from and to classes or work, out of health-related physical activities regular vigorous physical activities (minimum 30 minutes on most days, running or biking fast, lifting weights or heavy objects,), regular moderate physical activities (about 30 minutes, 5 days a week at any intensity, walking, biking, swimming) and not regular physical activities (sporadic running, walking, biking, swimming, playing, dancing) were selected as indicators of frequency, duration and intensity.

The semantic differential scale questions were related to the motivational factors and the scoring scales gave to the respondents 5 options to tick with equal number of positive and negative options. The following indices of motivation were constructed: to have fun, to relax, to meet people, to develop one's personality, to improve health, to improve physical achievement. The reliability was measured by the Cronbach's alpha coefficient (0.89). The answers given to the open-ended questions were categorized according to their frequency.

The students completed the questionnaires (Appendix A/1) in the presence of the author during the school time and the parents and grandparents were subsequently given the questionnaires (Appendix A/2 and A/3) at home. The response rate was 100% for the students, 77.4% for the parents and 65.5% for the grandparents.

### *3.1.3 Procedures*

In order to carry out the research at the schools the author had to obtain permission given by the Ministry of Education of Cyprus, more specifically by the principal of Secondary Education and by the individual principal at each school that was selected for the study. A request letter (Appendix C) and a personal interview with the principal became necessary to achieve the permission. Thereafter the three questionnaires had to be examined by the research committee of the Pedagogical Institute of Cyprus (CPI) in order to clarify if the questions were in an appropriate form to be distributed among the students. Further on, certain recommendations were given by the Pedagogical Institute to improve the structure of the questions in the Greek version, to be easier understandable by the students. Subsequently, the questionnaires were submitted again after the corrections and the final form was approved by the Ministry of Education of Cyprus.

### 3.1.4 Treatment of data

The data were analyzed using the SPSS program for Microsoft Windows. To examine statistically significant differences between generations at first Chi-Square was used where frequencies between two variables were observed.

In order to assess the motivation level for sport participation of the three generational groups, at the present time and at the age of 12-18, a multi-variant analysis (Factor analysis) and one-way analysis of variance (ANOVA) were used in each case. Because of the large number of variables a data reduction method and Factor analysis were used in order to cluster the variables according to their characteristics. Additionally, the assumptions for using ANOVA were verified by: (1) the independence of the cases; (2) normality – the normal distributions of the residuals; (3) homoscedasticity (homogeneity of variance).

The assumptions for using ANOVA also were verified by Kolmogorov-Smirnov test (normality) and by Brown-Forsythe test (homogeneity of variance). Bonferroni post hoc tests were used to further indicate statistically significant differences between the three generational groups; the level of  $\alpha=0.05$  was considered significant.

In order to identify how physical activity has been changed within one's lifetime and between generations, data of retrospective nature were also needed. The adult respondents were asked to clarify the number of days per week and the amount of time per day they used to spend at the age of 12-18 for the kinds of physical activity which were given to them alternatively. Similar questions were put to the youngsters concerning present time. To compare the two sets of scores Wilcoxon<sup>4</sup> two related sample test (Wilcoxon Signed Rank Test) was used.

In some cases t-test analyses were used in order to check the significance of sport participation in relation to the economic situation of the students' group.

Information derived from the open questions was analyzed in a qualitative way in order to complement and enhance the statistical (quantitative) analysis in the given research dimensions.

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<sup>4</sup> The Wilcoxon signed rank test, also known as the Wilcoxon matched pairs test, is a nonparametric test used when comparing two related samples or repeated measurements on a single sample to assess whether their population median differ. Therefore it tests whether the distribution of two paired variables in two related samples is the same.

### ***3.2 In-depth interviews***

The survey method was complemented by in-depth interviews which were structured according to the life cycle of the respondents and the answers were categorized according to the type of the motivations (enjoyment or health prevention).

The parents and grandparents were asked both about the attitudes and motivations they have at present time and those that they used to have at the age of 12-18 years, while students were asked only about the attitudes and motivations that they have at present time.

In-depth interviews were conducted with Gymnasium and Lyceum pupils between the ages of 12-18 during the academic year of 2007-2008 (n=15), their parents (n=9) and their grandparents (n=5). The guidelines of the in-depth interviews included questions about the following issues: (1) Importance of the role of sport; (2) Practice of sport; (3) Familiarity with certain sports; (4) Ownership of sport equipment; (5) Sport socializing agents; (6) Sport motivations; (7) Participation in SFA programs (Appendix B).

### ***3.3 Analysis of documents***

During the research the following major documents were analyzed: the lists of public secondary schools (Gymnasia – Lykeia) registered by the MoEC, the lists with the numbers of the students that were enrolled at the academic year 2007-2008, annual reports from the Ministry of Education and Culture, Sport for All programs issued by the Cyprus Sport Organization and the Ministry of Education and Culture and reports by the Statistical Service of the Republic of Cyprus.

## 4. RESULTS

### 4.1 Knowledge about sport

#### 4.1.1 Cypriots' familiarity with sports

To be familiar with a sport is a precondition to be involved in it in most cases. Therefore, the first aim was to understand how familiar the Cypriot population is with sports. The three generations' knowledge about sports was examined in the context of "tasting a sport" and practicing it.

The results show that Cypriots tried and practiced mostly traditional sports, such as swimming, volleyball, football and basketball, even jogging attracted relatively many of them, but they are hardly familiar with "sports modi", such as snowboard, kite-board, etc (Table 15).

Table 15 Sports that Cypriots ever practiced

	<b>Students</b>		<b>Parents</b>		<b>Grandparents</b>	
	<i>Tried</i>	<i>Practice</i>	<i>Tried</i>	<i>Practice</i>	<i>Tried</i>	<i>Practice</i>
Basketball	51.28	23.08	43.67	3.93	15.46	1.03
Swimming	49.12	23.35	25.76	7.42	23.71	3.09
Volleyball	45.88	12.69	38.43	2.62	10.31	0.00
Tennis	41.57	10.66	14.85	2.18	3.09	0.00
Football	41.16	33.74	38.86	7.42	28.87	5.15
Handball	40.76	6.07	7.42	0.44	2.06	1.03
Jogging	34.82	38.33	35.37	15.28	27.84	11.34
Badminton	28.34	2.83	6.55	1.75	1.03	0.00
Golf	16.19	1.48	4.37	0.44	3.09	1.03
Rock climb	10.12	3.10	4.80	1.31	5.15	0.00
Snooker	9.45	2.56	5.68	0.44	0.00	0.00
Rugby	8.50	0.00	1.31	0.00	0.00	1.03
Ski	8.23	2.16	3.49	0.44	2.06	0.00
Water-ski	6.61	2.70	2.62	1.31	1.03	1.03
Snowboard	5.67	0.81	1.31	0.44	3.09	0.00
Sailing	5.13	0.40	1.31	0.87	3.09	0.00
Cricket	2.70	0.13	2.62	0.00	1.03	0.00
Kite-board	1.35	0.27	0.87	0.00	1.03	0.00
Jereed	0.27	0.00	0.44	0.00	0.00	0.00

As it was expected, football is very popular in all age groups; but this is not the sport which is practiced by the most people, jogging precedes it in the rank not only with grandparents and parents but also with students. The latter are familiar with most sports. They seem to try a lot of sports even if they don't practise them regularly. Notwithstanding, in spite of living on an island, they do not benefit from the opportunity to have sea all around the country, water sports, especially sailing, are underrepresented in the list of practiced sports. There has been a growing demand for swimming pool recently. The Cyprus Sport Organization and the newly established private clubs and fitness centers try to answer this demand and to offer more options.

In certain other cases, such as in the case of handball or tennis, the gap between tasting a sport and practising the same sport needs attention.

#### 4.1.2 Opinions on the importance of the role of sport in the life of Cypriots

The three generational groups had a different opinion with regard to the importance of the role of sport in their life at the present and at the age of 12-18. The relevant results of this research are presented in Figure 2. The students seem to appreciate sport more than the other two generations. As the results reveal, at the age of 12-18 the generations of parents and grandparents favoured more the sporting elements in their life and attributed more importance to sport.

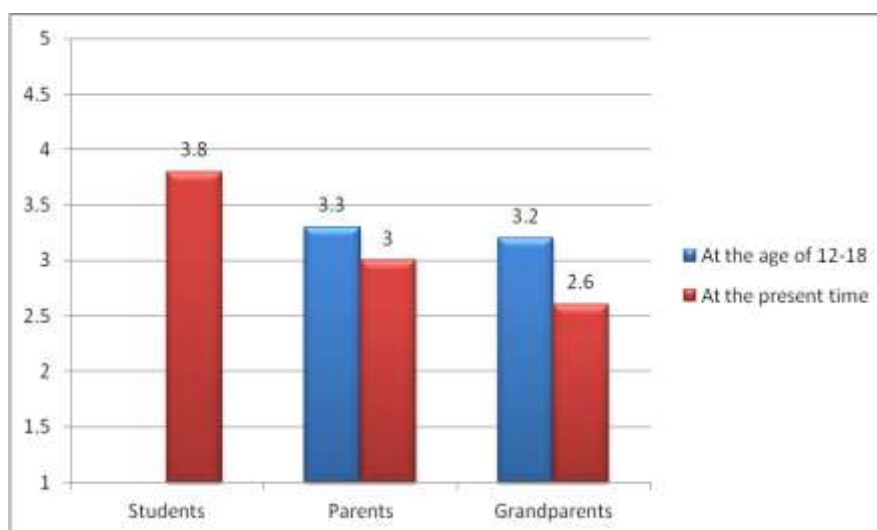


Figure 2 Importance of the role of sport in life of the generations \*

\* (1: not important 5: extremely important)



In order to make a comparison between the three generational groups' opinion regarding the importance of sport, analyses of variance (ANOVA) was performed (Table 16).

*Table 16* Importance of sport in the participants' life (results of ANOVA analyses)

	F value	df	p	
At the present time	70.741	2	<0.001	significant
At the age of 12-18	21.445	2	<0.001	significant

The findings presented in Table 16 show that the differences between the groups are significant. Sport is, and respectively used to be, almost very important (Mean=3.8) for the students and rather important for the parents (Mean=3.3) as well for the grandparents (Mean=3.2) at the age of 12-18. At present the difference is higher because of the diminishment of the importance of sport among the grandparents (Mean=2.6). The socialization process occurred in different historical periods of the country, and this circumstance also had an impact on the opinions about sport. Furthermore, the people's priorities and physical abilities have changed during their lifetime; the grandparents' generation lost their interest in sport which was not too high anyway, not even in their childhood and youth.

## ***4.2 Sport related behaviour***

### *4.2.1 Level and frequency of primary involvement in sport*

Based on a generally accepted classification in the international literature, in this thesis a distinction is made between primary and secondary involvement in sport. According to this concept, playing sport or exercising are considered as a common characteristic of primary involvement. The term of secondary involvement refers to direct (coaching, managing, organizing etc) and indirect (consuming sport, writing about sport, taking pictures of sport, covering sport programs, buying athletes or sport clubs etc) involvement [44]. In this chapter the Cypriots' primary involvement, that is, their active participation in sport and exercise is studied.

In order to examine whether statistically significant differences exist between the three generational groups regarding their sport participation at present chi-square analyses were performed. The chi-square test was chosen in this case due to the non-parametric nature of the available data. The finding clarified first whether the members of the different generations practice sport or not (Table 17).

*Table 17* Sport practice by the three generations

	Students	Parents	Grandparents
YES, practice sport	78 %	54 %	21 %
NO, do not practice sport	22 %	46 %	79 %

The practiced sporting activities were differentiated at three levels: recreational level, competitive level and extreme sports. The chi-square analysis (Table 18) showed that there is a significant difference in the participation at the three different levels of sports between the three groups.

*Table 18* Generational differences in sport participation at present (results of chi-square analysis)

	$\chi^2$ value	df	p
Recreational level (R)	42.216	2	<0.001 significant
Competitive level (C)	13.550	2	0.001 significant
Extreme sports (E)	29.450	2	<0.001 significant

The differences in sport participation with the three groups in regard of recreational level, competitive level and extreme sports are also shown in Figures 3, 4 and 5.

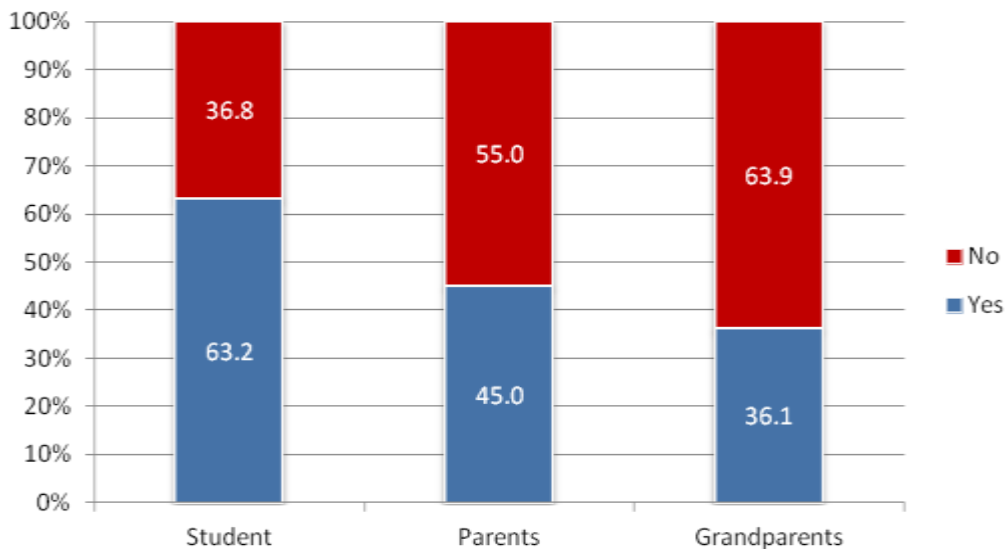


Figure 3 Generational differences in sport participation at recreational level

In the international literature great emphasis is given to the recreational character of today's sport. As it was mentioned, more and more EU citizens are involved in recreational sports as an alternative to sedentary lifestyle. It also seems to be the case for the Cypriot population since the young generation's sport involvement is much higher than their parents'. The youth made a bigger step than the middle aged generation did in comparison with their parents.

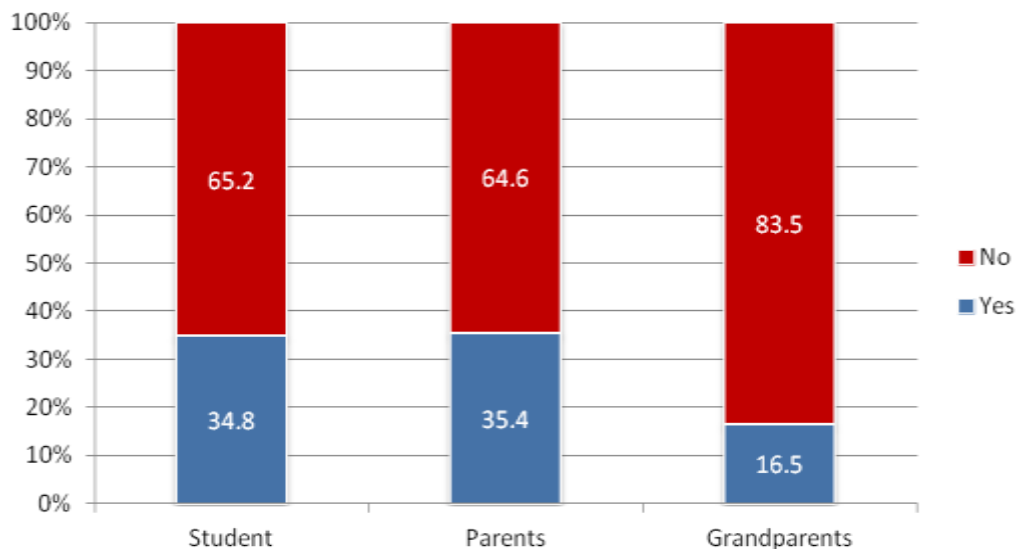


Figure 4 Generational differences in sport participation at competitive level

The findings in connection with sport participation at competitive level support the statement that the character of sport has been changing; competitions are no longer the most frequent form of sport involvement. Although the students are more active in sport than their parents, they do not compete more often, they practice at recreational level or they chose extreme sports.

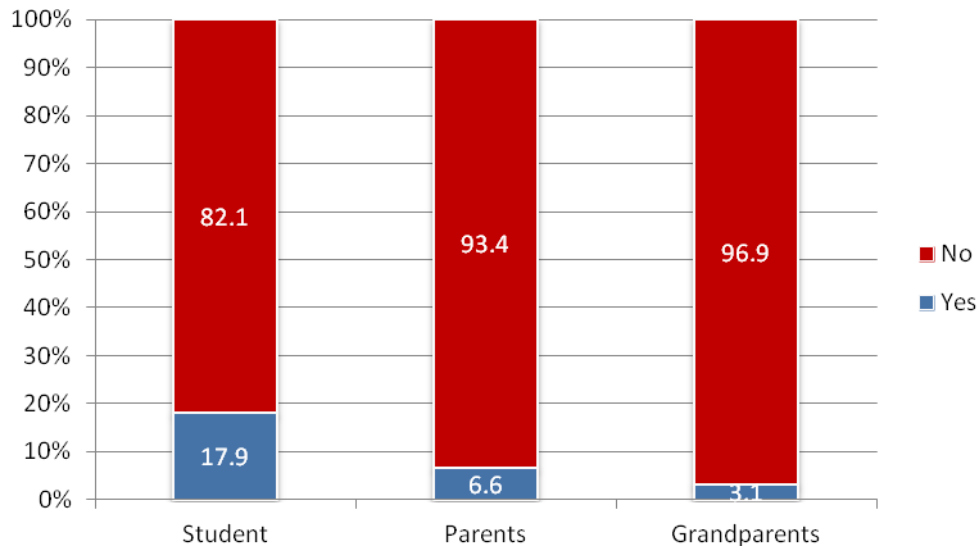


Figure 5 Generational differences in going for extreme sports

As it was mentioned earlier, the “sports modi” appeared on the island of Cyprus but they have not been spreading yet. The results regarding the participation in extreme sports are exactly given the same impression. Although more and more members of the young generation practice extreme sport, they are familiar with relatively few of them.

The frequency of sport involvement was determined at the three different levels which were specified earlier: in recreational sports, competitive sports and in extreme sports. The results based on chi-square analysis are presented in Table 19. They show that there is a significant difference between the three groups regarding the frequency of participation at the three different levels.

Table 19 Frequency of sport participation (results of chi-square analysis)

		$\chi^2$ value	df	p	
How often?	Recreational level (R)	338.097	8	<0.001	significant
	Competitive level (C)	27.020	8	0.01	significant
	Extreme sports (E)	<i>no test (missing cells)</i>			

The frequency of sport participation by the three groups at recreational level and competitive level is shown in Figures 6 and 7.

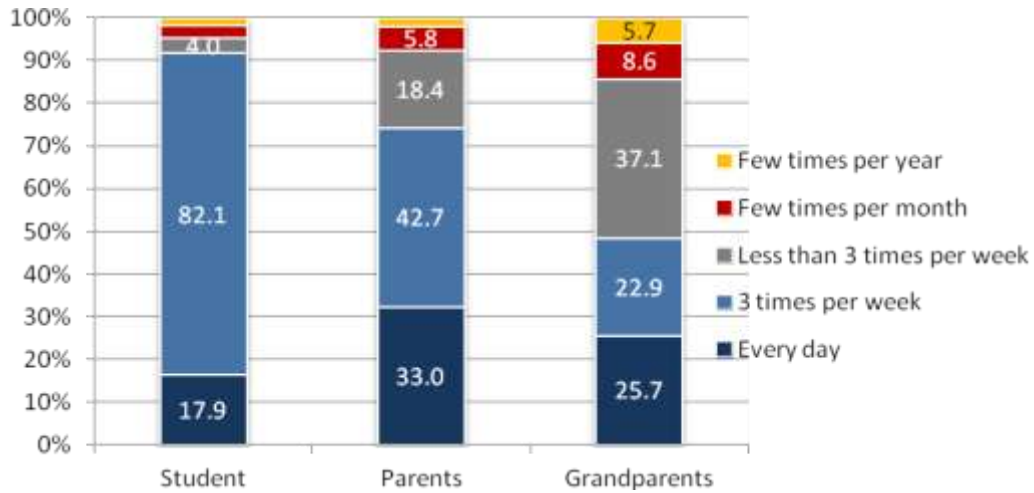


Figure 6 Frequency of participation in recreational sports (R)

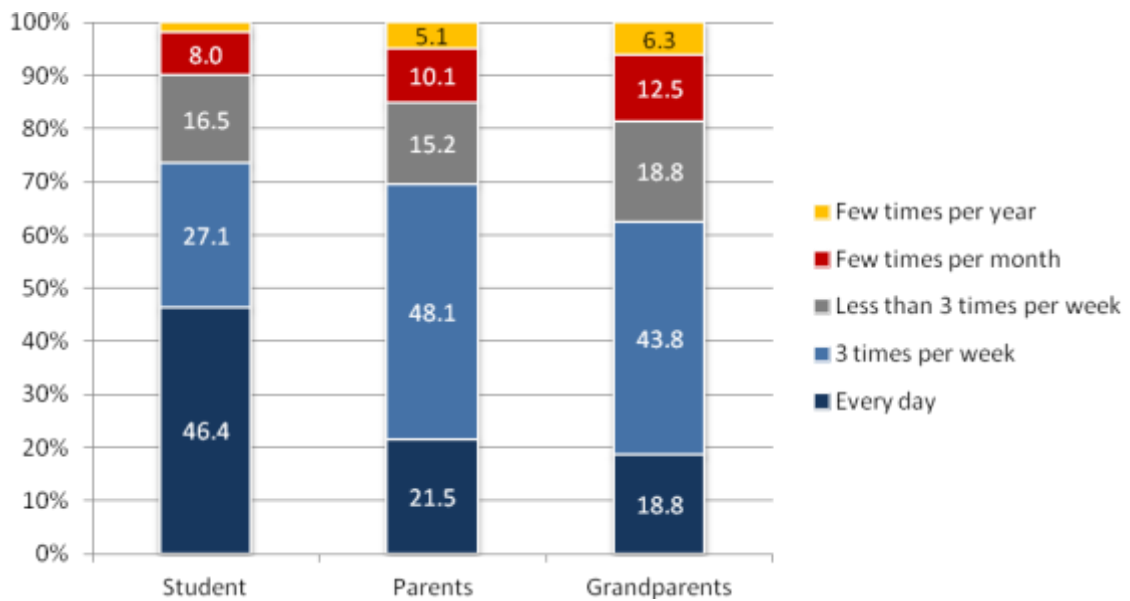
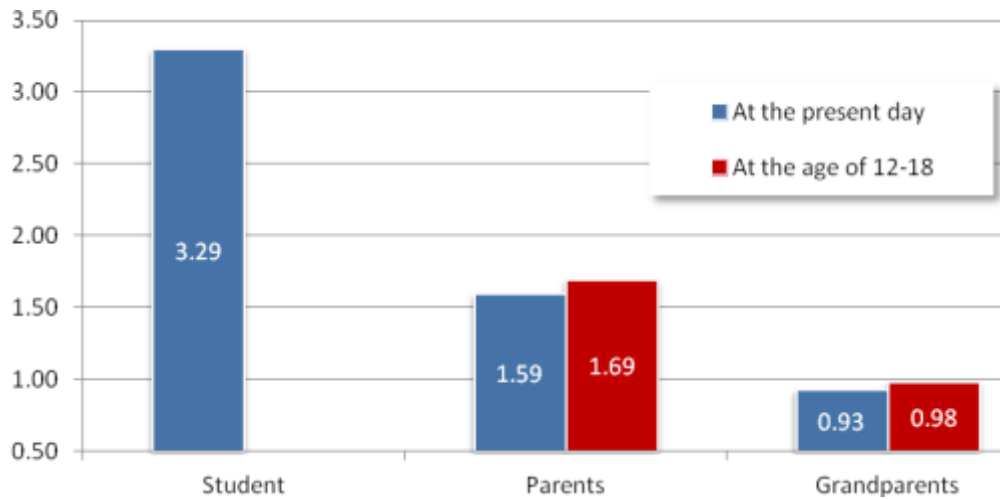


Figure 7 Frequency of participation in competitive sports (C)

*Ownership of sport equipments*

Information about the quantity of sport equipment owned by the members of the three generational groups in different periods of their life cycle also enlarge the picture on their situation related to sport. As it was expected, at present the students own much

more sport equipments than their parents and grandparents have and much more than the latter had in a similar age (Figure 8). The fact that the parents and the grandparents own almost the same quantity of sport equipment today as they did in their childhood demonstrate well how much the importance of sporting activity was underestimated in Cyprus a few decades earlier.



*Figure 8* Sport equipments owned by the three generational groups at present and at the age of 12-18

In order to investigate whether the above noticed differences between the three generational groups are significant statistically, ANOVA analysis was performed (Table 20).

*Table 20* Ownership of sport equipments at present and at the age of 12-18 (results of the ANOVA analysis)

	F value	df	p	
At the present life	103.706	2	<0.001	significant
At the age of 12-18	387.050	2	<0.001	significant

The results revealed that statistically significant differences exist between the three generational groups regarding the ownership of sport equipment at the present and at the age of 12-18. The present differences are surely rooted in the age differences. The

huge differences in the past, besides the low status of sport in Cyprus, can be explained by the fact that in contemporary societies the global market offers a huge variety of sport tools which affect the individual's needs and selections.

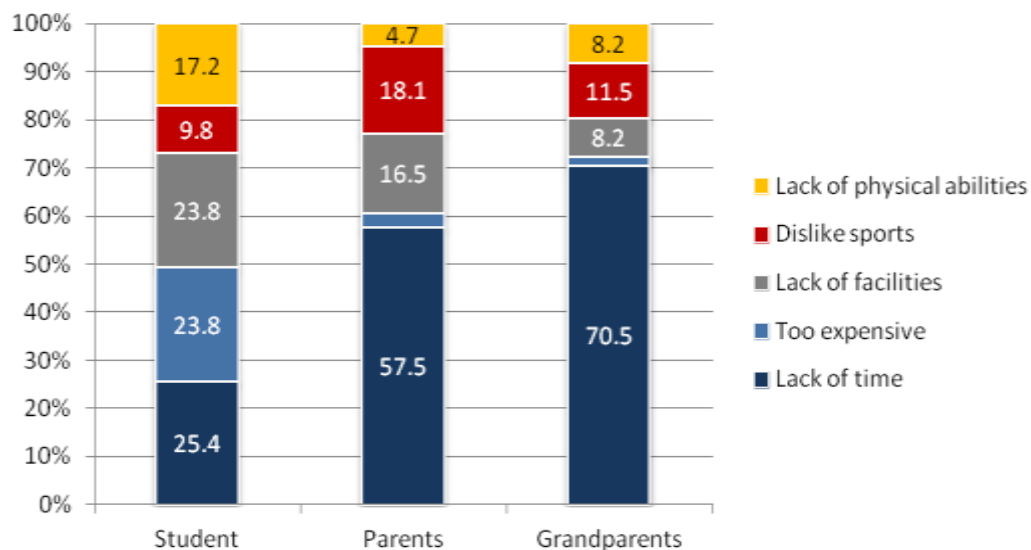
### *Reasons for non-participation*

Regarding the major reasons for non participation in sports, the results of the chi-square analysis (Table 21) showed that there is a significant difference in the explanations of why people decline to practice at recreational and at competitive levels. Concerning extreme sports there are not sufficient data to either to prove or to deny the assumption.

*Table 21* Reasons of non participation in sports (results of chi-square analysis)

		$\chi^2$ value	df	p
Why not? (C)	Recreational level (R)	76.387	10	0.01 significant
	Competitive Level (C)	116.803	10	<0.001 significant
	Extreme Sports (E)	<i>no test (missing cells)</i>		

The reasons for no participation for the three groups are also shown in Figures 9 and 10.



*Figure 9* Reasons for non participation in recreational sports (R)

The results regarding the main reasons for non participation in sport at a recreation level are partly similar to what the international literature revealed, that is the lack of time. Although this explanation is understandable for the parents' generation it seems to be only a pretext for the students' and grandparents' generation. It is surprising that the lack of physical abilities is relatively a frequent reason with the students' generation, much more frequent than with the other two groups. Many students also miss sporting facilities where they could practice those new sports they only heard about and as a new phenomenon, almost one forth of them find the cost of participation in recreational sports too high.

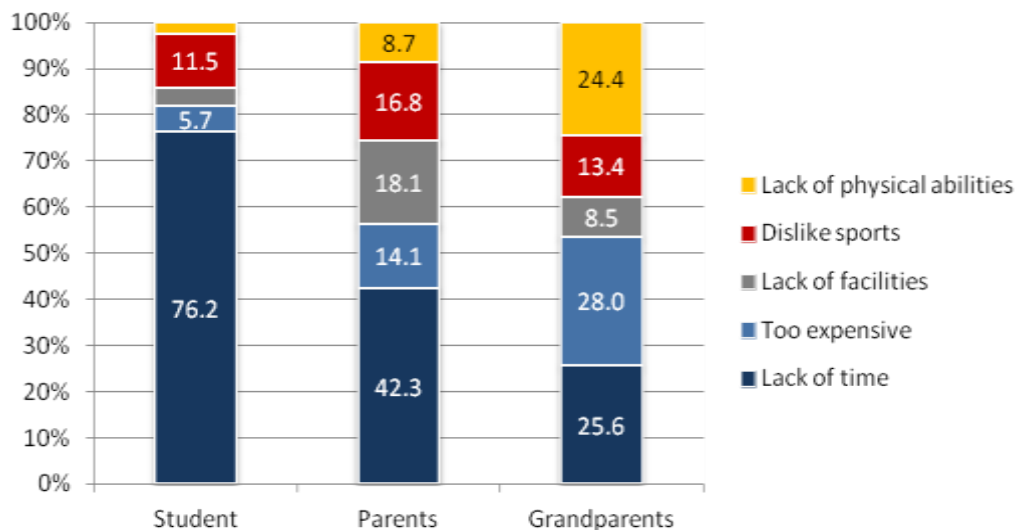


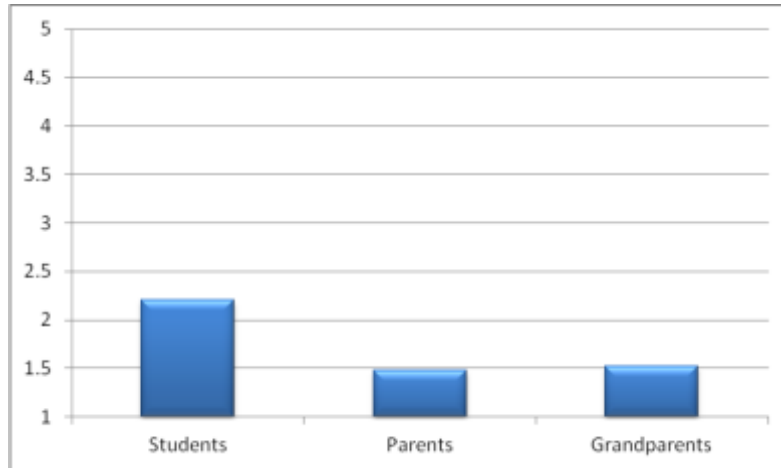
Figure 10 Reasons for non participation in sports at a competitive level (C)

As it concerns the non participation at a competitive level the findings show that some seemingly identical reasons might have different meaning. Lack of time probably refers to real time limitation with the parents' group, but the majority of the students have other priorities, they do not want to spend their time with sport which is more and more similar to working activity. This philosophy is behind the grandparents' and parents' reluctance when they express their dislike and when they refer to the lack of their abilities.

The parents' and the grandparents' reluctance can be noticed in their attitudes and behavior in connection with the Sport for All programs organized by the Cyprus Sport Organization. The results based on ANOVA analysis revealed significant differences between the three generational groups regarding their participation in any Sport for All



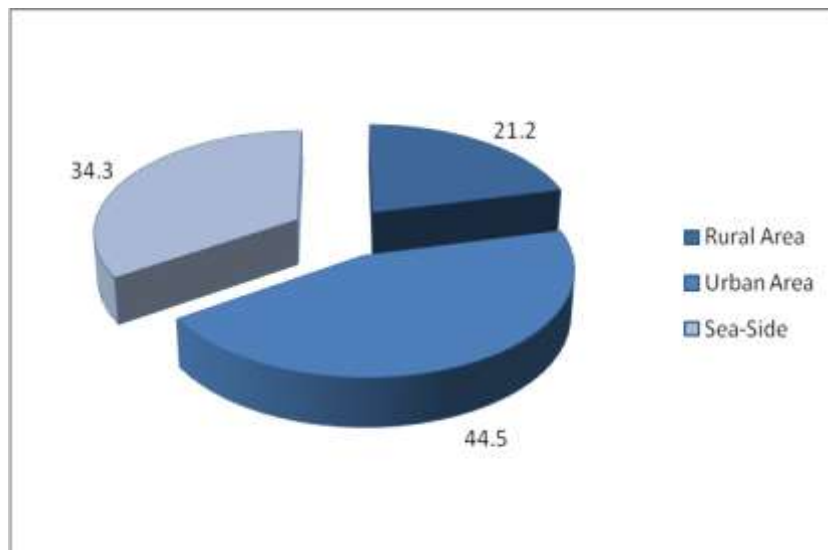
programs. ( $F=57.656$ ,  $df=2$ ,  $p<0.01$ ). The different degree of three groups' involvement also is illustrated in Figure 11.



*Figure 11* Participation in Sport for All programs\*

\*(5=every day.....1= never)

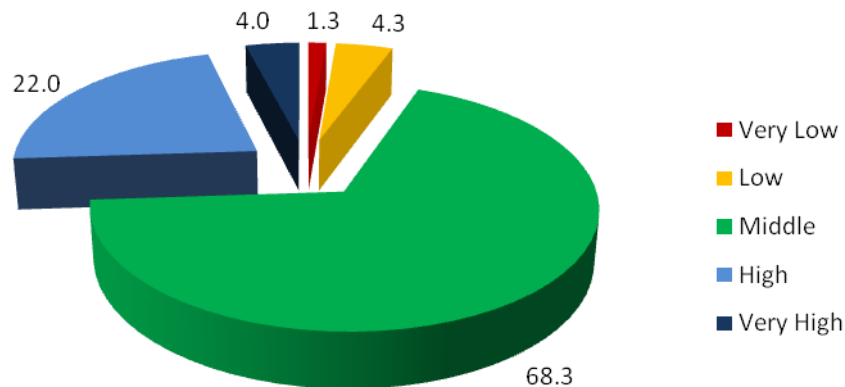
Although the impact of the major demographic and socioeconomic characteristics on the three generations' sporting habits was not a key issue to be examined it was studied how some of them, namely the dwelling place and the economic situation, influenced the youth involvement in sport. As a result of the stratified sampling the students were living in different geographical regions in Cyprus (Figure 12)



*Figure 12* Students' residence at the present (N=741)

In principle it could have been expected that students living in rural area had less access to sport and the traditional value system which survived longer here than in the urban area also might have had an unfavorable impact on their way of thinking and behaving in connection with sport. However, no relationship was found between the residence and the sport participation of the students.

The economic situation in the students' family seems to have more impact. The students' evaluation on the economic circumstances they were living in is presented in Figure 13.



*Figure 13* Economic situation of students' families (N=741)

In order to examine how their families' economic characteristic had an impact on the students' habits concerning the venue where they practice and their opinion about the importance of sport in lifestyle, ANOVA analysis were performed. In order to clarify how the economic background has an impact on the students' level of participation, a t-test was conducted. The results based on the ANOVA analyses show that the economic situation of the students affects their sport practice as it concern the venue of the practice; students with higher economic status have higher chance to attend fitness centres (Table 22). The same phenomenon is also reflected in Figure 14.

Table 22 Venue of the students' sport practice and their economic situation (results of the ANOVA analyses)

	<b>F value</b>	<b>df</b>	<b>p</b>	
Nature (outdoor environment)	0.738		p=0.565	NS
Private sport facilities (tennis courts, footsal fields, swimming pools, etc.)	1.371		p=0.242	NS
Fitness centre	4.852	4	p<0.05	significant
School	0.268		p=0.898	NS
At home	0.913		p=0.456	NS

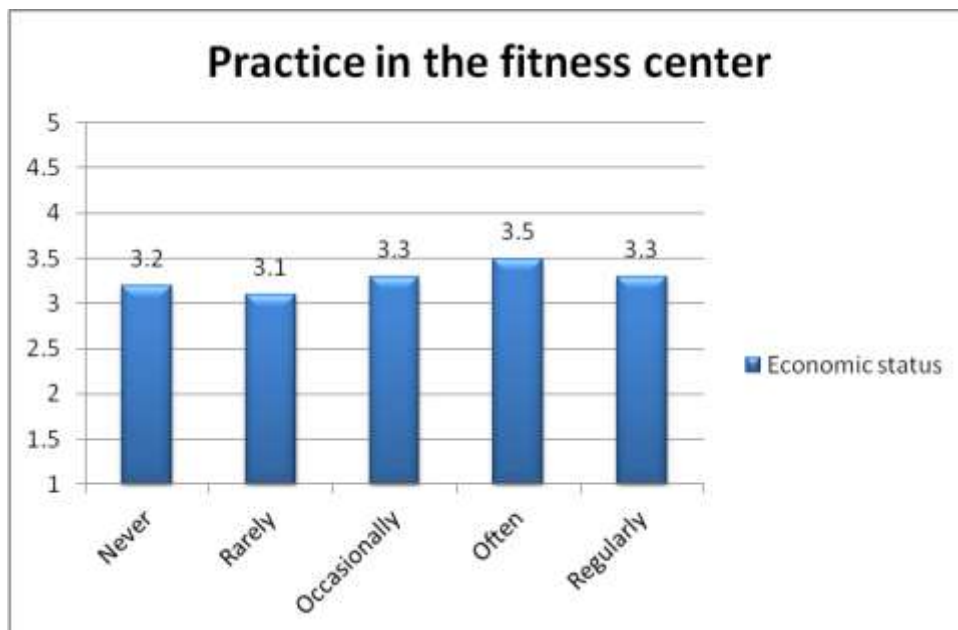
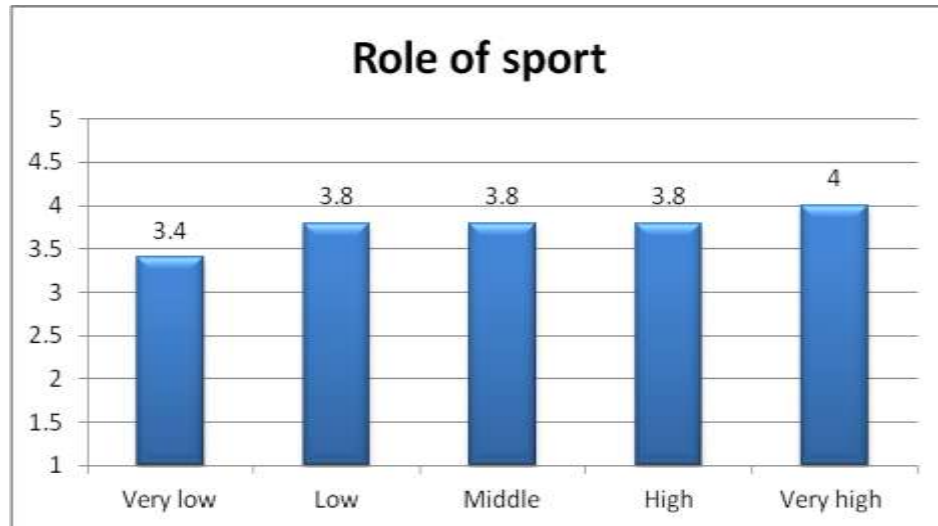


Figure 14 Frequency of practicing in fitness centers according to the students' economic background (N=741)

At the same time the ANOVA analyses ( $F = 1.10$ ;  $df = 4$ ; NS) revealed that there are no significant differences between the students' economic background and their opinion about the importance of the role of sport in life. Figure 15 also show the students' opinion about this issue.



*Figure 15* Students' opinions about the importance of the role of sport according to their economic background (N=741)

The t-test analysis revealed a statistically significant difference in participation in competitive sports by students with different economic background (Table 23). It means that although several students complained about the high price of fitness clubs, they participated in recreational sports and in extreme sports regardless of their economic background, involvement in competitive sports required more favourable economic circumstances.

*Table 23* Level of sport participation according to the students' economic background (results of the t-test analyses)

	<b>t value</b>	<b>df</b>	<b>p</b>	<b>p</b>
Recreational Level	-0.567	732	p>0.5	NS
Competitive Level	2.792	732	p<0.05	significant
Extreme Sports	0.840	732	p>0.5	NS

#### 4.2.2 Socializing agents of primary involvement in sport

In order to make a comparison between the three generational groups regarding the importance of various sport socializing agents in their life, one-way ANOVA analysis were used. The fact that the sample was under a normal distribution led to the

implementation of the ANOVA analysis. The results, as presented in Table 24, revealed that statistically significant differences exist between the three generational groups concerning the importance of the examined seven socializing agents.

*Table 24* Importance of sport socializing agents with the three generations (results of the ANOVA analysis)

<b>Factors</b>	<b>F value</b>	<b>df</b>	<b>p</b>	<b>p</b>
Friends	48.414	2	p<0.01	significant
Family	45.334	2	p<0.01	significant
Coach	94.269	2	p<0.01	significant
TV	52.951	2	p<0.01	significant
School	25.571	2	p<0.01	significant
PE teacher	24.377	2	p<0.01	significant
Magazines	32.243	2	p<0.01	significant

The data in Table 24 indicate that the three generations have statistically significant differences regarding the following factors: *Friends* ( $F_{(2)} = 48.414$ ,  $p < 0.01$ ), *Family* ( $F_{(2)} = 45.334$ ,  $p < 0.01$ ), *Coach* ( $F_{(2)} = 94.269$ ,  $p < 0.01$ ), *TV* ( $F_{(2)} = 52.951$ ,  $p < 0.01$ ), *School* ( $F_{(2)} = 25.571$ ,  $p < 0.01$ ), *PE teacher* ( $F_{(2)} = 24.377$ ,  $p < 0.01$ ) and *Magazines* ( $F_{(2)} = 32.243$ ,  $p < 0.01$ ).

A Tukey post hoc test was also performed the results of which revealed that only the group of students' differed significantly from the other two generational groups concerning all factors in this respect. Between the two adults' group significant differences were found just in case of a few factors (Table 25).

Table 25 Results of the Tukey post hoc test on sport socializing agents

Investigated factors	Groups	Groups	Mean Difference	Std. Error	Sig.
Family	Students	Parents	0.775	0.098	0
		Grandparents	1.001	0.14	0
	Parents	Students	-0.775	0.098	0
		Grandparents	0.226	0.157	0.323
	Grandparents	Students	-1.001	0.14	0
	Parents	-0.226	0.157	0.323	
Friends	Students	Parents	0.675	0.099	0
		Grandparents	1.078	0.141	0
	Parents	Students	-0.675	0.099	0
		Grandparents	0.403	0.158	0.029
	Grandparents	Students	-1.078	0.141	0
	Parents	-0.403	0.158	0.029	
School	Students	Parents	0.321	0.095	0.002
		Grandparents	0.691	0.135	0
	Parents	Students	-0.321	0.095	0.002
		Grandparents	0.37	0.152	0.039
	Grandparents	Students	-0.691	0.135	0
	Parents	-0.37	0.152	0.039	
TV	Students	Parents	0.597	0.098	0
		Grandparents	0.848	0.14	0
	Parents	Students	-0.597	0.098	0
		Grandparents	0.252	0.157	0.245
	Grandparents	Students	-0.848	0.14	0
	Parents	-0.252	0.157	0.245	
Investigated factors	Groups	Groups	Mean Difference	Std. Error	Sig.
PE Teacher	Students	Parents	0.292	0.102	0.012
		Grandparents	0.69	0.145	0
	Parents	Students	-0.292	0.102	0.012
		Grandparents	0.398	0.163	0.039
	Grandparents	Students	-0.69	0.145	0
	Parents	-0.398	0.163	0.039	
Magazines	Students	Parents	0.482	0.082	0
		Grandparents	0.636	0.117	0
	Parents	Students	-0.482	0.082	0
		Grandparents	0.154	0.132	0.474
	Grandparents	Students	-0.636	0.117	0.
	Parents	-0.154	0.132	0.474	
Coach	Students	Parents	0.832	0.113	0
		Grandparents	1.08	0.161	0
	Parents	Students	-0.832	0.113	0
		Grandparents	0.248	0.181	0.355
	Grandparents	Students	-1.08	0.161	0
	Parents	-0.248	0.181	0.355	

The results presented in Figure 16 also give a detailed insight in the differences regarding the importance of the different socializing agent in the promotion of the three generations' involvement in sport.

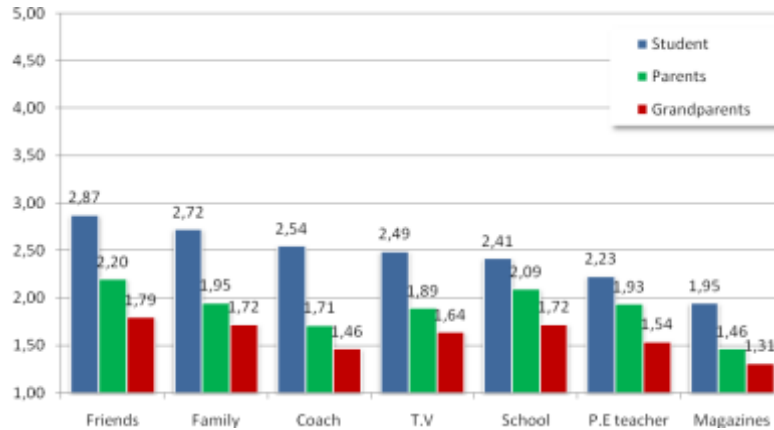


Figure 16 Importance of socializing agents regarding sport participation \*

\*(1=not at all.....5=very much)

#### 4.2.3 Motivations for primary involvement in sport

With the aim to examine the motivations for participation in sporting activities at the present time and at the age of 12-18, the motivations were clustered into two factors: *Joy* and *Health Factor*. The three generations have statistically significant differences between them, both in their activities at present and the age of 12-18.

In order to examine the factors which motivate Cypriots at the present to get involved in sporting activities, Factor analysis was used. The Kaiser-Meyer-Olkin (KMO) index was 0.719, which is a satisfactory value allowing to continue with the Factor analysis. Two factors derived from the Factor analysis are presented in Table 26. The 52.288% of the cumulative variance attributed to the first two factors and hence this model with the two factors could be sufficient to be representative of the variables related to motivational issue.

Table 26 Factor loading of the two factors against the motivation degree for participation in sporting activity at the present time

Items	Factors		h <sup>2</sup>
	I	II	
<i>Joy factor (a=0.801)</i>			
To have fun	0.784	0.171	0.64
To relax from day to day life	0.702	0.297	0.58
To meet other people	0.633	0.205	0.44
To develop my personality	0.582	0.129	0.35
<i>Health factor (a=0.771)</i>			
To improve health	0.145	0.989	0.99
To improve physical performance	0.493	0.560	0.55
Eigenvalue	3.282	1.061	
Percentage of variance	30.283	22.00	
Cumulative percentage of variance	30.283	52.288	

Regarding the examination of the factors which motivated Cypriots at the age of 12-18 to get involved in sporting activities, Factor analysis was followed as well. The Kaiser-Meyer-Olkin (KMO) index was 0.811, which is a satisfactory value allowing to continue with the Factor analysis. Two factors derived from the Factor analysis are presented in Table 27.

52.008% of the cumulative variance attributed to the first two factors and hence this model with the two factors could be sufficient to be representative of the questionnaire's variables related to motivational issues.



Table 27 Factor loading of the two factors against the motivation degree for participation in sporting activity at the age of 12-18

Items	Factors		h <sup>2</sup>
	I	II	
<i>Joy factor (a =0.784)</i>			
To have fun	0.703	0.192	0.53
To relax from day to day life	0.670	0.350	0.57
To meet other people	0.645	0.208	0.45
To develop my personality	0.565	0.199	0.35
<i>Health factor (a=0.808 )</i>			
To improve health	0.162	0.986	0.99
To improve physical performance	0.486	0.606	0.60
Eigen value	3.37	0.98	
Percentage of variance	28.193	23.816	
Cumulative percentage of variance	28.193	52.008	

The results<sup>5</sup> from the analysis, as presented in Tables 28 and 29 revealed that significant statistical differences exist between the three generational groups concerning the two factors at the present time.

<sup>5</sup> It should be noted that ANOVA's results are presented in z scores.

Table 28 Differences among the three generational groups regarding the two factors at the present time (results of the ANOVA analysis)

Factors	Students		Parents		Grand parents		F value
	Mean	SD	Mean	SD	Mean	SD	
(1)	0.746	0.192	0.334	0.21	0.232	0.208	$F_{(2,1064)}=101.027^{***}$
(2)	0.20	0.23	0.251	0.25	0.596	0.226	$F_{(2,1064)}=4.772^{**}$

ns = non significant; \*  $p < 0.05$ ; \*\*  $p < 0.01$ ; \*\*\*  $p < 0.001$

A one way analysis of variance (ANOVA) revealed that significant statistical differences exist between the three generational groups concerning the *Joy Factor* [ $F_{(2, 1064)}= 101.027, p < 0.001$ ] and *Health Factor* [ $F_{(2, 1064)}= 4.772, p < 0.01$ ] at the present time (Table 29).

Table 29 Differences among the three generational groups regarding the two factors at the present time (Bonferroni post hoc analysis)

Factors	Group A	Group B	Mean Difference	Sig.
Joy	Students	Parents	0.412	0.001
	Students	Grand-parents	0.514	0.001
	Parents	Grand-parents	0.102	0.01
Health	Students	Parents	0.051	0.001
	Students	Grand-parents	0.396	0.001
	Parents	Grand-parents	0.345	0.001

Regarding the *Joy Factor* post hoc analyses, using the Bonferroni post hoc criterion for significance, indicated that statistically significant differences exist between all the three generational groups, more specifically between students and parents (Mean Difference=0.412,  $p < 0.001$ ), students and grandparents (MD=0.514,  $p < 0.001$ ), parents and grandparents (MD=0.102,  $p < 0.01$ ). Regarding the *Health Factor* post hoc analyses, using the Bonferroni post hoc criterion for significance indicated that statistically significant differences exist between all the three generational groups, more

specifically between students and parents (MD=0.051,  $p < 0.001$ ), students and grandparents (MD=0.396,  $p < 0.001$ ), parents and grandparents (MD=0.345,  $p < 0.001$ ).

According to the results of a one way analysis of variance (ANOVA) significant statistical differences also exist between the three generational groups concerning the *Joy Factor* [ $F_{(2, 1064)} = 17.363$ ,  $p < 0.001$ ] and *Health Factor* [ $F_{(2, 1064)} = 126.950$ ,  $p < 0.01$ ] when the comparison refers to the age of 12-18 (Table 30).

Table 30 Differences between the three generational groups regarding the two factors at the age of 12-18 (results of the ANOVA analysis)

Factors	Students		Parents		Grand parents		F value
	Mean	SD	Mean	SD	Mean	SD	
(1)	0.523	0.192	0.412	0.23	0.378	0.22	$F_{(2,1064)} = 17.363^{***}$
(2)	0.265	0.23	0.462	0.26	0.781	0.23	$F_{(2,1064)} = 126.950^{**}$

ns = non significant; \*  $p < 0.05$ ; \*\*  $p < 0.01$ ; \*\*\*  $p < 0.001$ .

Regarding the *Joy Factor*, post hoc analyses, using the Bonferroni post hoc criterion for significance, indicated that statistically significant differences exist between students and parents (MD=0.111,  $p < 0.001$ ), students and grandparents (MD=0.145,  $p < 0.001$ ), but not between parents and grandparents (MD=0.034,  $p < 0.076$ ). Regarding the *Health Factor*, post hoc analyses, using the Bonferroni post hoc criterion for significance, indicated that statistically significant differences exist between students and parents (MD=0.197,  $p < 0.001$ ), students and grandparents (MD=0.516,  $p < 0.001$ ), parents and grandparents (MD=0.319,  $p < 0.001$ ) (Table 31).

Table 31 Differences between the three generational groups regarding the two factors at the age of 12-18 (Bonferroni post hoc analysis)

Factors	Group A	Group B	Mean Difference	Sig.
Joy	Students	Parents	0.111	0.001
	Students	Grand-parents	0.145	0.001
	Parents	Grand-parents	0.034	0.076
Health	Students	Parents	0.197	0.001
	Students	Grand-parents	0.516	0.001
	Parents	Grand-parents	0.319	0.001

#### 4.2.4 Secondary involvement in sport: consuming sport

Out of the different kinds of secondary involvements in this research sport consumption was studied. More precisely it was examined how often the members of the three generations attend sporting events, how often they read about sport, and how often they watch sport related programs in the television both at national and at international levels. The results are presented in Figure 17.

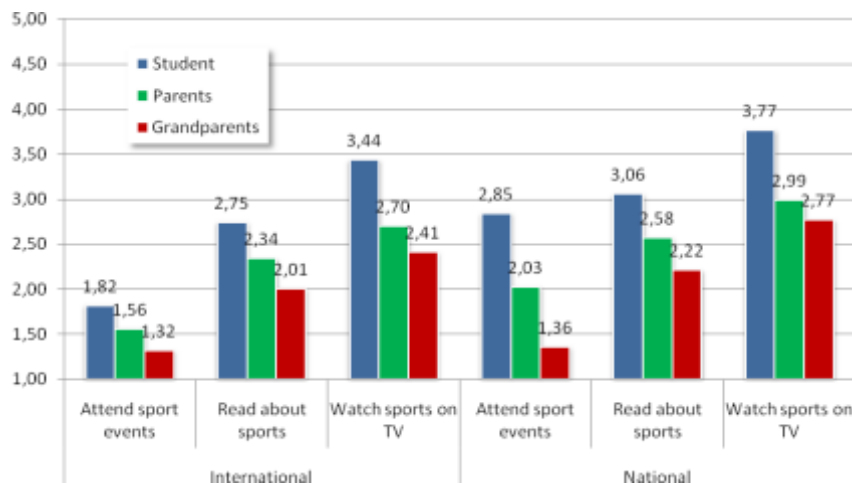


Figure 17 Frequency of secondary involvement in sports \*

\*(1=never.....5=regularly)

National sport is preferred to international sport by all the three generations in connection with the different kind of sport consumption. Notwithstanding, international

sports seem to be popular enough as far as watching their televised events is concerned. Of course, the cost also has an impact on the frequency of consuming sport, especially on the attendance of international matches or other international sport competitions. Generally speaking, Cypriot attend international sporting events which take place in Cyprus, except a few groups consisting of enthusiastic football fans that follow their teams when they play a match abroad.

In order to make a comparison between the three generational groups regarding the frequency of their sport consumption, one-way analysis of variance (ANOVA) was also used (Table 32).

*Table 32* Frequency of secondary involvement in sports (results of the ANOVA analysis)

		<b>F value</b>	<b>df</b>	<b>p</b>	
<b>International</b>	Attend sport events	13.693	2	p<0.01	sign
	Read about sports	16.205	2	p<0.01	sign
	Watch sports on TV	37.685	2	p<0.01	sign
<b>National</b>	Attend sport events	71.906	2	p<0.01	sign
	Read about sports	20.959	2	p<0.01	sign
	Watch sports on TV	41.622	2	p<0.01	sign

The results from this analysis, as presented in Table 32, revealed that statistically significant differences exist between the three generational groups concerning all examined sport consuming habits: Attending international sport events ( $F_{(2)} = 13.693$ ,  $p < 0.01$ ), Reading about international sports ( $F_{(2)} = 16.205$ ,  $p < 0.01$ ), Watching international sports on TV ( $F_{(2)} = 37.685$ ,  $p < 0.01$ ), Attending national sport events ( $F_{(2)} = 71.906$ ,  $p < 0.01$ ), Reading about national sports ( $F_{(2)} = 20.959$ ,  $p < 0.01$ ) and Watching national sports on TV ( $F_{(2)} = 41.622$ ,  $p < 0.01$ ).

It was expected that young people attend sporting events the most frequently. However, it was not expected that just few grandparents go to see even football matches to the stadia. It also was surprising that the young people spend much more time in front of the television watching sport related events than their parents and grandparents. The

differences in the three generations' sport socialization can be behind this contradictory phenomenon.

In contrary to our expectations, the results of the Tukey post hoc test (Table 33) showed that the students are the most active in all areas of sport consumption examined in this investigation. The generation of the grandparents follows very slowly the changes in the similarly slowly changing Cypriot sport culture. The differences in the three generations' sport socialization can be behind this contradictory phenomenon.

Table 33 Results of the Tukey post hoc test on sport consumption

	Investigated factors	Groups	Groups	Mean Difference	Std. Error	Sig.
International	Attend sporting events	Students	Parents	0.261	0.078	0.002
			Grandparents	0.504	0.111	0
		Parents	Students	-0.261	0.078	0.002
			Grandparents	0.244	0.125	0.124
		Grandparents	Students	-0.504	0.111	0
			Parents	-0.244	0.125	0.124
	Read about sports	Students	Parents	0.401	0.106	0.001
			Grandparents	0.735	0.152	0
		Parents	Students	-0.401	0.106	0.001
			Grandparents	0.335	0.17	0.121
		Grandparents	Students	-0.735	0.152	0
			Parents	-0.335	0.17	0.121
	Watch sports on TV	Students	Parents	0.734	0.109	0
			Grandparents	1.025	0.156	0
		Parents	Students	-0.734	0.109	0
		Grandparents	0.291	0.175	0.22	
Grandparents		Students	-1.025	0.156	0	
		Parents	-0.291	0.175	0.22	
National	Attend sporting events	Students	Parents	0.82	0.103	0
			Grandparents	1.485	0.146	0
		Parents	Students	-0.82	0.103	0
			Grandparents	0.665	0.164	0
		Grandparents	Students	-1.485	0.146	0
			Parents	-0.665	0.164	0
	Read about sports	Students	Parents	0.481	0.109	0
			Grandparents	0.841	0.156	0
		Parents	Students	-0.481	0.109	0
			Grandparents	0.36	0.174	0.098
		Grandparents	Students	-0.841	0.156	0
			Parents	-0.36	0.174	0.098
	Watch sports on TV	Students	Parents	0.777	0.106	0
			Grandparents	0.996	0.151	0
		Parents	Students	-0.777	0.106	0
		Grandparents	0.218	0.17	0.404	
Grandparents		Students	-0.996	0.151	0	
		Parents	-0.218	0.17	0.404	

### ***4.3 Customs related to physical activity***

#### *4.3.1 Changes in everyday physical activity*

In older time the everyday life and work contained sufficient physical activities to satisfy the human body's need for it. The advancements in science and technology which generally speaking can be characterized both by positive and negative consequences, have changed this situation, since the second half of the 20<sup>th</sup> century physically inactive way of life have been spreading.

Due to the special historical circumstances, mainly being a colony until 1960, the advancements in science and technology affected the various aspect of the Cypriot people's life relatively late. According to Bathrellou et al. [7], a rapid urbanization, a large migration and major demographic changes only occurred during the last three decades in Cyprus. However, since the modern way of life has gained ground there in the end, and it requires less and less compulsory physical activities, the negative elements that can be derived from science and technology have manifested themselves in the spreading of sedentary lifestyle also in Cyprus [14]. The acceleration of urbanization, the development of transportation and communication, and the increasing use of the mass media and the internet resulted in the decreasing of the Cypriot population's everyday physical activity both intergenerationally and intragenerationally. In this thesis research data concerning the changes in the frequency, intensity and in the kind of daily physical activity throughout the three generations' life and within the life cycle of the two adult generations are presented.

#### *4.3.2 Intragenerational changes of physical activity*

In order to identify how the physical activity throughout the parents' and grandparents' own generation changed data of retrospective nature were needed in addition to the present time data. The findings of the Wilcoxon two-sample test related to the middle-aged people show that the ranks changed negatively. The differences between the frequency of the middle-aged people's physical activity at the present and at the age of 12-18 are significant in all areas, except physical activity in the house

(gardening, housework, etc). It means that the middle-aged Cypriot adults' daily routine comprises significantly less physical activity than it did in their childhood and adolescent years; they walk less indoor and less frequently to and from their work places. The fact that at the same time they have more household chores does not justify this modification. Moreover, all kinds of health related exercises lessened in their weekly and daily programmes (Table 34).

*Table 34* The changes in the frequency of physical activity between present and at the age of 12-18 with the parents' generation (Hours/Day) (results of the Wilcoxon two related sample test analysis)

	<b>Negative Ranks</b>	<b>Positive Ranks</b>	<b>Ties</b>	<b>Z</b>	<b>P</b>
	<i>Present time &lt; Age of 12-18</i>	<i>Present time &gt; Age of 12-18</i>	<i>Present time = Age of 12-18</i>		
Sitting during school or work	38	<b>65</b>	126	-3.008	0.01
Moving on foot outdoor during school or work	<b>79</b>	45	105	-3.417	0.01
Walking indoor during school or work	<b>69</b>	54	106	-1.917	0.06
Watching T.V or play video games	46	<b>59</b>	124	-1.265	0.21
Moving on foot outdoor during free time	<b>94</b>	28	107	-6.344	0.01
Walking indoor during free time	35	<b>49</b>	229	-1.142	0.26
Being active to the point you start sweating	<b>72</b>	21	136	-4.605	0.01



Further analysis of the Wilcoxon Signed Rank Test also revealed the way in which the selected variables changed significantly. For instance, the today's middle-aged adults were sitting less in their childhood during classes than they do it nowadays in their work places ( $Z = -3.008$ ,  $p = .01$ ). On the other hand, they moved more outside of their school time than they do it outside of their work time ( $Z = -3.417$ ,  $p = .01$ ). They were playing or practicing much more frequently in their youth to the point of sweating than they do it in these days ( $Z = -6.344$ ,  $p = .01$ ). Although the differences are not significant statistically, it is worthwhile of mentioning that the middle-aged people watch TV or play video games more frequently in their adulthood than they did it in their age of 12-18 ( $Z = -1.265$ ,  $p = .21$ ). The later fact is explained by the delayed spreading of the television in Cyprus, which started as late as in 1976.

The most considerable decline occurred in the intensity of their still existing physical activity, the decrease in their vigorous physical activity is the most spectacular (Table 35).

*Table 35* Changes in the intensity of physical activities between the age of 12-18 and present time with the middle-aged generation (days/week)

	Negative Ranks	Positive Ranks	Ties	<b>Z</b>	<b>P</b>
	<i>Present time &lt; Age of 12-18</i>	<i>Present time &gt; Age of 12-18</i>	<i>Present time = Age of 12-18</i>		
Vigorous physical activity	<b>89</b>	19	121	-6.667	0.01
Moderate physical activity	<b>76</b>	25	128	-5.440	0.01
Indoor walking	<b>80</b>	29	120	-4.744	0.01
Walking to and from school/ work	<b>82</b>	26	121	-5.887	0.01
Physical activity in the house	33	<b>69</b>	127	-4.289	0.01
Non regular physical activity.	<b>90</b>	27	112	-5.988	0.01

Although the values of the scores are different, similar tendencies could be observed when the results of the Wilcoxon two related sample were evaluated with the group of elderly. Comparing the negative and the positive ranks at the present time and at the age of 12-18, significant differences can be noticed in all daily living and health related physical activities. In contrast of the middle-aged, the household chores did not increase but decreased with the old people (Table 36).

*Table 36* The changes in the frequency of physical activity at the present and at the age of 12-18 with the grandparents' generation (Hours/Day) (results of the Wilcoxon two related sample test analysis)

	<b>Negative Ranks</b>	<b>Positive Ranks</b>	<b>Ties</b>	<b>Z</b>	<b>P</b>
	<i>Present time &lt; Age of 12-18</i>	<i>Present time &gt; Age of 12-18</i>	<i>Present time = Age of 12-18</i>		
Sitting during school or work	<b>32</b>	9	56	-3.632	0.01
Moving on foot outdoor during school or work	<b>36</b>	12	49	-2.952	0.01
Walking indoor during school or work	<b>32</b>	18	47	-1.371	0.170
Watching T.V or play video games	16	<b>19</b>	62	-0.161	0.872
Moving on foot outdoor during free time	<b>35</b>	11	51	-3.120	0.01
Walking indoor during free time	<b>34</b>	13	50	-2.951	0.01
Being active to the point you start sweating	<b>29</b>	12	56	-2.745	0.01

A more detailed evaluation of the data gained with the help of the Wilcoxon test show that the daily routine also changed with the elderly concerning the frequency and the intensity of their different activities. For instance, since they are getting old and work much less, grandparents' generation spends less time in sitting at work than they

did during their school time. They also walk less frequently indoor and watch TV or play video games less frequently than in their age of 12-18. In case of the grandparents the examined variables changed in the following ways: *sitting during school/work* ( $Z = -3.632$ ,  $p = .01$ ), the *moving on foot outdoor during school/work* ( $Z = -2.952$ ,  $p = .01$ ), the *moving on foot outdoor during free time* ( $Z = -3.120$ ,  $p = .01$ ), the *walking indoor during free time* ( $Z = -2.951$ ,  $p = .01$ ) and the *being active to the point you start sweating* ( $Z = -2.745$ ,  $p = .01$ ) variables changed in a negative direction and the differences are significant. The *walking indoor during school/work* ( $Z = -1.371$ ,  $p = .170$ ) variable changed negatively but the differences are not statistically significant. Finally, the *watching TV or play video games* ( $Z = -0.161$ ,  $p = .872$ ) variable changed in a positive direction, but the differences are not statistically significant. Although the elderly are sitting more frequently in front of the television and the computer than they did in their age of 12-18 when these alternatives for spending free time did not exist, they use so little time for the latter activities that they are not the obstacle preventing them from being more active physically. With the grandparents' generation the differences are the most striking in the case of vigorous physical activity and in the case of non regular physical activity (Table 37).

Table 37 Intragenerational changes in the intensity of physical activities between the age of 12-18 and the present with the elderly (days/week)

	Negative Ranks	Positive Ranks	Ties	Z	P
	<i>Present time &lt; Age of 12-18</i>	<i>Present time &gt; Age of 12-18</i>	<i>Present time = Age of 12-18</i>		
Vigorous physical activity	<b>41</b>	6	50	-4.918	0.01
Moderate physical activity	<b>39</b>	12	46	-3.981	0.01
Indoor walking	<b>27</b>	18	52	-2.173	0.01
Walking to and from school/work	<b>33</b>	8	56	-4.074	0.01
Physical activity in the house	<b>31</b>	17	49	-2.334	0.01
Non regular physical activity	<b>39</b>	9	49	-4.172	0.01

### 4.3.3 Intergenerational changes in physical activity

Customs related to physical activity can be changed not only within one generation's lifetime, but they can be altered relative to the previous generations' life cycle. In this thesis some selected elements of the way of life regarding physical activity and inactivity is examined with the three generations when they were in the same age, more specifically when they were 12-18 year old.

First of all the students', their parents' and their grandparents' opinion was compared in connection with the importance of physical activity in life. It turned out that the younger a generation the higher their opinion on the necessity of physically active elements in the everyday life (Figure 18).

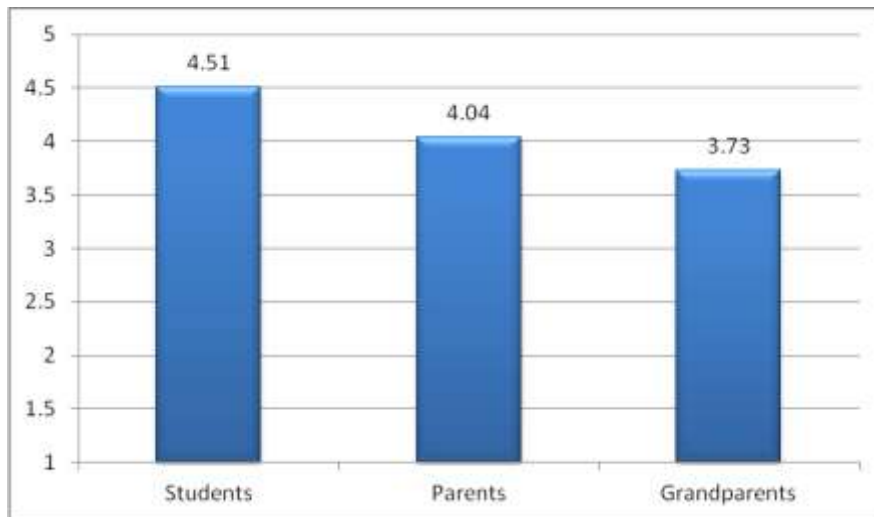


Figure 18 Opinions about the importance of physical activity\*

\*(1: not important.....5: extremely important)

An analyses of variance (ANOVA) was performed in connection with the above findings the results of which revealed that statistically significant differences exist between the three generational groups concerning their opinion with regard to the importance of being physically active ( $F = 38.333$ ,  $df = 2$ ,  $p < 0.01$ ).

Then it was studied how much time the members of the three generations spent with six particular activities in their age of 12-18. Obviously with the students it meant the frequency of these activities at present; the data concerning the parents and grandparents were of retrospective character (Table 38).

Table 38 Time spent for physically active and inactive elements in everyday life at the age of 12-18

	Duration per day	Students	Parents	Grandparents
Sitting during school	>3 hours	43.9	38.0	26.8
	1,5-3h	14.4	10.0	8.2
	30min-1.5h	18.5	13.1	14.4
	<30min	23.2	38.9	50.6
<b>Total</b>		<b>100</b>	<b>100</b>	<b>100</b>
Moving on foot outdoor during school	>3 hours	5.1	15.7	29.9
	1.5-3h	7.7	19.2	16.5
	30min-1.5h	34.5	25.3	15.5
	<30min	52.7	39.8	38.1
<b>Total</b>		<b>100</b>	<b>100</b>	<b>100</b>
Walking indoor during school	>3 hours	2.5	8.3	10.3
	1.5-3h	7.6	12.7	24.7
	30min-1.5h	26.3	26.6	18.6
	<30min	63.6	52.4	46.4
<b>Total</b>		<b>100</b>	<b>100</b>	<b>100</b>
Watching TV or playing video games	>3 hours	28.1	7.0	5.2
	1.5-3h	26.4	13.5	10.3
	30min-1.5h	27.9	22.3	10.3
	<30min	17.6	57.2	74.2
<b>Total</b>		<b>100</b>	<b>100</b>	<b>100</b>
Moving on foot outdoor during free time	>3 hours	35.0	39.0	38.0
	1.5-3h	33.0	24.0	16.0
	30min-1.5h	21.0	19.0	18.0
	<30min	11.0	18.0	28.0
<b>Total</b>		<b>100</b>	<b>100</b>	<b>100</b>
Being active to the point you start sweating	>3 hours	49.3	48.9	53.6
	1.5-3h	21.7	18.3	9.3
	30min-1.5h	18.0	15.3	13.4
	<30min	11.0	17.5	23.7
<b>Total</b>		<b>100</b>	<b>100</b>	<b>100</b>

The above results means that today's students are sitting at classes longer time than their parents did when they attended school, and their parents were sitting more at classes than their own parents, that is, today's grandparents. The grandparents' generation spent more time on average with walking to and from school, and the same activity requires the less time from their grandchildren. Not only because there are more school than there used to be, but they go to school more often by public transport. The youngsters watch television longer hours than the middle-aged and the elderly are sitting in front of the television or the computer even shorter time than the middle-aged.

The differences between the students, their parents and their grandparents regarding the frequencies of these activities in their age of 12-18 were examined with the help of chi-square analysis which showed significant intergenerational differences between the three generations concerning the following variables: "sitting at school/" ( $\chi^2 = 45.764$ ,  $p < 0.01$ ); "walking to and from school" ( $\chi^2 = 110.049$ ,  $p < 0.01$ ); "indoor walking" ( $\chi^2 = 55.921$ ,  $p < 0.01$ ); "watching TV or playing video games" ( $\chi^2 = 230.333$ ,  $p < 0.01$ ); "moving out of school" ( $\chi^2 = 34.198$ ,  $p < 0.01$ ); and "being active to the point of sweating" ( $\chi^2 = 29.397$ ,  $p < 0.01$ ) (Table 39).

*Table 39* Frequency of physical activity at the age of 12-18 of the three generational groups (results of the chi-square analyses)

Independent variable	Dependent variable (at the age of 12-18)	$\chi^2$	df	p	
Group <i>student;</i> <i>parents;</i> <i>grandparents</i>	Sitting during school	45.764	6	0.01	sign.
	Moving on foot outdoor during school	110.049	6	0.01	sign.
	Walking indoor during school	55.921	6	0.01	sign.
	Watching T.V or play video games	230.333	6	0.01	sign.
	Moving on foot outdoor during free time	34.198	6	0.01	sign.
	Being active to the point you start sweating	29.397	6	0.01	sign.

The findings also suggest that the significant intergenerational differences regarding both the frequency of and the time spent for various kinds of physical activity manifest themselves partly in a similar, partly in a dissimilar way as it can be observed in most other European Countries.

## 5. DISCUSSION

The findings of this research helped understand some elements of the existing generational gaps in connection with sport and physical education in contemporary Cypriot society. The perceived generational differences have to be discussed in a historical and cultural context.

The today's grandparents' generation spent their childhood during the British colonial area. In that time participation in modern sport was not a serious alternative for spending their leisure; they were rather involved in traditional games and sports. Schools were not a socializing agent; most children had no early sport socialization in the today's sense of the term. Besides, the prevailing traditional value system was puritan; enjoyment, fun, relaxation played much less importance in it than they did some decades later. Moreover, the heavy physical requirements of the dominating agricultural jobs might have contributed to the fact that the importance of sport and exercise for adults used to be underestimated for long time in the Cypriot culture. Generally speaking the middle-aged and the elderly were socialized without learning that intensive physical activities are needed in all ages, many of them do not believe that physical activities can be beneficial not only to young people's development but also to the adult individuals' physical, mental and psychological states. This ignorance can also be in connection with the low level and low status of physical education at their schools where attention had not been paid to discussing sport as a relevant issues, and to promote lifelong sporting activity was not on the agenda at all [16]. Consequently, they do not appreciate highly the health related physical activities for adults and in accordance with their disparaging opinion not too many of them practice. Exercise-intensive approach is far from the majority of them, the decline in vigorous physical activities is drastic after their youth is over. Moreover, the decrease in moderate and in even non regular physical activities is also significant within their lifetime.

The circumstances for sport socialization changed when Cypriot sport developed and became institutionalized, after the island became independent from the colonial rulers in 1960. The parents' generation was growing up about that time. The children of this period received relatively more impulse for sport involvement but this trend was



interrupted when the Turkish forces invaded the island and the country was separated in two.

Along with many other sectors of the island, Cypriot sport suffered greatly following the Turkish invasion of July, 1974. Sports facilities, stadiums and even equipments were seized under Turkish control on the 37% of the island. The number of refugees surpassed 200.000, and hundreds, including sports officials and athletes, are missing even today. The Turkish invasion resulted in economic catastrophe in sport as well; dozens of sports clubs were left homeless [17].

This historical event had also a decisive impact on the Cypriot youth's of that time sporting values, attitudes and motivations. The value system in the Cypriot society was still traditional in the childhood of today's parents'; their parents (the today's grandparents) transmitted their puritan values and behavioral patterns in connection with sport.

All these explain why the sport participation and motivations of the grandparents' generations were different only from their grandchildren's, when they were 12-18 year old. They considered health promotion as a stimulating factor in their childhood and youth and they did not change their mind during their whole life cycle. The Cypriot elderly seem not to be really aware of or interested in the beneficial impact of sport on their mental well-being. This statement is also supported by the contradictory results of a recent Eurobarometer on sport and physical activity [20] which, on the one hand, show Cyprus as a health conscious country regarding individuals' motivations for physical activity. On the other hand, in another chapter of the same study, it is revealed that almost the half of the Cypriot population aged 15 years and over never plays sport or do it less than monthly, and Cyprus is one of the countries in the European Union where the sport participation of the 55+ age group decreases the fastest. The older Cypriot generations' use of time is determined by traditional cultural values in which sporting activity is not included.

In spite of the changing role of modern sport in society, the today's parents' sport involvement and motivations in their age of 12-18 did not differed significantly from their own parents', that is, they regarded health promotion as the most important reason to practice sport. Comparing the findings with their parents' the only modification in their motives was that a few of them also found the improvement of their physical

performance important. Paradoxically, contrary to international trend, the prospect to have fun, to meet other people, and to relax stimulate the today's parents more to be involved in sport in their adulthood than they did in their childhood, since both sport and the Cypriot society had changed since then.

The members of the youngest generation, which consists of secondary school students, were brought up under entirely different social circumstances since as a result of globalization the traditional social norms and values have been radically changing in Cyprus recently. Life organizing values have also been modified, and motivations for gratification and filing one's life with joy came to the front in various field of social life, including sport. The majority of today's secondary school students, who are interested in sport at all, are not willing to work hard for achieving higher performance; they rather regard it as a source of pleasure.

Several research findings support a great part of the above results. At the beginning, in the 1970s, research on participation motivations for sport focused on youth participation [22] and the work focused on factors connected to the youngsters' physical ability; the social aspects of motivations were not studied in detail [3]. The findings of these investigations show that among the multiple reasons for young peoples' sport involvement to develop skill and fitness, to answer challenges, and to have fun can be found the most frequently. Later, from the latter half of the 1980s, when several researchers' interest also turned to the participation motivations of adults, it was discovered that their most often cited motives were different from the youngsters' motives. Generally speaking, fun and enjoyment energize different types of sport involvement less frequently with adults than with young people. The results of this research in connection with the middle-aged generation are not in harmony with the research findings cited above, because contrary to international trend, the Cypriot parents' participation motivation are more similar to their children's than to their own parents'.

Like worldwide, young people in Cyprus are looking for alternative sports activities with central values such as: freedom, experience of excellence and creating an own youth culture. However, the similarities stop here. Two major differences are worth of mentioning. First, the Cypriot students are familiar with just a few alternative sports, not even such sporting activities which are common all over Europe, for instance skate

boarding or roller skating, attract them. These new forms of sport started appearing in the country but they still have not many followers. The second main difference is related to the lack of water sports culture in Cyprus, they hardly consider the sea as a scene for exercising, and not even surfing is popular in their circle.

In spite of the changing offers which could be seen in the television, lots of Cypriots remains strongly bonded to the sport which has been the most popular traditionally in the country: to football. Football was introduced by the British long before Cyprus became independent; it was the sport which was also played at schools and which was played on an official basis nationally soon after that the Cypriot Football Association was established as early as in 1934. The CFA became a member of the FIFA in 1948 and in the UEFA in 1962. Football was disseminated because it was a worker class sport, golf the preferred British sport preserved its exclusivity; it was reserved for the elite. The Cypriot Golf Federation was founded as late as in 2000. This historical background explains why Cypriots in all ages prefer football, and why they divide informally the sport in Cyprus in two major groups: in the first category only football can be found, and in the second one all the other sports.

The popularity of the second most preferred sport in the rank, basketball, can be attributed in part to the successes of Greek basketball internationally, in part to the spectacular NBA<sup>6</sup> matches which were covered by the media in the 1990's and droved relatively many Cypriots to try to practice this sport. Taking another example of how a national athlete's success in the international arena had an impact on the people's choice, we can refer to the case of the 25 year old Cypriot tennis player, Marcos Baghdatis. Since he achieved a second place in the Australian Open in 2006, the popularity of tennis in Cyprus has risen. The students' generation started to have an interest in tennis and more tennis academies appeared. A similar phenomenon can be observed with football academies. When certain Cypriot football teams achieved a good place in the top 16 of the UEFA Champions League, football academies were founded all over the island.

The families' economic capital does not seem to have a decisive impact on the choice of sports. In the past, when the people were poorer, cultural reasons hindered more their involvement in sport than their economic situation. For a few decades the

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<sup>6</sup> The National Basketball Association is the pre-eminent men's professional basketball league in North America

standard of living has been very good enough in Cyprus. The global financial crisis of 2009 and the deep economic crisis in which Greece has been since 2010 had not influenced the economy of Cyprus yet in the time of the data collection. Paradoxically the students who have not been independent financially complained the least, they seldom referred to lack of money as a barrier preventing them from practicing sport. This phenomenon can be explained by the tradition according to which the Cypriot families support their young for a long period of time. Their aim is to satisfy their children's/grandchildren's needs; the parents and grandparents consider it more important to serve the interests of their descendents than their own. Even if they had had intention, which was not often the case, they promoted their young family members sport involvement instead of theirs.

The generational differences regarding the importance of sport and physical activity in the everyday life seem to be very big in Cyprus due to a great extent to the fact that the country is a relatively young republic with sweeping social transitions in a fairly short period of time. Among others, a radical structural social mobility could be observed, since agriculture played less and less role in the national economy. Consequently, there has been less and less occupational physical activity in many people's work the lack of which had negative impact on the population's health.

Due to special historical circumstances the advancements in science and technology have affected the various aspect of the Cypriot people's life relatively late. However since modern way of life require less and less compulsory physical activities they have manifested themselves recently in the spreading of a sedentary lifestyle also in Cyprus.

Like all over Europe the duration of education became longer during the 20<sup>th</sup> century and the younger generations spent more and more time with sitting at classes. Parallel with this there has been a rapid progress in transportation which was not as rapid in Cyprus as it was in the western part of the continent. Therefore not only the elderly but even the majority of the middle-aged went to school on foot in their childhood, only the today's school children can use public transport widely, or can have bicycle, especially that of technology-intensive.

Moreover, the grandparents' generation spent much less time with sitting school at their age of 12-18 because of two main reasons. Firstly, they attended classes for a

shorter time; the level of their education is the lowest out of the three generational groups. Secondly, in their childhood the school's schedule was unsteady, even the class periods and breaks between them were not predetermined. The church, in accordance with the municipalities of Cyprus, was acting as a provider of the education by authorizing priests to take the role of the teachers until the turning point when the communities could support schools with public funding [71].

The everyday life of the today's grandparents also encompassed more active elements in their childhood and youth than the youngsters' life comprises nowadays. Both intra-and intergenerational changes in daily living and health related physical activities occurred and the advancements in science and technology had a contradictory impact on these processes

The rise and the spreading of the television have produced a new leisure time culture which contributed to a sedentary behavior all over Europe since the 1950s-1960s but in Cyprus television became a national mass media only in the second part of the 1970s. Since TV became a cultural force decades later here, it was lacking from the children's and youngsters' way of life not only with the today's elderly but with the middle-aged people as well. In want of the temptation by television and by public transport, the Cypriot children's daily life used to be more active physically than it is nowadays. The delayed advancements in the other fields of technology might have had a positive impact even on the adult generations' everyday life since they have to complete more household chores comprising physical activities. Although occupational physical activity was not an aim to study empirically this time, it has to be noticed that the today's grandparents' job required more physical skill and more energy than their son's. When Cyprus became independent in 1960, the majority of the economically active population worked as farmer, and even in the 1970s one third of them worked in the agriculture where their job demanded high levels of physical activity.

It is known that Cyprus has undergone sweeping changes during a relatively short amount of time recently. The exploitation of scientific and technological development as an integral phenomenon has accelerated on the island; it can be characterized in contemporary Cyprus by impressive progress. However, like everywhere, the advancements in science and technology have both positive and negative sides in Cyprus as well. On the one hand it has tremendously improved the Cypriot population's

quality of life. On the other hand it must not be denied that beside other negative consequences (the pollution of air and seas around the island, the depletion of the ozone layer, toxic waste etc) the utilization of the technological advantages promoted a physically inactive lifestyle.

## 6. CONCLUSIONS

According to Giddens “we are constantly responding and adjusting to the changing environment around us; as individuals, we evolve with and within the larger context in which we live. Even the small choices we make in our daily lives, what we wear, how we spend our leisure time and how we take care of our health and our bodies-are part of an ongoing process of creating and re-creating our self-identities” [25, page 68].

In this thesis the focus is on how the different generations noticed the changes in their environment, more specifically how they responded and adjusted to the major modifications in connection with sport and with everyday physical activity.

Sport has become multi-dimensional and new sports have been creating day by day. According to the related literature a wide range of new sports, called “sports modi” have been spreading, several of them even were recognized formally. The three last generations in Cyprus do not seem to follow the above tendency in sport. *Based on the results it can be stated that hypothesis one*, according to which Cypriots “tasted” and practiced mostly traditional sports but they are not familiar with “sports modi,” *is confirmed*. Although there are differences between the young, the middle-aged and the elderly regarding the number of sports they have ever went in for in one way or another, a considerable turn towards modern and extreme sports which occurred internationally could not be observed nationally, not even with the students. It is noteworthy that with the latter golf appeared as a novelty in the middle of the rank of sports, and they tried to practice, while their grandparents who might have seen the British rulers playing golf were not attracted by it. The generations are obviously changing their preferences on what they call sport and how important role the different sports play in their lives.

Due to the changing environment, sport became more important in the people’s life in contemporary Cypriot society than it used to be decades ago. The young people responded well to this phenomenon, they attribute more importance to sport in life than their parents and grandparents did when they were in a similar age. On the other hand, the grandparents and parents were of a higher opinion about the significance of sport in their childhood and youth than they are today. *These results confirmed the second hypothesis* which assumed that significant differences exist between the three

generational groups regarding their opinion about the role that sport plays in the lives of the Cypriots.

With full knowledge of the fact that the transformation of mentality is a very slow process, it can be rightly say that the CSO, the COC and other responsible bodies for sport can be blamed to a certain degree for the backwardness of the adults' way of thinking about the social importance of sport. While they made efforts during the last decades in the promotion of the populations' sport participation through national and local sport programs, they missed to launch campaigns with the help of which they could have explained why it would be of vital importance to practice. The leading officials of these sports organizations should have been aware of the lacking sporting traditions and of the low level of sport culture in this respect as well. The Strategy CSO 2020 “Δικαίωμα στην Άθληση – Πολίτες εν Δράση” - “Right in Sports – Citizens in Action” introduced recently in Cyprus might be a sign of a new paradigm, but its consequences can only be seen in the future.

Until recently the efforts of the sporting bodies for promoting the Cypriot population's sporting activity has been crowned with moderate success. Significant differences were found between the three generational groups regarding the frequency and the level (recreational and competitive) of sport participation (there were not sufficient data related to extreme sports). With these findings the first part of *the third hypothesis* which assumed that significant differences exist between the three generational groups' primary involvement in sport *is partly confirmed*. However, when participation in Sport for All programs was measured on a five-item scale, the findings concerning the students were only a little more favorable than their *parents' and grandparents', and all three generational groups' mean was below the average*.

The situation is even more complex in connection with secondary sport involvement. Although *the data verified the assumption* included in hypothesis three according to which significant differences exist between the three generational groups regarding their secondary sport participation: the interpretation of the data revealed that the nature of the differences does not always answer the implicit expectations. Namely, the students spend much more time in front of the television watching sport programs than their grandparents who have plenty of time and just a few of the latter attend



football matches which are considered to be the most popular pastime in the Cypriots' leisure.

Similar contradictions were noticed concerning the reasons for the three generational groups' non participation. On the one hand significant differences were found between the explanations given by the members of the three generations about why they decline to practice at recreational and competitive levels; thereby *the second part of the third hypothesis was partly confirmed*. Regarding extreme sports the data were not sufficient either to prove or to deny the assumption. On the other hand, the meaning of a significant difference does not fully answer the implicit expectations: almost one fifth of the students explained their absence from sport by the lack of their ability, while there were much fewer parents and grandparents referring to this reason.

The last part of the third hypothesis according to which the students' economic background had a decisive impact on their involvement at all levels had to be rejected, since no significant relationship was found between their families' economic situation and their sport participation either in recreational or in extreme sport. Their financial dependency influenced significantly only their involvement in competitive sports. Generally speaking the older generations consider themselves responsible to support financially their children until the end of their studies or even until marriage and further on. Notwithstanding they are reluctant to finance their offspring's participation in competitive sport because they might not agree with such commitment. Besides, they think that the sport sphere, first of all the CSO and the COC, should contribute to the athletes' cost to a much higher degree.

*Based on the results, the fourth hypothesis* which assumed that significant differences exist between the three generational groups regarding the role played by the various socializing agents in their sport involvement *is accepted*. The results discovered that there are significant differences between the importances of the socializing agents influencing the three generations' sporting activity. It can be stated that the students' sport related behavior is influenced more by external factors than their parents' and grandparents'. The various factors affected the grandparents' generation less. Although to a different extent, the friends had the strongest impact with all three generations. The second most important socializing factor was the family, proving that in spite of recent changes, family ties are still close in the country.

*The results also supported the fifth hypothesis* according to which it was assumed that significant differences exist between the three generations regarding their motivation for sport participation at present and their motivations when they were at the age of 12-18. The grandparents considered health enhancement as a stimulating factor in their childhood and youth, and they did not change their mind during their whole life cycle. The parents' motives are closely connected to joy and fun at present but in their childhood they considered health promotion as the most important reason for sport involvement. The students' motivation on participation in sport is closely related to fun and enjoyment.

Generational differences in participation motivation for sport are probably universal but their elements can be dissimilar depending on the value system in general and in sport in particular in societies.

*Finally, according to the results of this study, the sixth hypothesis* which supposes that significant differences exist between the three generational groups regarding their everyday physical activity *is also confirmed*. After examining intra- and intergenerational changes in daily living and in selected health related physical activities between the three generational groups, the findings show that both the frequency and the intensity of daily physical activity have been decreasing within the lifetime of the middle-aged and the elderly, partly in a similar, partly in a dissimilar way as it occurs in most other European countries. Moreover, significant differences could be noticed between the physically active and inactive elements in the three examined generations' way of life. The observed changes can only be explained by the process of getting older to a small extent. They are rather rooted in the contradictory impact of the slow advancements in science and technology on the Cypriots' everyday life and in the special characteristics of physical culture in Cyprus.

The particular characteristics of the historical and cultural circumstances in Cyprus allow the generalization of the conclusions only on a national level. Generational differences are definitely universal but the elements of these differences are often dissimilar in different countries.

In principle some findings of this research could be relevant in those South European states where, similarly to Cyprus, the traditional values and behavioral

patterns survived long and where the close family ties playing an outstanding role in early sport socialization have loosened only recently, as a consequence of globalization.

In practice not significant similarities can be observed because of the radical differences in these countries' history and in the history of their sport. Unlike Cyprus, the cited countries were not colonized; they were rather colonizers (e.g. Spain and Portugal). Besides, modern sport emerged much earlier in those countries, for instance Greece, the value system of which is the most similar to the Cypriot one, played a leading role in promoting the rise and the spread of the Olympic movement. Finally, the size of all quoted countries is considerably bigger than that of Cyprus where daily life is usually more personal than in countries with large populations and the knowledge of other people's backgrounds and personalities might have a special impact on sport socialization throughout the life cycle. Notwithstanding, the question how the smallness of Cyprus, and in connection with it the strong interpersonal networks as well as the closeness of the interpersonal relations, do influence the participation motivations for sport is still open.

One of the major conclusions of our study is that effective measures have to be taken in the immediate future to stop the spreading of the observed and obviously increasing inactivity among the Cypriot population. According to the European Commission, the EU and its member states must take proactive steps to reverse the decline in physical activity that became faster over the past decades [64]. The quest for physical fitness has grown already at least in the western world [66]. Cyprus should follow the good practices and should make attempt to counterbalance the negative consequences of the increasingly inactive nature of daily life.

When Cyprus started approaching the European Union, as a start, she joined various European bodies dealing with sport. The Cypriot involvement in these European bodies resulted in the rethinking of the national sport policy: sport for all received much more attention than before. The Cyprus Sport Organizations took a few measures to promote the people's awareness in connection with the health benefits of regular exercise as well as with their need for physical activity, and several local communities started offering more access to recreational sports and exercise. During the last decade the options for sport involvement broadened, a few new forms of sports appeared, sport programs even for third age people were offered. In spite of these encouraging facts, the

way of how the individual generations have been thinking about the importance of sport have changed very slowly, and the majority of the Cypriot population is still far from integrating regular exercise and sport in their life. Further research works are needed to discover how the ever changing political, cultural, social and economic factors affect the different generations' participation motivations and sport involvement in Cyprus, and how the national sport politics and sport policy can use the research findings and other countries' good practice in a more effective way.

### *Summary in English*

In this thesis the focus is on how the different generations noticed the changes in their social environment and how they responded and adjusted to them in connection with sport and with everyday physical activity in Cyprus. Its main objectives are to discover the generational changes which occurred in the life cycle of the last three Cypriot generations in connection with sport related knowledge, behavior, socialization, motivation and with customs related to physical activity. In order to realize the objectives of the thesis an empirical research was carried out by the author. It was completed by survey method among secondary school students, their parents and grandparents (N=1067). Data were collected by questionnaires and were analyzed by the SPSS program for Microsoft Windows. Multivariate analysis and One Way ANOVA also were used. The survey method was complemented by in-depth interviews (N= 29) and by analysis of documents. The results show that there are significant differences between the three generational groups regarding knowledge about sport, opinion about the importance of sport, sport socializing agencies, participation motivation, primary and secondary involvement in sport, explanation for non participation and daily living and health related physical activities. Notwithstanding, the meaning of these significant differences did not fully answer the implicit expectations. The perceived generational differences are analyzed in a historical and cultural context. It is stated that while generational differences related to sport is universal; due to particular circumstances (the smallness of the country, the shortness of its independent history) several elements of these differences are special in Cyprus. Generational differences in sport had never been approached from scientific perspectives in Cyprus; this first approach seems to be useful. Nevertheless, further research are needed to discover how the ever changing political, cultural, social and economic factors affect the different generations' participation motivations and sport involvement in Cyprus, and how the national sport policy can use the research findings and other countries' good practice in a more effective way.

***Summary in Hungarian (Összefoglalás)***

Jelen értekezés fókuszában az állt, hogy a ciprusi társadalom különböző generációi hogyan érzékelték a társadalmi környezetükben történő változásokat és hogyan reagáltak, alkalmazkodtak ezekhez a sport és a mindennapi fizikai aktivitás területén. A szerző legfőbb célkitűzése annak feltérképezése volt, hogy a ciprusiak utóbbi három nemzedékének életében milyen változásokat lehet felfedezni a sporttal kapcsolatos ismereteik, viselkedésmintáik, motivációik, szocializációjuk és szokásaik tekintetében. Az értekezés célkitűzéseinek megvalósításához a szerző empirikus kutatást végzett. A kutatás survey-módszerrel vizsgálta a középiskolás tanulókat, szüleiket és nagyszüleiket (N=1067). Az adatgyűjtés kérdőíven keresztül történt, az adatok az SPSS for Windows program használatával kerültek feldolgozásra, többváltozós elemzések és egy-utas ANOVA eljárás segítségével. A survey-módszert mélyinterjú kutatás (N=29) és dokumentumelemzés egészítette ki. Az eredmények azt mutatják, hogy szignifikáns különbségek mutatkoznak a három csoport között a sporttal kapcsolatos ismeretek, a sport jelentőségéről való vélekedések, a sportszocializációs szintek, a sportba való elsődleges, illetve másodlagos bekapcsolódás, a távolmaradás magyarázatai, illetve a mindennapi, egészséggel kapcsolatos testmozgás terén egyaránt. Mindazonáltal e szignifikáns különbségek nem teljesen igazolták az előzetes elvárásokat. A megélt generációs különbségeket a szerző történeti-kulturális kontextusba ágyazva elemzi. Megfogalmazódik, hogy bár a sporttal kapcsolatos generációs különbségek általánosnak tekinthetők, bizonyos körülmények (az ország kis mérete, a függetlenség óta eltelt rövid idő) következtében az eltérések néhány eleme speciálisan Ciprusra érvényesek. A generációk közötti különbségeket a sport területén korábban nem vizsgálták a ciprusi társadalom esetében, és ez az első vizsgálat hasznosnak bizonyult. Ezzel együtt további kutatásokra van szükség annak felderítése érdekében, hogy hogyan befolyásolják a folytonosan változó politikai, kulturális, társadalmi és gazdasági tényezők a különböző nemzedékek sportbeli részvételét és az ezzel kapcsolatos motivációikat Cipruson, és hogy hogyan tudja a nemzeti sportpolitika hatékonyabban hasznosítani a kutatási eredményeket és más országok „jó gyakorlatait”.

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## APPENDIX A: Questionnaires

### *A/I Questionnaire for the students' generation*

Dear Student,

As you probably realized, the world of sports is growing globally and it is becoming more exciting. Our country is following this growth and those who firstly experience these changes are your generation. The purpose of this survey is to discover how the sporting habits of Cypriots have been changed via three generations and how the changes in the Cypriot society influenced the physical activity of the Cypriot population. Your opinion is very important for the efficiency of the survey therefore you are kindly requested to give sincere answers to the questions. It must be clarified that the questionnaire is **anonymous**. Please, answer the questions in a manner that reflects your true opinion.

Thank you for your cooperation.

**Please answer the questions fill or circle the choice that represents your true opinion about the following questions:**

**1. Age:** \_\_\_\_\_

**2. Gender:**     a) Male                                 a) Female

**3. Type of school:**   a) Lyceum     b) Gymnasium

**4. Grade:**     a) 1<sup>st</sup> Grade                 b) 2<sup>nd</sup> Grade                 c) 3<sup>rd</sup> Grade

**5. Residence at the present time. Please circle the area and specify the name of the city or village that you are living:**

a) Rural Area   b) Urban Area   c) Sea-Side

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**6. Economic situation of your family:**

<b>Very Low</b>	<b>Low</b>	<b>Middle</b>	<b>High</b>	<b>Very High</b>

**7. Do you practice any sporting activity?**

	<b>Yes</b>	<b>No</b>
Recreational Level (R)		
Competitive Level (C)		
Extreme Sports (E)		

<b>i) If Yes how often? Fill in with (R, C, E) the answers that represent you</b>		<b>ii) If No why? Fill in with (R, C, E) the answers that represent you</b>	
a) Every day		a) Lack of time	
b) 3 times per week		b) Too expensive	
c) Less than 3 times per week		c) Lack of facilities	
d) Few times per month		d) Dislike sports	
e) Few times per year		e) Lack of physical abilities	
f) Other.....		f) Other.....	

**8. To which degree do the following reasons motivate you to participate in any sporting activity?**

	<b>Not at all</b>	<b>Little</b>	<b>Sufficiently</b>	<b>Much</b>	<b>Too much</b>
To improve health.					
To improve physical performance					
To meet other people					
To relax from day to day life					
To have fun					
Doctor's orders					
To develop my personality					
Other..... .....					

**9. How important role does sport play in your life?**

<b>Not important</b>	<b>A bit important</b>	<b>Important</b>	<b>Very important</b>	<b>Extremely important</b>

**10. Please mark (✓) the sports that you know, already tried, or practice:**

	<b>I know the sport</b>	<b>I tried the sport</b>	<b>I practice the sport</b>
Football			
Basketball			
Volleyball			
Handball			
Tennis			
Swimming			
Golf			
Jogging			
Snooker			
Cricket			
Badminton			
Rugby			
Jereed			
Snowboard			
Ski			
Water-ski			
Rock climb			
Kite-board			
Sailing			
Others, namely			

**11. How often have you ever participated in Sport for All programs?**

Every day	
Few times per week	
Few times per month	
Few times per year	
Never	

**12. Have you own equipments to use in a sport? a) Yes                      b) No****Please mark (✓) the equipment you own.**

Soccer ball		Bicycle		Golf club	
Basket ball		Tennis racquet		Kite board	
Hand ball		Snowboard		Boat	
Volley ball		Skateboard		Jet ski	
Rugby ball		Kite		Others, namely	

**13. How often do you practice your sport in the following locations?**

	Never	Rarely	Occasionally	Often	Regularly
Nature (outdoor environment)					
Private Sport Facilities (tennis courts, footsals, swimming pools, etc)					
Fitness Centre					
School					
At home					
Other, namely.....					

**14. Have you ever been a member in a sport club, federation or school team in Cyprus?**

	Yes	No
Sport Club		
Federation		
School team		

**15. Do you know about sport programs offered by Sport Organizations in Cyprus?**

- a) Yes            b) No

**If yes, from where you get the information?**

Family	Friends	Media	School

**16. How often do you consume sports?**

	International Sport					National Sport				
	Never	Rarely	Occasionally	Often	Regularly	Never	Rarely	Occasionally	Often	Regularly
Attend sport events										
Read about sports										
Watch sports on TV										

**17. To which degree did the following factors influence you to participate in sports?**

	<b>Not at all</b>	<b>Little</b>	<b>Sufficiently</b>	<b>Much</b>	<b>Too much</b>
Family					
Friends					
School					
T.V					
PE teacher					
Magazines					
Coach					

**18. Please mark (✓) the amount of time you spend daily with the following activities:**

<b>Daily</b>	<b>Less than 30 min.</b>	<b>30min. -1.30h</b>	<b>1.30h- 3h</b>	<b>More than 3hours</b>
Sitting during school				
Moving on foot outdoor during school				
Walking indoor during school				
Watching TV or playing video games				
Moving on foot outdoor during free time				
Walking indoor during free time				
Being active to the point you start sweating				

**19. According your opinion how important it is to be active physically**

<b>Not important</b>	<b>A bit important</b>	<b>Important</b>	<b>Very important</b>	<b>Extremely important</b>

**20. Please mark (✓) the amount of days you spend with the following activities weekly:**

<b>Weekly</b>	<b>1 Day or less</b>	<b>2 Days</b>	<b>3 Days</b>	<b>3 Days or more</b>
Vigorous physical activity (lifting heavy objects, digging, fast cycling, etc.)				
Moderate physical activity (carrying light objects, normal pace cycling, etc.)				
Walking over 10 minutes at a time				

Physical activity for moving from place to place.				
Physical activity in the house (gardening, housework, etc.)				
Physical activity for leisure time and recreation.				

**21. To which degree does the area of your residence provide you with opportunities to be physically active?**

<b>Not at all</b>	<b>Little</b>	<b>Sufficiently</b>	<b>Much</b>	<b>Too much</b>

**Please specify how**

---

**22. To which degree did the area of your residence provide you with opportunities to be physically active in the past?**

<b>Not at all</b>	<b>Little</b>	<b>Sufficiently</b>	<b>Much</b>	<b>Too much</b>

**Please specify why**

---

**23. To which degree do you enjoy physical education lessons?**

<b>Not at all</b>	<b>Little</b>	<b>Sufficiently</b>	<b>Much</b>	<b>Too much</b>

**24. Do you have any recommendation concerning the promotion of sporting activity at school?**

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**25. What is your lifestyle like in comparison with your parents and your grandparents?**

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**Thank you for your cooperation.**



**7. What is the level of your economic situation?**

	Very Low	Low	Middle	High	Very High
At the present time					
At the age of 12 -18					

**8. How important role does sport play in your life?**

	Not important	A bit important	Important	Very important	Extremely important
At present time					
At the age of 12 - 18					

**9. Do you practice any sporting activity at present time?**

	Yes	No
Recreational Level (R)		
Competitive Level (C)		
Extreme Sports (E)		

<b>i) If Yes how often? Fill in with (R, C, E) the answers that represent you</b>		<b>ii) If No why? Fill in with (R, C, E) the answers that represent you</b>	
a) Every day		a) Every day	
b) 3 times per week		b) 3 times per week	
c) Less than 3 times per week		c) Less than 3 times per week	
d) Few times per month		d) Few times per month	
e) Few times per year		e) Few times per year	
f) Other.....		f) Other.....	

**10. Did you practice any sporting activity at the age of 12-18?**

	Yes	No
Recreational Level (R)		
Competitive Level (C)		
Extreme Sports (E)		



<b>i) If Yes how often? Fill in with (R, C, E) the answers that represent you</b>		<b>ii) If No why? Fill in with (R, C, E) the answers that represent you</b>	
a) Every day		a) Every day	
b) 3 times per week		b) 3 times per week	
c) Less than 3 times per week		c) Less than 3 times per week	
d) Few times per month		d) Few times per month	
e) Few times per year		e) Few times per year	
f) Other.....		f) Other.....	

**11. To which degree do the following reasons motivate you to participate in any sporting activity at present time?**

	<b>Not at all</b>	<b>Little</b>	<b>Sufficiently</b>	<b>Much</b>	<b>Too much</b>
To improve health.					
To improve physical performance					
To meet other people					
To relax from day to day life					
To have fun					
Doctor's orders					
To develop my personality					
Other, namely					

**12. To which degree did the following reasons motivates you to participate in any sporting activity at the age of 12-18?**

	<b>Not at all</b>	<b>Little</b>	<b>Sufficiently</b>	<b>Much</b>	<b>Too much</b>
To improve health.					
To improve physical performance					
To meet other people					
To relax from day to day life					
To have fun					
Doctor's orders					
To develop my personality					
Other, namely					

**13/a Please mark (✓) the sports that you know, tried, practiced:**

	<b>I know the sport</b>	<b>I tried the sport</b>	<b>I practiced the sport</b>
Football			
Basketball			
Volleyball			
Handball			
Tennis			
Swimming			
Golf			
Jogging			
Snooker			
Cricket			
Badminton			
Rugby			
Jereed			
Snowboard			
Ski			
Water-ski			
Rock climb			
Kite-board			
Sailing			
Other, namely			

**13/b What was your sport at the age of 12 – 18?**

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**14. How often have you ever participated in any Sport for All programs?**

Every day	
Few times per week	
Few times per month	
Few times per year	
Never	

**15. Have you own equipments to use in sport at the present time? a) Yes b) No**  
**Please mark (✓) the equipment you own.**

Soccer ball		Bicycle		Golf club	
Basket ball		Tennis racquet		Kite board	
Hand ball		Snowboard		Boat	
Volley ball		Skateboard		Jet ski	
Rugby ball		Kite		Other.....	

**16. Did you own equipments to use in sport at the age of 12-18? a) Yes b) No**  
**Please mark (✓) the equipment you owned.**

Soccer ball		Bicycle		Golf club	
Basket ball		Tennis racquet		Kite board	
Hand ball		Snowboard		Boat	
Volley ball		Skateboard		Jet ski	
Rugby ball		Kite		Other.....	

**17. How often do you practice your sport in the following locations at present time?**

	Never	Rarely	Occasionally	Often	Regularly
Nature (outdoor environment)					
Private Sport Facilities (tennis courts, footsals, swimming pools, etc)					
Fitness Centre					
School					
At home					
Other, namely.....					

**18. How often did you practice your sport in the following locations at the age of 12-18?**

	Never	Rarely	Occasionally	Often	Regularly
Nature (outdoor environment)					
Private Sport Facilities (tennis courts, footsals, swimming pools, etc)					
Fitness Centre					
School					
At home					
Other.....					
...					

**19. Have you ever been a member in a sport club, federation or school team in Cyprus?**

	Yes	No
Sport Club		
Sport Federation		
School team		

**20. Do you know about sport programs offered by Sport Organizations in Cyprus?**

a) Yes            b) No

**If yes from where you get the information?**

Family	Friends	Media	School

**21. How often do you consume sports?**

	International Sport					National Sport				
	Never	Rarely	Occasionally	Often	Regularly	Never	Rarely	Occasionally	Often	Regularly
Attend sport events										
Read about sports										
Watch sports on TV										

**22. To which degree did the following factors influence you to participate in a sport?**

	Not at all	Little	Sufficiently	Much	Very much
Family					
Friends					
School					
TV					
PE teacher					
Magazines					
Coach					

**23. Please mark (✓) the amount of time you spend daily for the following activities at present time:**

<b>Daily</b>	<b>Less than 30 min</b>	<b>30min-1,30h</b>	<b>1,30h-3h</b>	<b>More than 3h</b>
Sitting during work				
Moving on foot outdoor during work				
Walking indoor during work				
Watching T.V or play video games				
Moving on foot outdoor during free time				
Walking indoor during free time				
Being active to the point you start sweating				

**24. Please mark (✓) the amount of time you used to spend daily for the following activities at the age of 12-18:**

<b>Daily</b>	<b>Less than 30 min</b>	<b>30min-1.30h</b>	<b>1.30h-3h</b>	<b>More than 3h</b>
Sitting during school or work				
Moving on foot outdoor during school or work				
Walking indoor during school or work				
Watching T.V or play video games				
Moving on foot outdoor during free time				
Walking indoor during free time				
Being active to the point you start sweating				

25. Please mark (✓) the amount of days you spend for the following activities weekly at present time:

<b>Weekly</b>	<b>1 Day or less</b>	<b>2 Days</b>	<b>3 Days</b>	<b>3 Days or more</b>
Vigorous physical activity (lifting heavy objects, digging, fast cycling, etc.)				
Moderate physical activity (carrying light objects, normal pace cycling, etc.)				
Walking over 10 minutes at a time				
Physical activity for moving from place to place.				
Physical activity in the house (gardening, housework, etc.)				
Physical activity for leisure time and recreation.				

26. Please mark (✓) the amount of days you used to spend for the following activities weekly at the age of 12-18:

Weekly	1 Day or less	2 Days	3 Days	3 Days or more
Vigorous physical activity (lifting heavy objects, digging, fast cycling, etc.)				
Moderate physical activity (carrying light objects, normal pace cycling, etc.)				
Walking over 10 minutes at a time				
Physical activity for moving from place to place.				
Physical activity in the house (gardening, housework, etc.)				
Physical activity for leisure time and recreation.				

27. To which degree does the area of your residence provide you with opportunities to be physically active?

Not at all	Little	Sufficiently	Much	Too much

Please specify how \_\_\_\_\_

28. To which degree did the area of your residence provide you with opportunities to be physically active in the age of 12-18?

Not at all	Little	Sufficiently	Much	Too much

Please specify how \_\_\_\_\_

29. According to your opinion how important it is to be active physically?

Not important	A bit important	Important	Very important	Extremely important

**30. Do you have any recommendation concerning the promotion of sporting activity at your community?**

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**31. What is your lifestyle like in comparison with your parents and with your children?**

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**Thank you for your cooperation**





**7. What is the level of your economic situation?**

	<b>Very Low</b>	<b>Low</b>	<b>Middle</b>	<b>High</b>	<b>Very High</b>
At the present time					
At the age of 12 -18					

**8. How important role does sport play in your life?**

	<b>Not important</b>	<b>A bit important</b>	<b>Important</b>	<b>Very important</b>	<b>Extremely important</b>
At present time					
At the age of 12 - 18					

**9. Do you practice any sporting activity at present time?**

	<b>Yes</b>	<b>No</b>
Recreational Level (R)		
Competitive Level (C)		
Extreme Sports (E)		

<b>i) If Yes how often? Fill in with (R, C, E) the answers that represent you</b>		<b>ii) If No why? Fill in with (R, C, E) the answers that represent you</b>	
a) Every day		a) Every day	
b) 3 times per week		b) 3 times per week	
c) Less than 3 times per week		c) Less than 3 times per week	
d) Few times per month		d) Few times per month	
e) Few times per year		e) Few times per year	
f) Other.....		f) Other.....	

**10. Did you practice any sporting activity at the age of 12-18?**

	<b>Yes</b>	<b>No</b>
Recreational Level (R)		
Competitive Level (C)		
Extreme Sports (E)		

<b>i) If Yes how often? Fill in with (R, C, E) the answers that represent you</b>		<b>ii) If No why? Fill in with (R, C, E) the answers that represent you</b>	
a) Every day		a) Every day	
b) 3 times per week		b) 3 times per week	
c) Less than 3 times per week		c) Less than 3 times per week	
d) Few times per month		d) Few times per month	
e) Few times per year		e) Few times per year	
f) Other.....		f) Other.....	

**11. To which degree do the following reasons motivate you to participate in any sporting activity at present time?**

	<b>Not at all</b>	<b>Little</b>	<b>Sufficiently</b>	<b>Much</b>	<b>Too much</b>
To improve health.					
To improve physical performance					
To meet other people					
To relax from day to day life					
To have fun					
Doctor's orders					
To develop my personality					
Other, namely					

**12. To which degree did the following reasons motivates you to participate in any sporting activity at the age of 12-18?**

	<b>Not at all</b>	<b>Little</b>	<b>Sufficiently</b>	<b>Much</b>	<b>Too much</b>
To improve health.					
To improve physical performance					
To meet other people					
To relax from day to day life					
To have fun					
Doctor's orders					
To develop my personality					
Other, namely					

**13/a Please mark (✓) the sports that you know, tried, practiced:**

	<b>I know the sport</b>	<b>I tried the sport</b>	<b>I practiced the sport</b>
Football			
Basketball			
Volleyball			
Handball			
Tennis			
Swimming			
Golf			
Jogging			
Snooker			
Cricket			
Badminton			
Rugby			
Jereed			
Snowboard			
Ski			
Water-ski			
Rock climb			
Kite-board			
Sailing			
Other, namely			

**13/b What was your sport at the age of 12–18?**

---

**14. How often have you ever participated in any Sport for All programs?**

Every day	
Few times per week	
Few times per month	
Few times per year	
Never	

**15. Have you own equipments to use in sport at the present time? a) Yes b) No**  
**Please mark (✓) the equipment you own.**

Soccer ball		Bicycle		Golf club	
Basket ball		Tennis racquet		Kite board	
Hand ball		Snowboard		Boat	
Volley ball		Skateboard		Jet ski	
Rugby ball		Kite		Other.....	

**16. Did you own equipments to use in sport at the age of 12 - 18? a) Yes b) No  
Please mark (✓) the equipment you owned.**

Soccer ball		Bicycle		Golf club	
Basket ball		Tennis racquet		Kite board	
Hand ball		Snowboard		Boat	
Volley ball		Skateboard		Jet ski	
Rugby ball		Kite		Other.....	

**17. How often do you practice your sport in the following locations at present time?**

	Never	Rarely	Occasionally	Often	Regularly
Nature (outdoor environment)					
Private Sport Facilities (tennis courts, footsals, swimming pools, etc)					
Fitness Centre					
School					
At home					
Other, namely.....					

**18. How often did you practice your sport in the following locations at the age of 12-18?**

	Never	Rarely	Occasionally	Often	Regularly
Nature (outdoor environment)					
Private Sport Facilities (tennis courts, footsals, swimming pools, etc)					
Fitness Centre					
School					
At home					
Other.....					
...					

**19. Have you ever been a member in a sport club, federation or school team in Cyprus?**

	<b>Yes</b>	<b>No</b>
Sport Club		
Sport Federation		
School team		

**20. Do you know about sport programs offered by Sport Organizations in Cyprus?**

a) Yes                      b) No

**If yes from where you get the information?**

<b>Family</b>	<b>Friends</b>	<b>Media</b>	<b>School</b>

**21. How often do you consume sports?**

	<b>International Sport</b>					<b>National Sport</b>				
	<b>Never</b>	<b>Rarely</b>	<b>Occasionally</b>	<b>Often</b>	<b>Regularly</b>	<b>Never</b>	<b>Rarely</b>	<b>Occasionally</b>	<b>Often</b>	<b>Regularly</b>
Attend sport events										
Read about sports										
Watch sports on TV										

**22. To which degree did the following factors influence you to participate in a sport?**

	<b>Not at all</b>	<b>Little</b>	<b>Sufficiently</b>	<b>Much</b>	<b>Very much</b>
Family					
Friends					
School					
TV					
PE teacher					
Magazines					
Coach					

**23. Please mark (✓) the amount of time you spend daily for the following activities at present time:**

<b>Daily</b>	<b>Less than 30 min</b>	<b>30min-1.30h</b>	<b>1.30h-3h</b>	<b>More than 3h</b>
Sitting during work				
Moving on foot outdoor during work				
Walking indoor during work				
Watching T.V or play video games				
Moving on foot outdoor during free time				
Walking indoor during free time				
Being active to the point you start sweating				

**24. Please mark (✓) the amount of time you used to spend daily for the following activities at the age of 12-18:**

<b>Daily</b>	<b>Less than 30 min</b>	<b>30min-1,30h</b>	<b>1,30h-3h</b>	<b>More than 3h</b>
Sitting during school or work				
Moving on foot outdoor during school or work				
Walking indoor during school or work				
Watching T.V or play video games				
Moving on foot outdoor during free time				
Walking indoor during free time				
Being active to the point you start sweating				

**25. Please mark (✓) the amount of days you spend for the following activities weekly at present time:**

<b>Weekly</b>	<b>1 Day or less</b>	<b>2 Days</b>	<b>3 Days</b>	<b>3 Days or more</b>
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Walking over 10 minutes at a time				
Physical activity for moving from place to place.				
Physical activity in the house (gardening, housework, etc.)				
Physical activity for leisure time and recreation.				

**26. Please mark (✓) the amount of days you used to spend for the following activities weekly at the age of 12-18:**

<b>Weekly</b>	<b>1 Day or less</b>	<b>2 Days</b>	<b>3 Days</b>	<b>3 Days or more</b>
Vigorous physical activity (lifting heavy objects, digging, fast cycling, etc.)				
Moderate physical activity (carrying light objects, normal pace cycling, etc.)				
Walking over 10 minutes at a time				
Physical activity for moving from place to place.				
Physical activity in the house (gardening, housework, etc.)				
Physical activity for leisure time and recreation.				



**27. To which degree does the area of your residence provide you with opportunities to be physically active?**

Not at all	Little	Sufficiently	Much	Too much

Please specify how \_\_\_\_\_

**28. To which degree did the area of your residence provide you with opportunities to be physically active in the age of 12-18?**

Not at all	Little	Sufficiently	Much	Too much

Please specify how \_\_\_\_\_

**29. According to your opinion how important it is to be active physically?**

Not important	A bit important	Important	Very important	Extremely important

**30. Do you have any recommendation concerning the promotion of sporting activity at your community?**

\_\_\_\_\_

\_\_\_\_\_

**31. What is your lifestyle like in comparison with your children and with your grandchildren?**

\_\_\_\_\_

\_\_\_\_\_

**Thank you for your cooperation**

**APPENDIX B: Guidelines for the in-depth interviews with students**

- Importance of sport in contemporary life at international and national level
- The status of extreme sports in Cyprus
- Importance of sport in the respondent's family
- Importance of sport at the respondent's school
- Personal experiences in sport with great emphasis on socialization and on motivations
- Recommendations for changes in sport at the respondent's school
- Recommendations for changes in sport in Cypriot society

*Interview protocol for parents and grand-parents*

1. How important role does sport play in your life? Why?
2. Do you practice any sporting activity at the present time?
  - a. If yes, what kind of activity do you practice (recreational, competitive, extreme)?
  - b. How often?
  - c. In which of the following locations: nature, private sport facilities, fitness center, and school, at home, other?
3. Did you practice any sporting activity at the age of 12-18?
  - a. If yes, what kind of activity did you practice (recreational, competitive, extreme)?
  - b. How often?
4. From the list of sports which are given to you with which of them you are familiar with? More specific, which of these sports do you know, have tried and practiced in the past?
5. Do you own any sport equipment? If yes, then what kind of sport equipment do you have? How many?
6. Which are the major factors which influence you to get involved with sports? Why?
7. Which were the major factors which influence you to get involved with sports at the age of 12-18? Why?
8. Which reasons motivate you to participate in sporting activity? Why?
9. Which reasons motivated you to participate in sporting activity at the age of 12-18? Why?
10. Have you ever participated in any Sport for All programs? If yes, how often?

## APPENDIX C: Request letters

### *The request letters for permission to distribute the questionnaires*

Ευστάθιος Χριστοδουλίδης  
Νίκου Καζαντζάκη 1/β  
2321 Λακατάμια, Λευκωσία

**Υπουργείο Παιδείας και Πολιτισμού  
Λευκωσία, Κύπρος**

21 Οκτωβρίου 2008

Προς,

Την αξιότιμη Κα.διευθύντρια Μέσης Εκπαίδευσης,

Σας παρακαλώ όπως χορηγήσετε άδεια επισκέψεώς μου σε λύκεια και γυμνάσια της αρμοδιότητάς σας, με σκοπό την επίδοση ερωτηματολογίων σε μαθητές.

Τα ανωτέρω ερωτηματολόγια διαμοιράζονται μέσα στα πλαίσια της έρευνας της διδακτορικής μου διατριβής που έχει ως θέμα:

#### **“Changes in Physical Activity and Sporting Habits via Generations in Cyprus“**

Είμαι εγγεγραμμένος φοιτητής στο “Semmelweis University Doctoral School, Department of Social Sciences, Budapest, Hungary“.

Επισυνάπτω τα ερωτηματολόγια που θα επιδοθούν στους μαθητές.

Παρακαλώ όπως μεριμνήσετε επί του θέματος το συντομότερο δυνατόν.

Σας ευχαριστώ εκ των προτέρων.

Ευστάθιος Χριστοδουλίδης.

**ΥΠΟΨΗΝ: Κα. Βαλανίδου**

Ευστάθιος Χριστοδουλίδης  
Νίκου Καζαντζάκη 1/β  
2321 Λακατάμια, Λευκωσία

**Υπουργείο Παιδείας και Πολιτισμού  
Λευκωσία, Κύπρος**

26 Ιανουαρίου 2009

Προς,

Την αξιότιμη Κα.διευθύντρια Μέσης Εκπαίδευσης,

Σας παρακαλώ όπως χορηγήσετε άδεια επισκέψεώς μου σε λύκεια και γυμνάσια της αρμοδιότητάς σας, με σκοπό την επίδοση ερωτηματολογίων σε μαθητές.

Τα ανωτέρω ερωτηματολόγια διαμοιράζονται μέσα στα πλαίσια της έρευνας της διδακτορικής μου διατριβής που έχει ως θέμα:

**“Changes in Physical Activity and Sporting Habits via Generations in Cyprus“**

Είμαι εγγεγραμμένος φοιτητής στο “Semmelweis University Doctoral School, Department of Social Sciences, Budapest, Hungary“.

Επισυνάπτω για δεύτερη φορά τα ερωτηματολόγια που θα επιδοθούν στους μαθητές και στους γονείς τους κατόπιν διορθώσεων που έτυχαν μετά απο σειρά εισηγήσεων που έλαβα απο το παιδαγωγικό ινστιτούτο. Ορισμένες εισηγήσεις αφότου λήφθηκαν υπόψην, εσκεμμένα δεν προκάλεσαν αλλαγές στο ερωτηματολόγιο για σκοπούς που αφορούν την ερευνα.

Παρακαλώ όπως μεριμνήσετε επί του θέματος το συντομότερο δυνατόν.

Σας ευχαριστώ εκ των προτέρων.

Ευστάθιος Χριστοδουλίδης.