

THE RELATIONSHIP BETWEEN PHYSICAL ACTIVITY LEVELS AND
TIME MANAGEMENT SKILLS AMONG SELECTED UNIVERSITY
STUDENTS

A THESIS SUBMITTED TO
THE GRADUATE SCHOOL OF SOCIAL SCIENCES
OF
MIDDLE EAST TECHNICAL UNIVERSITY

BY

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IN PARTIAL FULLFILMENT OF THE REQUIREMENTS
FOR
THE DEGREE OF MASTER OF SCIENCE IN
THE DEPARTMENT OF PHYSICAL EDUCATION AND SPORTS

JUNE 2010

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ABSTRACT

THE RELATIONSHIP BETWEEN PHYSICAL ACTIVITY LEVELS AND TIME MANAGEMENT SKILLS AMONG SELECTED UNIVERSITY STUDENTS

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June, 2010, 68 pages

The purpose of this study was to explore the relationship between the physical activity levels and the time management practices of selected university students, and to identify the differences between physical activity levels and time management practices in terms of gender. The subjects of this study were 128 male (55,9%) and 101 female (44,1%) university students from six universities in İstanbul, Turkey which were selected on a volunteer basis. The Physical Activity Assessment Questionnaire (PAAQ) and the Time Management Questionnaire (TMQ) were used to gather data.

The data were analyzed by employing a Statistical Package for Social Statistics. Both descriptive and inferential statistics were used to analyze the data. The level .05 of significance was selected.

There was significant correlation between total hours spend in a week and time planning, and negative correlation between time wasters. There was significant correlation between total MET spend

in an hour and time attitudes, between total MET intensities and time attitudes. According to Chi-squared analysis gender difference is dependent of the PA levels in terms of "sport MET" and "total MET" intensities. Multivariate analysis of variance (MANOVA) indicated a significant main effect. Subsequent unvaried analysis indicated differences in Time Management in terms of gender.

Keywords: Physical Activity Level, Time Management, University Student, Time Planning, Time Attitudes, Time Wasters

ÖZ

SEÇİLMİŞ ÜNİVERSİTE ÖĞRENCİLERİNİN ZAMAN YÖNETİMİ BECERİLERİ VE FİZİKSEL AKTİVİTE DÜZEYLERİ ARASINDAKİ İLİŞKİ

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Yüksek Lisans, Beden Eğitimi ve Spor Bölümü

Tez Yöneticisi: Doç. Dr. M. Settar Koçak

Haziran, 2010, 68 sayfa

Bu çalışmanın amacı seçilmiş üniversite öğrencilerinin fiziksel aktivite düzeyleri ile zaman yönetimi becerileri arasındaki ilişkinin belirlenmesi ve fiziksel aktivite düzeyleri ile zaman yönetimi becerilerindeki cinsiyet farklılıklarının ortaya konmasıdır. Bu çalışmanın örneklem grubu, İstanbul'da gönüllü katılımı ile seçilen altı üniversitede eğitim gören 128 erkek (55,89%) ve 101 kadın (44,11%) üniversite öğrencisinden oluşmaktadır. Verilerin toplanmasında Fiziksel Aktivite Değerlendirme Anketi (FADA) ve Zaman Yönetimi Envanteri (ZYE) kullanılmıştır.

Verilerin analizinde Sosyal Bilimler İstatistiği için İstatistik paketi aracılığıyla Pearson korelasyonu, Chi-Squared Analizi ve çok yönlü Varyans Analizi (MANOVA) istatistiksel metodları kullanılmıştır.

Bir haftada fiziksel aktiviteye harcanan toplam saat ile zaman planlaması arasında anlamlı pozitif, zaman harcattırıcılar arasında anlamlı negatif korelasyon bulunmuştur. Bir saatte harcanan toplam MET değerleri ve toplam MET değerleri arasından da anlamlı korelasyon bulunmuştur. Chi-squared analiz sonuçları, "spor MET"

ve "toplam MET" deęerleri söz konusu olduęunda cinsiyet farklılıklarının fiziksel aktivite düzeylerine baęımlı olduęunu göstermiştir. Çok yönlü varyans analizi sonuçları da zaman yönetiminde cinsiyetler açısından farklılıklar olduęunu göstermektedir.

Anahtar Kelimeler: Fiziksel Aktivite Düzeyi, Zaman Yönetimi, Üniversite Öğrencileri, Zaman Planlaması, Zaman Tutumları, Zaman Harcattırıcılar

To my family

ACKNOWLEDGEMENTS

I am very grateful to my supervisor Assoc. Prof. Dr. M. Settar KOÇAK and wish to express my deepest gratitude to him for his guidance, advise, insight and encouragement in all stages of this study.

My deepest gratitude is extended to my committee: Prof. Dr. Ömer Geban and Prof. Dr. Feza Korkusuz. Each in different ways has provided me invaluable comments, suggestion and support on several aspects of this master thesis.

Thanks to Ayda Karaca for her guidance, valuable help and infinite support during the construction of this thesis.

I have a great deal of thanks to the people in METU Physical Education and Sports Department for their contribution towards this thesis.

My special thanks go to students and instructors involved in this study for their support and help.

Finally, I would like to thank my director and manager and my friends in my office for their understanding, support, and also thank to my family for their patience and encouragement in every step of this thesis. Without their trust and support I could not be here.

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ABBREVIATIONS

TMQ	Time Management Questionnaire
PAAQ	Physical Activity Assessment Questionnaire
FADA	Fiziksel aktivite Değerlendirme Anketi
ZYE	Zaman Yönetimi Envanteri
PA	Physical Activity
PA Levels	Physical Activity Levels
MET	Metabolic Equivalent
TM	Time Management

CHAPTER I

INTRODUCTION

Recent studies emphasize the health benefits of active lifestyles (Haskell et al. 2007, Ah et al. 2004, Thompson et al. 2003, Pate et al. 1995, Blair et al. 1989). Negative health behaviors such as being physically inactive are generally formed during adolescence and young adulthood. As this situation may have a significant influence on health behaviors and the occurrence of diseases later in life, early interventions may be useful for preventing chronic diseases (Ah et al. 2004).

Leisure time physical activity plays an important role in the prevention of atherosclerotic vascular disease by reducing the atherosclerotic risk factors such as insulin resistance and glucose intolerance, elevated blood pressure, cholesterol. (Thompson et al. 2003, Diabetes Prevention Program Research Group 2002, Blair et al. 1989).

Physical inactivity other than a decrease in energy expenditure may contribute to weight gain. For example, recent studies have demonstrated significant relationships between inactivity and other adverse health practices, such as the consumption of less healthy foods and an increase fat intake especially among adolescents and adults (WHO Technical Report Series 894, 2000).

The American College of Sports Medicine (ACSM) and American Heart Association (AHA) recommend people to involve in physical activity five days per week for 30 minutes per day at a moderate intensity for general health benefits, or three days per week at 20 minutes of high intensity in order to develop and maintain cardio-respiratory and muscular fitness, and flexibility in healthy adults. In addition, individuals who wish to improve their personal fitness level further reduce the risk for chronic diseases and disabilities, or prevent unhealthy weight gain (Haskell et al. 2007, Andersen et al. 2006).

There are various barriers such as, psychological, physical or environmental which hinder individuals from physical activity (Dishman, et al.1985). These barriers may differ in terms of age (Crombie et al. 2004, Auweele et al. 1997) or socio-demographic characteristics (Wolin et al. 2008).

Although, the "time pressures" counted as an environmental factor is the most common barrier to physical activity especially perceived by university students and adolescents (Koçak 2005, Sinclair et al. 2005, Wu et al. 2002), "lack of interest" was found to be most powerful barrier among older individuals (Crombie et al. 2004).

Managing time is a key component to success. Unless one manages time, he/she cannot manage anything. The hint of managing and controlling the time lies in the question; "what is the best way to spend my time". And all long term goals, priorities,

schedules will help to answer this question more meaningfully (Lankein 1973).

There are mainly eight time management approaches such as; get organized approach, warrior approach, goal approach, magic tool approach, time management 101 approach, go with the flow approach, recovery approach, prioritization and value identification approach in the literature. In terms of implementation all of the approaches have some advantages and disadvantages (Covey, 1994).

According to researchers who explore the physical activity levels of individuals, there is a need for assessing the relationship of time management and physical activity (Feldman et al. 2003, Wu et al. 2002, Koçak 2005). In this way there might be a possibility to overcome the time pressures by introducing time management skills. So the individuals can prioritize various activities and schedule time for physical activity which may lead them to be physically more active. From this point, the first purposes of this study were to explore the relationship between physical activity levels and time management practices among selected university students and to identify the differences between physical activity levels and time management practices of university students' in terms of gender.

1.1. Statement of the Problem

According to the researchers, "lack of time" is the most common barrier to physical activity perceived by university students and adolescents (Hellsten and Rogers 2009, Dwyer et al. 2006,

Koçak 2005, Sinclair et al. 2005, Dishman et al. 1985). It is not clear that sedentary people have actually no time to perform physical activity. As the limited nature of time, people can not have more time than they actually have only may have more control over it. If people can gain more control over time they may be able to devote this valuable resource to maintain physical activity as well. So, time barrier to physical activity can be an indication of poor time management practices which may lead to sedentary behavior.

The time management practices help people to enhance their quality of life in all dimensions; maintaining balance, reducing stress, setting and trying to reach the goals (Covey 1994).

Although there are many researches on Physical activity (Karaca et al. 2009, Karaca 2008, Wolin et al. 2008, Dwyer et al. 2006, Fahlman et al. 2006, Koçak 2005, Brown 2005, Sinclair et al. 2005, Crombie et al. 2004, Feldman et al. 2003, Tergerson and King 2002, Wu et al. 2002, Sirard and Pete 2001, Kohl et al. 2000) and time management (Hellsten and Rogers 2009, Alay and Koçak 2003, Trueman and Hartley 1996, Britton and Tesser 1991, Macan et al. 1990) separately, there are lack of studies exploring the relationship between the physical activity levels and time management skills of individuals.

Therefore the problem of this study was to investigate the relationship between the physical activity levels of selected university students and their time management practices and to

ascertain the differences between university students' physical activity levels and time management practices by gender.

1.2. Purpose of the Study

This study was designed to investigate two purposes by means of two questionnaires. The first purpose was to explore the relationship between physical activity levels and time management practices among selected university students. The second purpose was to identify the differences between physical activity levels and time management practices of university students' in terms of gender.

1.3. Research Hypotheses

The following hypotheses have been formulated and were tested at the ($p < .05$) level of significance.

- 1.3.1. There is no significant relationship between total time management practices, physical activity levels of selected university students.
- 1.3.2. There is no significant relationship between time planning practices and physical activity levels of selected university students.
- 1.3.3. There is no significant relationship between time attitudes and physical activity levels of selected university students.
- 1.3.4. There is no significant relationship between time wasters and PA levels of selected university students.

- 1.3.5. There is no significant difference in the physical activity levels by gender.
- 1.3.6. There is no significant difference in the time management practices by gender.

1.4. Assumptions of the Study

1. It is assumed that the subjects participated in this study complete both of Physical Activity Assessment and Time management Questionnaires unbiasedly and truthfully.
2. It is assumed that the subjects followed the test direction.

1.5. Delimitations of the Study

This study was delimited as follows:

1. To the sample undergraduate university students selected on a volunteer basis.
2. To the Physical Activity Assessment Questionnaire which measures the PA levels.
3. To the Time Management Questionnaire which measure time management practices.
4. To the translation of the Time Management Questionnaire into the Turkish language.

1.6. Limitations of the Study

This study may have been limited in the following ways:

1. 128 male and 101 female university students from six universities (three private and three state) selected in İstanbul, Turkey on a volunteer basis.
2. The accuracy of the subjects completing the questionnaires may have varied.

1.7. Definitions of Terms

Physical Activity: Physical activity refers to “any bodily movement produced by skeletal muscle resulting in a substantial increase over the resting energy expenditure” (Pate et al. 1995).

There are three main components of PA; “occupational work” (during the course of work), “Household and other chores” (day-to-day living), “Leisure-time physical activity” (discretionary free time activities including exercise and sports) (WHO Technical Report Series 894, 2000).

Exercise: “A planned and structured subset of leisure time physical activity that is usually undertaken for the purpose of improving or maintaining physical fitness” (Pate et al. 1995).

Sport: “Defined differently around the world but usually implies a form of physical activity that involves competition. It may also embrace general exercise and a specific occupation” (WHO Technical Report Series 894, 2000).

Sedentary Behavior (Physical Inactivity): Sedentary behavior can be defined as “a state when body movement is minimal and

energy expenditure approximates RMR” Although, its name implies inactivity it represents more than an absence of activity; it also includes passive behaviors such as TV viewing, reading, working at computer, driving a car, mediating or eating. (WHO Technical Report Series 894, 2000).

Frequency: Specifies how many days the activity was performed in a week (Karaca 2007).

Duration: Specifies the duration of the performed activity (min or hours) (Karaca 2007).

Intensity: It is the MET value spent for the activity in an hour (Karaca 2007).

MET: A MET is the ratio of work metabolic rate to a standard resting metabolic rate of 1.0 ($4.184\text{kJ}\cdot\text{kg}^{-1}\cdot\text{h}^{-1}$), 1 MET is considered a resting metabolic rate obtained during quiet sitting (Ainsworth et al. 2000).

Time Management: Selecting the best task to do from all the many possibilities available and then performing the task in the best way possible to improve the quality of life in all dimensions (Lankein 1973).

Short Range Planning: Planning in the short run, either within the day or within the week (Britton and Tesser, 1991).

Time Attitudes: Attitudes toward time.

Time Waster: Anything preventing one from achieving his objectives effectively (Mackenzie 1990).

1.8. Significance of the Study

Knowing the key barriers to physical activity of university students may help us why they are insufficiently active. When young adults attend university, many changes occur in their lifestyles that may serve as barriers to regular physical activity. Increased time pressures through high course workload and social pursuits have been reported as reasons for students stopping participation in physical activity and sport. The perceived “lack of time” is also a common barrier of university students according to national and international studies (Koçak 2005, Sinclair et al. 2005).

Self-motivated people are likely to be less sensitive to physical activity barriers. Many sedentary people who intended to be active but remain inactive, lack the self-regulatory skills essentially to engage exercise routines. Short-term studies suggest that interventions that teach goal setting, planning, self-monitoring, and self-reward skills can increase participation among sedentary people intended to be physically active (Dishman, et al.1985).

While regular maintainers of physical activity are more likely to view their PA goals as a part of their life revelations, irregular

maintainers are more likely to think that PA interferes with their aims (Nigg et al. 2008).

Recent research findings indicate that there is little relationship between improved health knowledge or attitudes toward exercise and improved adherence. Although both active and inactive individuals were reported to view exercise as a positive health behavior, those who strongly value exercise, who believe they have control over health outcomes, and who expect health benefits are likely to engage in much exercise. Moreover, researcher emphasized the association of health knowledge and exercise with improved maintenance of lifestyle activities (such as walking) for men and women, but not with participation in vigorous activity (exercise for fitness). Thus, the researcher stated that there is no evidence reported supporting the idea of increased knowledge about exercise leading to enhanced participation (Dishman, et al.1985).

The most frequently reported barrier to physical activity participation or exercise adherence especially among university students and adolescents is "lack of time" (Dishman et al. 1985, Auweele et al. 1997, Koçak 2005, Sinclair et al. 2005, Hellsten and Rogers 2009). As lack of time for physical activity may be the result of poor time management skills, to improve the time management skills interventions should be considered to overcome the time barriers to physical activity.

Although most common barrier to physical activity seems to be the "lack of time", there are not enough studies exploring the

relationship between PA Levels and time management skills of individuals.

Considering the health benefits of physical activity any barrier which hinders the maintenance of PA gains importance. Since improved time management skills may also improve the time planning for exercise. So, there might be a relationship between time management skills and Physical activity levels of individuals.

Then the purpose of this study is to ascertain the relationship between PA Levels and time management Practices of selected university students, to assess the differences between university students' PA levels and time management practices by gender.

CHAPTER II

LITERATURE REVIEW

The related literature will be presented under the following categories. Perceived benefits and barriers to physical activity will be discussed. Questionnaires developed on physical activity levels will be explained. Time management approaches will be discussed and then questionnaires developed on time management will be explained.

2.1. Perceived Barriers and Benefits to Physical Activity

Perceived barriers and benefits for physical activity are the most continuously cited cognitive variables. Perceived benefits are explained as one's valuation of the possible profit related with employing in certain health behavior. Perceived barriers allude to one's valuation of the possible blockages that restricts from employing in health behavior (Brown 2005).

There are psychological, physical or environmental barriers to physical activity. Environmental factors such as; "the attitudes of family, peers, and health professionals, weather, distance from facilities, and time pressures" may have effects on physical activity routines (Dishman, et al.1985).

Age and occupational status is another factor determining the perceived benefits and barriers for physical activity. A study on

middle aged sedentary adults showed that the reason “too much effort” in terms of time and energy expenditure was the most often given reason for not to exercise. Especially, working female and career building young adults scores were high on that reason. Additionally, 60% of female and male sedentary adults participated at the study did not have certain opinion about their inactivity. These individuals seem not willing to change their lifestyles (Auweele et al. 1997).

Despite the great amount of information about the positive relationship between health and PA, it is hard to understand why people do not participate in physical activities. Recent research in this area showed that knowing the benefits of specific behavior is not enough to change the behavior. There are many factors such as attitudes, beliefs, personality, environment, background to influence a person’s physical activity involvement. It is very important and essential to reduce the barriers to Physical Activity. In terms of corporate programs the initial movement motivation may be supplied by health benefit knowledge and belief but not the continued participation. Well-being and enjoyment appear to be more powerful drives for continued participation in corporate programs (Dishman et al. 1985).

Findings of a study which aimed to define the PA levels, beliefs and preventives of older people showed that as the age of the participants increase the time spent for leisure time activities decreases. Older male participants were to be found more willing to participate at leisure time activities than female participants.

Moreover, "lack of interest" in PA was found to be the most powerful factor followed by; "not believing that meeting new people is beneficial, doubting that exercise lengthens life, lack of energy, lack of daily access to a car, painful joints, dislike of going out alone" (Crombie et al. 2004).

Perceived benefits to physical activity may differ in terms of gender. A study showed that the most possible benefits of PA perceived by male and female adolescents may differ. Among female high school students; "to stay in shape", "to loose weight" and "to increase my energy level" were the three most possible benefits of PA. The three most possible benefits of PA among male adolescents were; "to become strong", "to stay in shape", and "to become competitive". The least possible benefit of physical activity was reported as "to be accepted by my friends" for both female and male high school students (Tergerson and King 2002).

In a study, conducted by Koçak, the most important Physical activity barriers perceived by Turkish university students, academic and administrative staff were explored by distributing a 12 item questionnaire. The most common reported reasons of not participating in physical activity were "lack of time, heavy class schedule, and laziness". "Lack of time" was the most common reason for both male and female subjects (Koçak 2005). School based educational programs about health and physical education could be counted as one of the methods which help to encourage adolescents in order to handle barriers to exercise (Fahlman et al. 2006).

"Lack of time" unlike different age groups (Crombie et al. 2004, Auweele et al. 1997) might be a barrier to physical activity among different socio-demographically populations (Wolin et al. 2008).

Perceived benefits and barriers of physical activity will keep on playing a considerable role in PA. There might be a potential improvement of predicting physical activity levels with the standardized measures (Brown 2005).

2.2. Questionnaires and Assessments Developed on Physical Activity

Physical activity which is considered to be a stable variable varies daily and seasonally. Because of its complex and variable nature it is very difficult to enhance indicators. Although sedentary behavior is less variable, the same problems occur. To assess the physical activity behavior several instruments vary in "complexity, accuracy, cost and ease of use". Increase in accuracy, cost, and complexity seem all to be parallel in terms of application (Welk 2008).

"Direct observation" "Doubly labeled water", "Indirect calorimetry", "activity monitors", "heart rate monitors", "pedometers", "accelerometers", "self-report", "Interview", "Proxy Report" and "diary" are the major types of physical activity assessments. While the use of activity monitors, heart rate monitors cost high, they accurately indicate physical activity. On the other

hand, direct observation requires trained observers and very time consuming. Similarly, pedometer and self-report are more easy to use, costs low but have potential problems with validity and reliability (Welk 2008, Sirard and Pete 2001, Kohl et al. 2000).

The choice of the physical activity measure depends on the study design and the age of the subjects. Following some general recommendations may help the researchers to decide which instrument to use. Self-report recall methods should not be used for children younger than 10 years of age. The best way is likely to be the direct observation method for young children and adolescents. To enhance the validity of recall and reporting interviewer assistance might be employed. In determining the method to be used to measure the Physical activity levels, validity, reliability, acceptability by the subjects, time and cost should be taken into consideration (Kohl et al. 2000).

Questionnaires are the most reliable, valid, easy to interpret, low cost and practical methods for large-scales. Errors in remembrance of activity are the limitations of Questionnaires as a self-report method. In order to decrease this limitation, interview techniques are extensively used (Sirard and Pete 2001, Kohl et al. 2000).

Generally test and retest method is used for the validity and reliability of physical activity questionnaires. There might be differences in terms of test-retest periods. Length of the test-retest period and questionnaire, low intensity of the activities, variability of

the life-styles, use of self-report in completing the questionnaire, age groups are some of the factors affecting the validity and reliability of questionnaires (Karaca and Turnagöl 2007).

A recent study which intends to determine the PA levels of young adults in Turkey conducted by Karaca and friends indicated gender differences in the duration and intensity of sport activities. According to the results of the study male subjects were found to be more physically active than female subjects and Female subjects engaged in non-vigorous sports activities for shorter periods of time than male subjects. Moreover, male subjects participated in both moderate and vigorous activities for longer periods of time than female subjects (Karaca et al. 2009).

Another study covering the New Zealand University students indicate a substantial reduce in the physical activity levels of university students (Sinclair et al. 2005).

2.3. Time Management Literature

In the literature, time management approaches range from traditional “efficiency” oriented to newer ones. There are basically three “generations” of time management, each of which builds on the one before, leading to greater efficiency and control (Covey, 1994).

First Generation

The first generation is mostly related with “reminders”. The main characterization of this generation is simple notes and checklists. People in this generation carry reminders and refer back not to forget. At the end of the day unaccomplished things will be put on the list for tomorrow. In some ways, “Go with the flow and recovery” are the time management approaches in the first generation; in other ways they begin to move us into the fourth generation time management.

Second Generation

The second generation is one step higher, “planning and preparation” is the main consideration and characterized by calendars and appointment books. People in this generation set appointments, specify deadlines, and keep the necessary information about meetings. “Get organized, warrior, goal, magic tool and time management 101” are the time management approaches in the second generation time management.

Third Generation

“Planning, prioritizing and controlling are the basic elements of the third generation. Value and priority clarification gains more importance among people in this generation. Long-medium and short goals are set to obtain these values at this generation. Both paper-based as well as electronic planners and organizers with

detailed forms on daily basis are the major characteristics of the third generation. "Get organized, warrior, goal, ABC, magic tool and time management 101" are the time management approaches in the third generation time management.

In the case of implementation, all of these three generations have some advantages and disadvantages. The third generation time management sounds good and promising, but can not deliver the hope because of its "rigid", "structured" and "unnatural" composition. The author emphasizes the clear need of another "fourth generation" which shelters all of the strengths of existing generations. This is a move beyond time management to a "life leadership" which results in quality of life (Covey, 1994).

In order to understand the three generations, it would better to go one step further. There are eight basic time management approaches which have a significant value and important contribution in the time management field. A brief summary of these approaches will be shortly represented (Covey, 1994).

The "Get Organized" Approach (Order)

"Lack of order" is assumed to be the reason of most time management problems at this approach. Get organized approach is related with paperwork and task. It is a system of organizing things by filing from kitchen to computer screens; tasks by giving order and sequence from simple to-do lists to complex project management software and people by defining, delegating and

tracking. Nevertheless, its time saving and efficiency leading nature excessive use of this approach carries the risk of over structured, inflexible people and organization.

The Warrior Approach (Survival and independent Production)

The warrior approach includes powerful techniques as insulation, isolation and delegation. The main aim of this approach is in order to focus, protect the time and produce. It could be possible to protect the time by insulation technique; use of secretaries, closed doors, phone answering machines. Isolation technique could be explained by removing to a quite environment and creating an uninterrupted time. Assigning tasks to others named as delegation. By This technique people get more free time.

Especially for creative and independent works, this technique creates free time and short-term independent action. Others are observed as enemy and it is not effective in long-term and put barriers.

The Goal Approach (Achievement)

This approach includes long, mid and short – range planning, goal setting, visualization, positive mental attitude and self motivation. It says, “know what you want and focus your effort to achieve it”.

To accomplish the goals people create the sequential plan and clarify values by this approach. Knowing how to set and achieve goals generally results in accomplishment. But achievement of goals will not necessarily bring the quality of life results. It is focused on independent achievement.

The ABC Approach (Prioritization and Values Identification)

The ABC Approach is the traditional first things first approach. This approach builds on the goal approach adding the importance concept of sequence. This is the concentration of the most important task first. The techniques included in this approach are value clarification and task ranking. It is assumed that, knowing what you want to accomplish and focus on those things first will make you happy.

The ABC approach provides order and sequence with values and beliefs. It doesn't recognize extrinsic realities managing the quality of life. Moreover, frustration and failure may rise from following only the values.

The Magical Tool Approach (Technology)

Selection of the right tool will give power and help to create quality. Based on this assumption this approach raises productivity and individual capacity. Calendars, planners and the computer programs help keep track of priorities; organize tasks and fast access to information. By the assumption that systems and

structures can help to be more effective, this approach also enhances the creation of high-quality products and services. However, it could be limiting, focusing on daily urgent rather than long-term goals prioritization.

The Time Management 101 Approach (Skills)

This is a popular approach. It is organizational and based on the assumption that the time management is an originally a skill. When people lack skill, it can create various problems about planning, setting goals and delegating. People have to use some tools, such as “to-do-lists” and planners and keep in mind that organizing, prioritizing, goal setting and delegating are the necessities of effective functioning.

Although, only having good skills does not solve time problems it-self, work related skills develop and enhance the accomplishment of objectives, leading to an increase in performance. Moreover, it is interesting that in the long run people who are not quite as organized seem to make greater contribution to the organization than many who do.

The “Go with the Flow” Approach (Harmony and Natural Rhythms)

This approach is based on philosophies of Eastern Culture and it emphasizes the congruity of inner self and one’s harmony with the flow of nature. This approach differs from the traditional time

management approaches about time and life. Biological research suggests that living beings have certain vibrations. Mechanical world of computers, cellular phones and clocks sets people at odds with their natural body rhythms which may lead to various illness and problems.

At this approach, vital elements as vision, purpose and balance are frequently missing and it is often a reaction to urgency addiction or an escape rather than an aid to build quality of life.

The Recovery Approach (Self-Awareness)

This approach states that environmental factors such as heredity and scripting may result in flaws in the psyche causing the behavioral time management dysfunctions. An individual may become perfectionist, influenced by culture of an early role model. Insufficient delegation, micromanaging are the clues of time management problems of this approach. Recovery from the psychosociological deficiencies which creates the time management problems is seemed to be the solution.

This approach helps to identify the characteristics and source of bad time management habits. Nevertheless, its main focus is on the past rather than the future. By this approach self-awareness could be obtained and essential improvements could be gained but only self-awareness would not be enough to solve the problem and lead to an increase in the quality of life.

The author emphasizes the unique valuable contributions of each approach. They grow out a paradigm of control, independent effort efficiency and chronological time (Covey, 1994).

2.4. Questionnaires Developed on Time Management

There are several studies which developed time-related scales. The most well-known questionnaires were Time Management Behavior Scale (TMB) (Macan, Shahani, Dipboye and Philips, 1990) and Time Management Questionnaire (TMQ) (Britton and Tesser, 1991).

The Time Management Behavior Scale (Macan, Shahani, Dipboye and Philips, 1990) was design to measure time management behaviors of university students. They created 76 questionnaire items covering topic areas of time management; setting goals and priorities, learning to say "no", making a list to-do list, organizing, planning, delegating and procrastinating. The items were developed to evaluate the extend to which time management behaviors were used not the students evaluation of the soundness or convenience of such behavior.

Developing the scale all non-contributing items were removed and 46 items TMB was obtained. After a factor analysis of 288 responses on the 46 items, four factors emerged. Setting Goals and Priorities (15 items), Mechanics, Planning, Scheduling (13 items), Perceived Control of Time (13 items), and Preference for Disorganization (5 items) were the labels of four factors. The first

subscale, Setting Goals and Priorities is related with goal setting and task prioritization. The second subscale, Mechanics, Planning and Scheduling is related with to-do lists, planning and time managing. The third subscale, Perceived Control of Time is related with the belief one can affect how the time is spent. The last subscale, Preference for Disorganization refers to a general choice for disorganization in one's workplace (Macan, Shahani, Dipboye and Philips, 1990).

Time management Questionnaire is the other well-known instrument which evaluates the time management practices (Britton and Tesser, 1991). After a factor analysis three subscales emerged from 35 items. Short-Range Planning (7 items), Time Attitudes (6 items) and Long-Range Planning (5 items) were the labels of three factors. The first subscale, Short-Range Planning has variety of items related with planning in the short run, either within the day or within the week. Students who score high on this factor report organizing their day. The second subscale, Time Attitudes is more attitudinal in time. Students who score high on this subscale indicate that they feel in charge of the way their time is spent. Third and the last subscale, Long-Range Planning has the items in the long run. Students score high on this subscale seem to think of things in terms of a relatively wide time window. They set goals for the entire quarter, keep track of the important dates and do not wait until the last minute to finish on major assignments. This assessment was designed to test the time management practices of university students (Britton and Tesser, 1991).

The British version of Britton and Tesser's Time Management Questionnaire was tested by Trueman and Hartley (1996), the Turkish version of Time Management Questionnaire was tested by Alay and Koçak (2002).

The British version of TMQ has 14 items and two subscales which were labeled as, Daily planning subscale (5 items) and Confidence in Long-term Planning subscale (9 items) (Trueman and Hartley, 1996).

Turkish version of TMQ has 27 items and three subscales. The subscales of the questionnaire were Time Planning (Short and Long Range Planning (16 items), Time Attitudes (7 items) and Time Wasters (4 items). The first factor was labeled as, Time Planning because it includes variety of factors both in the short and long run. The second factor was named as Time Attitudes which is more attitudinal in time. The last subscale was called as Time Wasters because the items included at this factor reflects poor time management habits and related with bad use of personal time (Alay and Koçak, 2002).

2.5. Findings on the Physical Activity and Time Management

There is lack of studies assessing the relationship between physical activity and time management skills in the literature. Instead, there are various statements pointing out the possible relationship between them.

A study exploring the association of physical activity with different types of sedentary pursuits used a self-administered questionnaire that addressed time spent in physical activity, time spent in sedentary pursuits, musculoskeletal pain, and psychosocial issues and were also measured height and weight. The findings of this study showed that there were more girls than boys in the low and moderate physical activity groups. On the other hand, increased time spent in "productive sedentary behavior such as reading, doing homework and working on computers, was associated with increased physical activity. In addition, time spent watching television and playing video games was found not associated with decreased physical activity. The researchers of this study indicate that certain teens are more capable of managing their time to include both physical activity and sedentary pursuits or that those who are not physically active choose not to be, regardless of whether they watch television. Reducing television watching may not be likely to increase physical activity. Finally, researchers pointed out that time management skills or motivational strategies may be necessary to encourage participation in physical activity (Feldman et al. 2003).

Similarly, results of an international research indicates that the time constrains emerged as a distinct factor of Taiwanese adolescents perceived barriers to physical activity. The researcher suggests the high relevance of time constrains to participating in physical activity in this population as a result of the great emphasis on academic performance and stress related to preparation for the high school entrance exams. Furthermore, strategies which can be

designed to help adolescents learn time management skills in order to prioritize their activities and schedule time for physical activity, emphasized by the researcher (Wu et al. 2002).

Finally in a more recent national study conducted by Koçak on perceived barriers to exercise among university members, reported the lack of time as the most common reason for not participating in physical activities among the university members. Koçak in his study points out that there are insufficient data in terms of identifying the cause of time restriction (Koçak 2005).

CHAPTER III

METHODS AND PROCEDURE

The purpose of this study was to ascertain the relationship between physical activity levels and time management practices of selected university students, and to explore the differences between university students' PA levels and time management skills by gender.

3.1. Selection of Subjects

The subjects of this study were 229 undergraduate university students from six universities (three private and three state) which are selected during 2009-2010 academic year in İstanbul, Turkey on a volunteer basis. According to the data obtained 128 (55,9%) of the participants were male and 101 (44,1%) of the participants were female university students. All the subjects participated in this study attended voluntarily.

3.2. Data Collection Procedure

All the procedures were arranged and conducted by the researcher to standardize the administration of the instruments. In this study the data was collected from 229 undergraduate university students. They were informed about the purpose of the investigations and assured that the information they provided was anonymous and confidential.

3.3. Data Collection Instruments

In this study two data collection scales was used. The Physical Activity Assessment Questionnaire (PAAQ) (Karaca 2007) and Time Management Questionnaire (TMQ) (Alay 2002) were used to collect data on Physical activity levels and time management skills of selected university students from six Universities in İstanbul. The mentioned instruments above will be described in detail in the following sections.

3.3.1. Physical Activity Assessment Questionnaire (PAAQ)

Reliability and validity of the PAAQ (Appendix A) on university students was determined by Karaca in 2007. The Reliability values PAAQ of university students were medium and high, validity values of PAAQ of university students were medium (Karaca 2007).

Physical Activity Assessment Questionnaire PAAQ is a self report questionnaire, which asks participants to give their weekly average frequency and duration they engaged in PA over the last year (Karaca et al. 2000).

PAAQ consists of eight categories,

- 1) Descriptive information (age, weight, height etc),
- 2) Work related activities
- 3) School related activities
- 4) Transportation

- 5) Home Related Activities
- 6) Climbing Stairs
- 7) Hobbies
- 8) Sport Related Activities

Subjects specified whether the activities that are listed under these categories were done and if so, on how many days (frequency) and how many hours per day (duration) the activity was generally performed in a week. Each activity was assigned an intensity value (Metabolic expenditure units-MET) based on the work of Ainsworth et al. (2000).

By means of PAAQ following calculations could be done; MET/Week (kcal/kg/week), kcal/week, MET/Hour. For this calculations duration, frequency and intensity data's are needed (Karaca 2007).

Formulas by which weekly and daily durations and intensity (METs/hour) of the activities were calculated (Karaca et al. 2009) are given below:

$$\text{Hours / week} = \text{frequency} \times \text{duration}$$

$$\text{Hours / day} = \frac{\text{hours week}}{7 \text{ days}}$$

$$\text{METs / hour} = \frac{(\text{frequency} \times \text{duration} \times \text{intensity})}{\text{hours / week}}$$

In this study, intensity of total physical activity was classified as sedentary ($\leq 1,55$), limited activity (1,55-1,74), and Physically active ($\geq 1,74$) Life Style PAL classification (WHO Technical Report Series 894, 2000). Total physical activity (including; transportation, climbing stairs, hobbies, home and sport related activities) intensities of the subjects were transformed into three categories by recoding the data using the Life Style PAL classification (WHO Technical Report Series 894, 2000) as;

- 1 = $\leq 1,55$as Sedentary
- 2 = 1,55-1,74.....as Limited activity
- 3 = $\geq 1,74$as Physically active

In this study, intensity of sport activities were classified as light (< 3 METs), moderate (3-6 METs) and vigorous (> 6 METs) based on the study of Pate (Ainsworth et al. 2000). Sport activity Intensities of the subjects were also transformed into three categories by recoding the data using the model proposed by Pate et al. (Ainsworth et al. 2000) as;

- 1 = < 3 METs.....as Light
- 2 = 3-6 METs.....as Moderate
- 3 = > 6 METs.....as Vigorous

3.3.2. Time Management Questionnaire (TMQ)

TMQ was first developed by Britton and Tesser in 1991. Reliability and validity of the Turkish version of Time Management Questionnaire (Appendix B) was conducted by Alay in 2000.

TMQ includes 27 items designed to measure time management practices with three subscales. The names of subscales and numbers of items are as follows;

- a) Time planning (short and long range planning) (16 items)
- b) Time attitudes (7 items)
- c) Time wasters (4 items)

Each item has five response categories which were scored from 1-5 with a high score indicating better time management: *"Always", "Frequently", "Sometimes", "infrequently" and "never"*.

Explanations of each of these subscales are below;

Time planning has a variety of items that require planning in the short run (either within the day or within the week). Students who score high on this subscale report organizing their day and thinking everything in terms of a relatively wide time range. They set goals for entire semester and review their class notes, even when a test is not imminent.

Time attitude is more attitudinal in nature. Students who score high on this subscale indicate that they feel in charge of the way their time is spent.

Time wasters are anything that prevents the students from achieving their objectives effectively. Continuing unprofitable routines or activities and spending more time with personal grooming than doing schoolwork on an average class day are examples of time wasters.

As the item numbers within each subscale were not equal, item scores were summed up and divided by the item number in each to make meaningful comparisons among them. Thus each subscale was examined independently from others. Total time management scores was calculated by adding each subscales scores (Alay 2002).

3.4. Data Analysis Procedure

The Statistical Package for Social Statistics (SPSS) program is used to analysis of the collected data. First of all descriptive statistics were used to define demographic variables of this study.

Second, to test the relationship between PA levels and TM practices of selected university students, Pearson Correlation technique was used. The same analysis was used to test the relationship between the subscales of TMQ and PA levels of selected university students as well as the following; the PA Levels and academic achievement; the subscales of TMQ and academic achievement.

Thirdly, Chi-squared analysis was used to determine whether or not gender difference is independent of physical activity levels.

Finally, Multivariate analysis of variance (MANOVA) was used to determine whether there was any difference in the Time Management practices by gender.

CHAPTER IV

RESULTS

4.1. Descriptive Statistics

The sample of this study consisted of 229 undergraduate university students from six universities (three private and three state). One hundred and twenty eight of the total samples (55,9%) were males and one hundred and one (44,1%) were females. Number of subject for each gender was close to each other. Distribution of subjects in terms of gender is presented in Table 1. and the data regarding the physical characteristics; age, height and weight of the subjects are given in Table 2.

Table1. *The demographic characteristics of the subjects with regard to their gender*

		N	Percent
Gender	Female	101	44,1
	Male	128	55,9
	Total	229	100,0

Table2. *The physical characteristics of the subjects*

	Female (n=101)		Male (n=128)		Total(n=229)	
	M	SD	M	SD	M	SD
Age (year)	20,11	1,52	20,46	1,59	20,31	1,56
Height (cm)	1,67	0,07	1,82	0,08	1,75	0,11
Weight (kg)	57,28	6,84	79,76	11,172	69,84	14,66

Distribution of subjects in terms of "sport MET" and "total MET" intensities are presented in Table 3. and Table 4. the data regarding the mean and standard deviations of time management practices of the subjects are given in Table 5.

Table3. *The physical activity levels of the subjects in terms of "sport MET" intensities*

	N	Percent
MET Intensities 1= Light	35	15,3
2= Moderate	126	55,0
3= Vigorous	68	29,7

Table4. *The PA levels of subjects in terms of "total MET" intensities*

	N	Percent
MET Intensities 1= Sedentary	121	52,8
2= Limited Activity	60	26,2
3= Physically Active	48	21,0

Table5. *The means and the standard deviations for total time management scale and the subscales*

	N	Mean	Std. Deviation
Total Scale	229	3,18	,4830
Time Planning	229	3,13	,6685
Time Attitudes	229	3,30	,5431
Time Wasters	229	3,13	,6824

4.2. Pearson Correlation Results

Pearson Correlation statistical procedure was performed to determine the relationship between physical activity levels and time management practices of selected university students. Table 6 shows the correlation coefficients between physical activity levels and total time management, and it also presents the correlation coefficients between physical activity levels and time management subscales for selected university students.

Table6. *The correlation results between physical activity levels, and time management practices of the subjects*

	Total Score	Time Planning	Time Attitudes	Time Wasters
PA Levels (TMI)			,153*	
Total Hours Spend W		,138*		-,149*
Total MET Spend H			,139*	

*. Correlation is significant at the 0.05 level (2-tailed).

As can be seen from Table 6, there was significant correlation between total hours spend in a week and time planning ($r=.037$, $p<.05$), and negative correlation between time wasters ($r=.024$, $p<.05$). There was significant correlation between total MET spend in an hour and time attitudes ($r=.035$, $p<.05$), between total MET intensities and time attitudes ($r=.021$, $p<.05$). Although, there was a significant correlation between the above, they were not highly correlated.

Besides that, no significant correlation was found between the following;

- the total hours spend in a week and time attitudes, total time management;
- the total Met spend in an hour and time planning, time wasters, total time management;
- the physical activity levels in terms of "total MET" intensities and time planning, time wasters, total time management.

On the other hand, no significant correlation was found between the physical activity levels in terms of "sport MET" intensities and total time management and time management subscales; the total Met spend in a week and total time management, time management subscales.

4.3. Chi-Squared Results

Chi-squared analysis was used to determine whether or not gender difference is independent of the physical activity levels.

According to Chi-squared analysis gender difference is dependent of the physical activity levels in terms of “sport MET” intensities [X^2_2 (N=229)=12.82, $p<.03$]. According to the further analysis male students in the third stage (vigorous physical activity) was higher in number.

According to Chi-squared analysis gender difference is dependent of the physical activity levels in terms of “total MET” intensities [X^2_2 (N=229)=12.82, $p<.02$]. According to the further analysis male students in the second (limited activity) and third stage (physically active) was higher in number.

Table7. *The differences between physical activity levels (sport MET intensities) in terms of genders*

	Female	Male
“sport MET” Intensities 1= Light	16	19
2= Moderate	67	59
3= Vigorous	18	50

Table8. *The differences between physical activity levels (total MET intensities) in terms of genders*

	Female	Male
“total MET” Intensities 1= Sedentary	62	59
2= Limited Activity	25	35
3= Physically Active	14	34

4.4. MANOVA Results

Multivariate analysis of variance (MANOVA) was used to determine whether there was any difference in the Time Management practices by gender.

Analysis indicate that there is a significant main effect (Wilk Lambda=0.94, $F_{4,224}=3.36$) Subsequent unvaried analysis indicated differences in Time Management ($F_{1,227}= 9.59$, $p=.002$) Women have higher scores in both time planning and total scale.

Table9. *The differences between time management practices in terms of genders*

	Female		Male	
	Mean	Std. Dev.	Mean	Std. Dev.
Total Scale	3.28	.4854	3.10	.4689
Time Planning	3.29	.6561	3.01	.6561
Time Attitudes	3.30	.5138	3.30	.5672
Time Wasters	3.19	.6992	3.08	.6682

CHAPTER V

DISCUSSION

The results of each hypothesis will be interpreted and alternative reasonable explanations for the results will be discussed within the limitations of the study in this section.

Hypothesis one stated that there is no significant relationship between the total time management practices and the physical activity levels of selected university students. The results of Pearson Correlation Coefficient indicate that there was no significant relationship between physical activity levels of subjects and total time management practices.

The subjects of this study did not have high scores on time management practices nor have physical activity levels especially in terms of "total MET" intensities (52.8% sedentary). The "total MET" met intensities includes home; transportation and sport related activities and climbing stairs; hobbies. The differences between the subject's residence condition (staying at a dormitory in the university or a home away from the university) may affect the results in a city like İstanbul where the transportation from an outside residence to university may take hours.

Physical activity levels in terms of "sport MET" intensities observed among the subjects yield in "moderate" by 55% of total.

There might be differences between the subjects' athletic levels and perceived intensities among sports. As the "sport MET" intensities were derived from the amount of MET spend in sports in an hour it might be effected from the misperception of the sport intensities by the subjects.

Hypothesis two stated that there is no significant relationship between time planning practices and physical activity levels of selected university students. Although there was no significant relationship between; physical activity levels of subjects in terms of "sport MET" ,"total MET" intensities of the subjects and time planning , the results of Pearson Correlation Coefficient indicate that there was significant relationship between the total hours spend by the participants in a week for physical activity and time planning, therefore the hypothesis was rejected.

As the time planning scale consists of the items related with planning in the short and long run, subjects who score high on time planning reported organizing their time and thinking by a relatively wide time range the relationship between the time planning and the time spend for physical activity is logical (Alay,2002). Hereby, it might be concluded that the development of time planning practices of the subjects may lead a rise in the total amount of time spend in a week for physical activity.

Hypothesis three stated that there is no significant relationship between time attitudes and physical activity levels of selected university students. Although there was no significant relationship

between; physical activity levels of subjects in terms of "sport MET" intensities and time attitudes; the results of Pearson Correlation Coefficient indicate that there was a significant relationship between; the physical activity levels of subjects in terms of "total MET" intensities, total MET spend in an hour and time attitudes, therefore the hypothesis was rejected.

High scores on the time attitudes scale indicates constructive use of time and being in charge of the way the time is spent (Alay, 2002). So, it might be concluded that constructed use of time and being in charge of the way the time is spent may lead a rise in physical activity levels of students.

Hypothesis four stated that there is no significant relationship between time wasters and physical activity levels of selected university students. Although there was no significant relationship between; physical activity levels of subjects in terms of "Sport MET" "total MET" intensities of the subjects and time wasters the results of Pearson Correlation Coefficient indicate that there was significant relationship between; total hours spend in a week for physical activity and time wasters, therefore the hypothesis was rejected.

The time wasters are anything that hinders the students from realizing schools objectives efficiently. As the items of this scale scored reversed to obtained data, subjects who score high on this subscale have high time management success in terms of time wasters (Alay, 2002). It is not surprising to have a negative relationship between total hours spend in a week and time wasters

practices of the subjects. Students may perceive the time spend for physical activity in general as a time barrier for realizing their school objectives efficiently.

Hypothesis five stated that there is no significant difference in the physical activity levels by gender. According to Chi-squared analysis gender difference is dependent of the physical activity levels in terms of "sport MET" [X^2_2 (N=229)=12.82, $p<.03$] and "total MET" [X^2_2 (N=229)=12.82, $p<.02$] intensities. According to the further analysis for physical activity levels of the subjects in terms of "sport MET" intensities male students in the third stage (vigorous physical activity) was higher in number and for physical activity levels of the subjects in terms of "total MET" intensities, male students in the second (limited activity) and third stage (physically active) was higher in number, therefore the hypothesis was rejected.

These findings are parallel with the earlier studies which found that young adult male Turkish university students were more physically active than young adult female Turkish university students (Karaca 2008, Karaca et. al 2009).

Social and psychological causes might explain the higher physical activity levels of males. Koivula, states that gender differences in sport participation motivation are likely to have emerged due to the expectations of society of "appropriate" behavior for men and women. Men are expected to be competitive while women are expected to be yielding and concerned about,

rather than competing with others. As body-related and social factors are stronger motives for women, competition and competence motives are more valued by men (Koivula 1999). The reasons why males in this study engaged more vigorous physical activity than females can be explained from these perspectives.

Hypothesis six stated that there is no significant difference in the time management practices by gender. Multivariate analysis of variance (MANOVA) indicated that there is a significant difference existed among gender (Wilk Lambda=0.94, $F_{4.224}=3.36$). Subsequent unvaried analysis indicated differences in Time Management ($F_{1.227}= 9.59$, $p=.002$) women have higher scores in both time planning and total scale, therefore the hypothesis was rejected.

These findings are parallel with the study of Alay and Koçak (2003) which found that female Turkish university students are more successful in terms of time planning than male students.

If there was a relationship between the physical activity levels and time planning why successful time planners are less physically active than male counterparts? To explain the contradiction we may refer back to the social and psychological reasons of physical activity level differences mentioned above.

CHAPTER VI

CONCLUSION AND RECOMMENDATIONS

6.1. Conclusion

Based upon the results of this study and the subject group involved, the following conclusions were drawn:

1. Results of this study indicated that the time management practices were related to the physical activity levels. Therefore, it was concluded that the subjects with better time management practices had higher level of physical activity.

2. There were gender differences among physical activity levels of university students. Therefore, it was concluded that gender was an important factor in physical activity levels.

3. The present study reveals a difference between female and male undergraduate university students with respect to time planning. Therefore, female university students are better than male university students on time planning.

6.2. Recommendations

Based on the results of this investigation, the following recommendations for practical consideration and future research are proposed.

1. Physical activity assessment should be implemented regularly for the university students to maintain realistic results on

their physical activity levels. Efforts should be made to inform the university students about the benefits of physical activity.

2. The reasons not to participate the physical activities should be examined in detail by conducting regular surveys among university students. Efforts should be made to eliminate these barriers.

6.2.1. Recommendations for Further Research

Based upon the results of this research study, following recommendations for further research are made:

1. Further studies should be conducted on an increased number of universities in Turkey

2. In addition to time management practices, future research should be conducted what other factors that might influence the physical activity levels of university students.

3. Similar studies should be conducted to assess the relationship between the age groups in physical activity levels and time management.

4. Improving the healthy attitudes among the university students should be one of the purposes of the universities. Time management courses should be given to students to overcome time barrier of physical activity.

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APPENDICES

APPENDIX 1

PHYSICAL ACTIVITY ASSESSMENT QUESTIONNAIRE (PAAQ)

Dear Participant,

Aim of this questionnaire is to determine the physical activity levels of individuals. Amount of kilocalories spent per day or week will be calculated according to the obtained data. Every physical activity (sitting, lying, running, climbing stairs) has a MET equivalent.

The information that you gave is very important in terms of obtaining the nearest value that you have spent as kilocalories. Physical activity may differ daily. For this reason, it will be enough to search for the answer of "GENERALLY HOW MUCH" question. Indicating the activities that you are doing **regularly at least once a week** and **since when** you have been doing them, will allow us to determine your physical activity habits. Thank you for your participation.

Name Surname:

Gender : F M

Age : _____ Height : _____ Weight : _____

Education : Primary School High School College

Overall Cumulative Grade Point Average: _____

Athletic Branch : _____

Athletic Level: Club License Individual Licence School Licence

Involvement at National Athletic Team: Yes No

Marital status: Married Single

WORK RELATED ACTIVITIES

If you are not working please do not fill this part

1-Work : _____

2-How many days you are working? _____ days

3-How many hours a day you are working? _____ hours

4-How many hours of your one day working period are you sitting? (Added sitting durations both working and resting hours will be written) _____ hours No sitting

***If you cannot define your working hours by the 2nd, 3rd and the 4th questions, please explain here in detail:.....

.....

SCHOOL RELATED ACTIVITIES

If you are not a student please do not fill this part

5-Which department you are studying? :_____

Which Year: 1 2 3 4 5 6 7 8

6- How many days you are going to school? _____days

7- How many hours a day you are at school? _____hours

8- How many hours of your one day school period are you sitting? (Added sitting durations both Class and resting hours will be written) _____hours No sitting

*** If you cannot define your school hours by the 2nd, 3rd and the 4th questions, please explain here in detail:

.....

TRANSPORTATION RELATED ACTIVITIES

In this section, write the round-trip total in specifying the transportation type to work, home, school, shopping places etc.

9- <u>Transport. mode</u> <u>month</u>	<u>How many</u> <u>days a week</u> /	<u>How many</u> <u>min a day</u> /	<u>since how many</u>
Walking	_____	_____	_____
Driving	_____	_____	_____
Sitting	_____	_____	_____
Standing	_____	_____	_____
Other (Specify)	_____	_____	_____

HOME RELATED ACTIVITIES

Sleeping

11. How many hours a day you are sleeping at weekdays? ____
hours

12. **How many hours a day you are sleeping at weekends?** ____
hours

Specify the housework that you are doing at the times other than the sleeping period at home (How many days a week and how many min per day at weekdays and weekends)

<u>Housework</u>	<u>WEEKENDS</u>		<u>WEEKDAYS</u>	
	<u>How many days a week</u>	<u>How many min a day</u>	<u>How many days a week</u>	<u>How many min a day</u>
House Cleaning.....	_____	_____	_____	_____
Cooking, setting and clearing the table.....	_____	_____	_____	_____
Dishwashing (alignment or extraction)	_____	_____	_____	_____
Laundry (machine settings, hanging out, folding).....	_____	_____	_____	_____
Ironing.....	_____	_____	_____	_____
Shopping.....	_____	_____	_____	_____
Child Care.....	_____	_____	_____	_____
Repair.....	_____	_____	_____	_____
Other (Specify)	_____	_____	_____	_____

13- Home Related Activities (sitting)

Home Work.....	_____	_____	_____	_____
Computer Usage.....	_____	_____	_____	_____
Reading etc.....	_____	_____	_____	_____
Watching TV.....	_____	_____	_____	_____
Other (Specify)	_____	_____	_____	_____
Other (Specify)	_____	_____	_____	_____
Other (Specify)	_____	_____	_____	_____

ACTIVITIES AS A HOBBY

Answering the question about your hobbies that you do at least once a week regularly at home or outside, specify how many days and how many min a day at weekdays and how many days and how many min a day at weekends.

<u>Hobbies</u>	<u>WEEKENDS</u>		<u>WEEKDAYS</u>	
	<u>How many days a week</u>	<u>How many min a day</u>	<u>How many days a week</u>	<u>How many min a day</u>
Drawing picture.....	_____	_____	_____	_____
Playing instrument....	_____	_____	_____	_____
Other (.....)	_____	_____	_____	_____

CLIMING STAIRS

1 floor staircase = 20 stairs

Example: If you are living at the 5th floor and climbing the stairs two times (5 floor x 2 times) it means that you are climbing 10 floor stairs. Please only write the stairs that you climb (do not include going down)

10- How many stairs you are climbing per day? _____ floor

SPORTS ACTIVITIES

Write down the exercises that you are still doing regularly at least once a week for the sports activities, how many days per week, how many hours a day, and enter how many months you've been doing, and mark your level of exertion.

Sports Branch much	How many days a week	How many min a day	Since how many months	Level of Exertion				
				Any	Few	Med	Much	Too
Walking	_____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Running	_____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cycling	_____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aerobic-step	_____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Soccer	_____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tennis	_____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Table Tennis	_____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (.....)	_____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (.....)	_____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (.....)	_____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (.....)	_____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

OTHER ACTIVITIES

In this section, on a regular basis at least once a week and you do not specify any part in determining your level of physical activity will affect your activities and enter the result.

WEEKENDS

WEEKDAYS

Other Activities	How many		How many	
	days a week	min a day	days a week	min a day
Other (Specify)	_____	_____	_____	_____
Other (Specify)	_____	_____	_____	_____
Other (Specify)	_____	_____	_____	_____

APPENDIX 2
PHYSICAL ACTIVITY ASSESSMENT QUESTIONNAIRE
(PAAQ)
(TURKISH VERSION)
FİZİKSEL AKTİVİTE DEĞERLENDİRME ANKETİ

Değerli Katılımcı

Bu anketin amacı, bireylerin fiziksel aktivite düzeylerinin saptanmasıdır. Elde edilen verilerle 1 haftada ya da 1 günde harcanan kilokalori miktarı hesaplanacaktır. Her türlü bedensel aktivitenin (oturmak, yatmak, koşmak, merdiven çıkmak v.b.) MET (kilokalori/kg/saat) olarak karşılığı vardır. Verdiğiniz bilgilerin doğruluğu, gerçekte harcadığınız kilokalori miktarına en yakın değeri elde edebilmemiz açısından önemlidir. Fiziksel aktivite her gün farklılık gösterebilir. Bu nedenle sorulara cevap verirken "**GENEL OLARAK NE KADAR**" sorusuna cevap aramanız yeterli olacaktır. **Haftada en az bir kez** olmak üzere, **düzenli** olarak yapmakta olduğunuz aktiviteleri ve bu aktiviteleri **ne zamandan beri** yaptığınızı belirtmeniz, fiziksel aktivite alışkanlığınızı belirlememizi sağlayacaktır. **Zaman ayırıp katıldığınız için teşekkür ederim.**

Adınız Soyadınız:

Cinsiyetiniz: K E

Yaşınız: _____ Boyunuz : _____ Kilonuz : _____

Eğitim Durumunuz: ilk ve orta derece lise Üniversite

Dönem Not Ortalamanız: _____ Genel Kum. Not Ortalamanız:

Sporcu iseniz uğraştığınız spor dalı: _____

Spor düzeyiniz: Kulüp lisans Bireysel Lisans Üniversite Lisans

Milli Takımda yer aldınız mı? Evet Hayır

Medeni Durumunuz: Evli Bekar

İŞLE İLGİLİ AKTİVİTELER

Eğer herhangi bir işte çalışmıyorsanız bu bölümü doldurmayınız

1-İşiniz : _____

2-Haftada kaç gün çalışıyorsunuz? _____gün

3-Günde kaç saat çalışıyorsunuz? _____saat

4-Günlük çalışma sürenizin kaç saatinde oturuyorsunuz? (Çalışırken ve dinlenirken oturulan süreler toplanarak yazılacak)_____ saat

Hiç oturmuyorum

***Eğer iş saatlerinizi 2, 3, ve 4. sorularda tanımlayamıyorsanız

detaylı olarak açıklayınız:

.....

OKUL İLE İLGİLİ AKTİVİTELER

Eğer öğrenci değilseniz bu bölümü doldurmayınız

5-Hangi bölümde okuyorsunuz? :_____

Kaçıncı yılınız: 1 2 3 4 5 6 7 8

6- Haftada kaç gün okula gidiyorsunuz? _____gün

7- Günde kaç saat okula gidiyorsunuz? _____saat

8- Bir günde okulda bulunduğunuz süre içinde kaç saat oturuyorsunuz? (Ders ve dinlenirken oturulan süreler toplanarak yazılacak) _____saat Hiç Oturmuyorum

*** Eğer okul saatlerinizi 6,7 ve 8. sorularda tanımlayamıyorsanız

detaylı olarak açıklayınız:

.....

ULAŞIM İLE İLGİLİ AKTİVİTELER

Bu bölümde iş, ev, okul, alışveriş v.b. yerlere ulaşım şeklinizi belirtirken gidiş-dönüş toplamını yazınız.

9- Ulaşım Modu	Haftada kaç gün	Günde kaç dk.	Kaç aydan beri
Yürüyerek	_____	_____	_____
Araba kullanarak	_____	_____	_____
Oturarak	_____	_____	_____
Ayakta	_____	_____	_____
Diğer (belirtiniz)	_____	_____	_____

EV İLE İLGİLİ AKTİVİTELER

Uyku

11. Hafta içi günde kaç saat uyuyorsunuz? ____ saat

Hafta sonu günde kaç saat uyuyorsunuz? ____ saat

12. **Evde, uyku dışında geçirdiğiniz süre içinde yaptığınız ev işlerini, hafta içi kaç gün ve 1 günde kaç dakika, hafta sonu kaç gün ve 1 günde kaç dakika yaptığınızı belirtin.**

HAFTA İÇİ HAFTA SONU

Ev işleri	Haftada kaç gün	Günde kaç dk.	Haftada kaç gün	Günde kaç dk.
Temizlik.....	_____	_____	_____	_____
Yemek yapma Sofra kurup kaldırma.....	_____	_____	_____	_____
Bulaşık (Makinede/elde yerleştirme ve boşaltma...)	_____	_____	_____	_____
Çamaşır (makineye koyma, asma ve katlama)...	_____	_____	_____	_____
Ütü Yapma.....	_____	_____	_____	_____
Alışveriş.....	_____	_____	_____	_____
Çocuk bakımı.....	_____	_____	_____	_____
Tamirat.....	_____	_____	_____	_____
Diğer (Belirtiniz)	_____	_____	_____	_____

13- Evde Oturarak Yapılan Aktiviteler

	<u>HAFTA İÇİ</u>		<u>HAFTA SONU</u>	
	Haftada kaç gün	Günde kaç dk.	Haftada kaç gün	Günde kaç dk.
Ders çalışma	_____	_____	_____	_____
Bilgisayar kullanma	_____	_____	_____	_____
Kitap okuma v.b.	_____	_____	_____	_____
Televizyon izleme	_____	_____	_____	_____
Diğer (Belirtiniz)	_____	_____	_____	_____
Diğer (Belirtiniz)	_____	_____	_____	_____
Diğer (Belirtiniz)	_____	_____	_____	_____

HOBİ OLARAK YAPILAN AKTİVİTELER

Evde ya da ev dışında düzenli olarak haftada en az bir kez yaptığınız hobileriniz ile ilgili sorulara cevap verirken hafta içi kaç gün ve 1 günde kaç dakika, hafta sonu kaç gün ve bir günde kaç dakika olduğunu belirtiniz.

<u>Hobileriniz</u>	<u>HAFTA İÇİ</u>		<u>HAFTA SONU</u>	
	Haftada kaç gün	Günde kaç dk.	Haftada kaç gün	Günde kaç dk.
Resim Yapmak.....	_____	_____	_____	_____
Müzik aleti çalmak....	_____	_____	_____	_____
Diğer (Belirtiniz).....	_____	_____	_____	_____

MERDİVEN ÇIKMA

1 kat merdiven = 20 basamak

Örneğin: 5. katta oturuyor ve günde 2 kez çıkıyorsanız, (5 katx2 kez) 1 günde 10 kat merdiven çıkıyorsunuz anlamına gelmektedir. Not: Sadece çıktığınız kat sayısını yazınız (indiğinizi yazmayınız).

10-Bir günde kaç kat merdiven çıkıyorsunuz? _____ kat

SPOR AKTİVİTELERİ

Halen düzenli olarak haftada en az bir kere yaptığınız spor aktivitelerini haftada kaç gün, günde kaç dakika ve kaç aydan beri yaptığınız yazınız ve zorlanma düzeyinizi işaretleyiniz.

Spor dalı fazla	Haftada kaç gün	Günde kaç dk.	Kaç aydan beri	Zorlanma Düzeyi				
				Hiç	Az	Orta	Çok	Çok
Yürüyüş	_____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Koşu	_____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bisiklet	_____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aerobik-step	_____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Futbol	_____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tenis	_____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Masa Tenisi	_____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Diğer (.....)	_____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Diğer (.....)	_____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Diğer (.....)	_____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Diğer (.....)	_____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

DİĞER AKTİVİTELER

Bu bölümde; düzenli olarak haftada en az bir kez yaptığınız ve herhangi bir bölümde belirtmediğiniz fiziksel aktivite düzeyinizin belirlenmesinde sonucu etkileyebilecek aktivitelerinizi yazınız.

Diğer	<u>HAFTA İÇİ</u>		<u>HAFTA SONU</u>	
	Haftada kaç gün	Günde kaç dk.	Haftada kaç gün	Günde kaç dk.
Diğer (Belirtiniz)	_____	_____	_____	_____
Diğer (Belirtiniz)	_____	_____	_____	_____
Diğer (Belirtiniz)	_____	_____	_____	_____

APPENDIX 3

TIME MANAGEMENT QUESTIONNAIRE (TMQ)

TIME MANAGEMENT QUESTIONNAIRE

This inventory contains 27 items that might be descriptive of you. Please read each question and then place a *check mark* in one of the parentheses next to the question, corresponding to the category that best describes you. For example; if the first question "always" applies to you put a check mark in the parentheses beneath always. Remember that we are interested in how you think you actually are, not how you would like to be. Be sure to answer all 27 questions. Time management questionnaire is an inventory that evaluates how you spent and manage your time, it is not a test. There is no "right" or "wrong" answer, answering the questions cordially is important. Thanks for your interest.

Time Planning (Short and Long Range Planning)

	<i>Always</i>	<i>Frequently</i>	<i>Sometimes</i>	<i>Infrequently</i>	<i>Never</i>
1. Do you plan your day before you start it?	()	()	()	()	()
2. Do you have a set of goals for each week ready at the beginning of the week?	()	()	()	()	()
3. Do you spend time each day planning?	()	()	()	()	()
4. Do you write a set of goals for yourself for each day?	()	()	()	()	()
5. Do you make a list of the things you have to do each day?	()	()	()	()	()
6. Do you make the schedule of activities you have to do on workdays?	()	()	()	()	()
7. Do you have a clear idea of what you want to accomplish during the next week?	()	()	()	()	()
8. Do you set deadlines for yourself for completing work?	()	()	()	()	()
9. Do you try to schedule your best hours for your most demanding work?	()	()	()	()	()
10. Do you keep your important dates (e.g. Exam dates, research paper due dates, etc.) on a single calendar?	()	()	()	()	()

	<i>Always</i>	<i>Frequently</i>	<i>Sometimes</i>	<i>Infrequently</i>	<i>Never</i>
11. Do you have a set of goals for the entire quarter?	()	()	()	()	()
12. Do you clip or Xerox articles which, although not presently important to you, may be in the future?	()	()	()	()	()
13. Do you regularly review your class notes, even when a test is not imminent?	()	()	()	()	()
14. Do you keep things with you that you can work on whenever you get spare moments?	()	()	()	()	()
15. Do you set and honour priorities?	()	()	()	()	()
16. Each week do you do things as they naturally occur to you, without an effort to make a plan in advance and compulsively? ^a	()	()	()	()	()
Time Attitudes					
1. Do you make constructive use of your time?	()	()	()	()	()
2. Do you believe that there is room for improvement in the way you manage your time? ^a	()	()	()	()	()
3. Do you feel you are in charge of your own time, by and large?	()	()	()	()	()
4. Generality, do you think you can usually accomplish all your goals for a given week?	()	()	()	()	()
5. Are you able to make minor decisions quickly?	()	()	()	()	()
6. Do you often find yourself doing things which interfere with your school works simply because you hate to say "no" to people? ^a	()	()	()	()	()
7. Do you find yourself waiting a lot without anything to do? ^a	()	()	()	()	()
Time Wasters					
1. On an average class day do you spend more time with personal grooming than doing school work? ^a	()	()	()	()	()
2. Do you continue unprofitable routines or activities? ^a	()	()	()	()	()
3. Do you smoke an average of at least one pack of cigarettes per day? ^a	()	()	()	()	()
4. The night before a major assignment is due, are you usually still working on it? ^a	()	()	()	()	()

^a These items were reverse scored, for example, response of "never" were given a score of 5.

APPENDIX 4
TIME MANAGEMENT QUESTIONNAIRE
(TMQ)
(TURKISH VERSION)

ZAMAN YÖNETİMİ ENVANTERİ

Bu envanter sizi tanımlayabilecek 27 soru içermektedir. Lütfen her soruyu okuyun ve sonra sizi en iyi tanımlayan ve ilgilendiren uygun kategoriye soruların yanındaki parantezlerden birinin içine işaret koyarak belirleyin. Örneğin, eğer birinci soruda “ her zaman” seçeneği size uygunsa “her zaman” seçeneğinin altındaki parantezin içine işaret koyunuz. Sizin nasıl olmak istediğinizle değil, nasıl düşündüğünüzle ilgilendiğimizi unutmayın. 27 sorunun tamamını cevaplandırırdığınızdan emin olunuz. Zaman planlaması anketi zamanınızı nasıl kullandığınızı ve yönettiğinizi değerlendiren bir envanterdir. Bu bir test değildir. “Doğru” veya “yanlış” yanıt yoktur, içtenlikle cevaplamanız önemlidir. İlginize teşekkürler.

Zaman Planlaması (Kısa ve Uzun Vadeli Planlama)

	<i>Her zaman</i>	<i>Sık sık</i>	<i>Bazen</i>	<i>Nadiren</i>	<i>Hiç</i>
1. Güne başlamadan önce gününüzü planlar mısınız?	()	()	()	()	()
2. Hafta başlarında her hafta için bir dizi amaçlar saptar mısınız?	()	()	()	()	()
3. Her gün planlama için zaman harcar mısınız?	()	()	()	()	()
4. Her gün kendiniz için bir takım amaçlar belirler misiniz?	()	()	()	()	()
5. Her gün yapmak zorunda olduğunuz şeylerin listesini yapar mısınız?	()	()	()	()	()
6. Okul günlerinizde yapmak zorunda olduğunuz aktivitelerin programını yapar mısınız?	()	()	()	()	()
7. Bir sonraki hafta için ne başarmak istediğiniz net olarak belirgin mi?	()	()	()	()	()
8. Çalışmalarınızı bitirmek için kendinize tarih saptar mısınız?	()	()	()	()	()
9. Çok uğraş gerektiren çalışmalarınız için en iyi zamanınızı programlamaya çalışır mısınız?	()	()	()	()	()
10. Sizin için önemli tarihleri (örn. sınav tarihleri, ödev teslim tarihleri, vs.) bir takvim üzerine işaretler misiniz?	()	()	()	()	()

	<i>Her zaman</i>	<i>Sık sık</i>	<i>Bazen</i>	<i>Nadiren</i>	<i>Hiç</i>
11. Bir akademik dönem için bir dizi amaçlar belirler misiniz?	()	()	()	()	()
12. Makaleleri şimdi gerekli olmasalar bile, gelecekte olabilir diye dosyalar veya fotokopisini çeker misiniz?	()	()	()	()	()
13. Yakın tarihte sınavınız olmasa bile, ders notlarınızı düzenli olarak tekrar eder misiniz?	()	()	()	()	()
14. Üzerinde çalışabileceğiniz şeyleri boş zaman bulduğunuzda yapabilmek için yanınızda taşır mısınız?	()	()	()	()	()
15. Önceliklerinizi belirler ve onlara uyar mısınız?	()	()	()	()	()
16. Her hafta sizinle ilgili olan şeyleri önceden bir plan yapmadan ve gerektiği gibi takip etmeden yapar mısınız? ^a	()	()	()	()	()

Zaman Tutumları

1. Zamanınızı yapıcı olarak kullanır mısınız?	()	()	()	()	()
2. Zamanınızı planlama işinde kendinizi geliştirmeye ihtiyaç duyuyor musunuz? ^a	()	()	()	()	()
3. Genel olarak kendi zamanınızı kendiniz planladığınızı hisseder misiniz?	()	()	()	()	()
4. Genellikle amaçlarınızın hepsini size verilen hafta içersinde çoğunlukla başarabileceğinizi düşünür müsünüz?	()	()	()	()	()
5. Küçük kararları çabucak verebiliyor musunuz?	()	()	()	()	()
6. İnsanlara hayır diyememekten ötürü kendinizi sık sık okul işlerinizi engelleyen işlerle meşgul durumda bulur musunuz? ^a	()	()	()	()	()
7. Yapacak bir şeyiniz olmadan kendinizi uzun süre bekliyor durumda bulur musunuz? ^a	()	()	()	()	()

Zaman Harcattırıcılar

1. Normal bir okul gününde, okul işlerinden kendi özel işlerinize daha çok zaman harcar mısınız? ^a	()	()	()	()	()
2. Fayda sağlamayan alışkanlıklara veya aktivitelere devam eder misiniz? ^a	()	()	()	()	()
3. Günde ortalama bir paket sigara içeriyor musunuz? ^a	()	()	()	()	()
4. Önemli bir okul ödevinin son teslim gününden bir gece önce hala onun üzerinde çalışır mısınız? ^a	()	()	()	()	()

^aBu maddeler ters puanlanmıştır, örneğin "hiç" cevabına 5 puan verilmiştir