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Research Article

The Turkish version of the Physical Activity Scale for the Elderly (PASE): its cultural adaptation, validation, and reliability

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Background/aim: This study aimed to describe the cultural adaptation of the Turkish Physical Activity Scale for the Elderly (PASE) and to examine the reliability and validity of the scale in older Turkish adults.

Materials and methods: Eighty elderly people were recruited for the study. The assessments included the PASE, the International Physical Activity Questionnaire (IPAQ), the Short Physical Performance Battery and Short Form-36 Quality of Life Questionnaire (SF-36), and the Mini Mental State Test. Outcome measures were conducted twice within a week (test-retest) for reliability.

Results: Cronbach's a coefficient was 0.714 for the initial evaluation. The intraclass correlation coefficient for the test-retest reliability was 0.995 with a 95% confidence interval of 0.993–0.997. A high level of positive correlation (0.742, P < 0.001) was found between the total score of PASE and the total scores of IPAQ. There were strong positive correlations between the PASE and the total score of SPPB (0.622, P < 0.001), while an average level of positive correlation with SF-36 was found (0.432, P < 0.001).

Conclusion: The results of the study suggest that the Turkish version of the PASE has powerful measurement qualities, which makes it a reliable and valid scale for the fields of research and practice.

Key words: Physical activity, elderly, questionnaire

1. Introduction

Physical activity is an important part of healthy aging in terms of preventing a number of chronic diseases or slowing down their progress (1). The decrease in physical activity in chronic diseases, which is seen along with the aging process, is quite an important factor. Therefore, it is of great significance to be aware of and develop the physical activity level for the sake of developing health and keeping the state of well-being (2). There are multiple effects of regular physical activity on physical fitness and health in the elderly like the maintenance of independence, the prevention of many serious health-related disorders, the conservation of energy balance, and the extension of the lifespan (3). For the elderly, the goals to be achieved by physical activity are to cope with the fragility resulting from inactivity and the changes caused by nonuse, to minimize the biological changes that occur with aging, to maximize psychological health, to increase mobility and function, and to provide the rehabilitation of acute and chronic diseases (4,5).

The complex structure of physical activity makes it difficult to perform an evaluation of it in all respects and

to investigate its effect on outcome parameters like energy expenditure. There is no gold standard in evaluating physical activity due to its complex structure. The methods of measurement in this subject can be grouped into 5 categories as behavioral observations; questionnaires and physical activity logs answered by the individual him/herself; physiological markers like heart rate, body temperature, and ventilation; motion sensors such as pedometers and accelerometers; and indirect calorimeter calculations (6,7).

Physical activity has a critical role in the prevention of diseases, increasing the level of independence in activities of daily living and improving the quality of life in elderly. For this reason, the evaluation of the physical activity levels of the elderly plays a key role in the individual specific physical activity suggestions and the development of methods to increase physical activity. The evaluation of physical activity through questionnaires has become quite popular in recent years due to the fact that it is cheaper compared to other methods and has easy-to-use characteristics in extensive studies (8). There are only a few physical activity questionnaires developed for the elderly (9), one of which

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is the Physical Activity Scale for the Elderly (PASE) (10). Like the other questionnaires used frequently in studies, there is no cultural adaptation and validity-reliability study on the PASE in the Turkish population. The PASE, in the literature, is often used for the elderly populations, and there have been validity-reliability studies conducted on it in several languages, as well, in addition to which there are also studies conducted comparatively along with the other physical activity questionnaires (11). The advantages of this questionnaire compared to the others are the short practice period, the easy scoring process, and its applicability via letters or phone. Separately, it consists of 3 subheadings of leisure time, household, and workrelated activities. These features make it easy to evaluate the physical activities of individuals among themselves in more detail and to compare the subheadings with other functional measures, e.g., physical performance (10,12).

Despite this, it cannot be used in the studies conducted on the elderly in our country since a Turkish version and cultural adaptation of it has not been studied yet. The objective of this study is to investigate the reliability and validity of the Turkish version of the PASE as well as studying the cultural adaptation of it.

2. Materials and methods

2.1. Cross-cultural adaptation process

Permission to use the original PASE questionnaire was obtained from the developer/author. The cultural adaptation of the PASE was done in line with the guidelines published by Ruberto and Beaton (13). First of all, the PASE was translated into Turkish as an advanced translation by two interpreters with highly advanced English, whose native language was Turkish. The translations were compared and discussed and a Turkish version was obtained along with the equivalents that best represented each item within the texts. Secondly, this text obtained as a retranslation was translated into English once again by two interpreters whose native language was English, by independently of one another. In the third step, two texts written in English were synthesized by the authors, and thus a consensus was reached on one single translation. Finally, the Turkish and English texts obtained were evaluated by a public health specialist, two interpreters whose native language was English, a philologist of English language and literature, and a multidisciplinary team consisting of physiotherapists so as to check the inconsistent parts within the text and eliminate the differences in meaning. Hence, a decision was made on the final version of the text. After a series of small alterations and corrections were made through a consensus reached by the team in question, a pilot study was performed on 15 elderly individuals. The Turkish version of the PASE is shown in the Appendix.

2.2. Participants

The study was conducted at Hacettepe University, Faculty of Health Sciences, Department of Physiotherapy and Rehabilitation. Eighty volunteers aged 65 and above, who had good cognitive levels according to Mini Mental State Test (MMST) scores of 24 and above and who were able to mobilize independently, were included in the study. Individuals with severe chronic diseases likely to hinder moderate and severe physical activities, those with symptomatic coronary artery disease or uncontrollable hypertension, those diagnosed with psychiatric or cognitive disorders, and those who underwent a surgical operation within the last 6 months were excluded from the study.

This study was approved by the Ethical Committee of Surgical and Medicinal Research of Hacettepe University, Faculty of Medicine, with the number LUT 10/70, on 23 December 2010. Each individual was informed about the content of the study before its commencement, and the volunteers read and signed informed consent forms, stating that they participated in the study as volunteers.

2.3. Procedure

The data were collected by a physiotherapist experienced in the field of geriatric rehabilitation during the participants' initial visits to the clinic. During the first visit, the demographic data of the participants were gathered, and the participants were subjected to the PASE, the International Physical Activity Questionnaire (IPAQ), the Short Physical Performance Battery (SPPB), and the Short Form-36 Quality of Life Questionnaire (SF-36). The PASE was filled out again by all the participants 1 week later for retesting. It was assumed that the clinical condition remained unchanged within that period. In order to minimize the risk of short-term clinical change in the participants, no treatment was performed on the participants within that period of time.

2.4. Outcome measures

2.4.1. Physical Activity Scale for the Elderly (PASE)

The PASE was developed in 1993 for the purpose of evaluating the components of physical activities involving leisure time, work-related activities, and the household. The PASE examines the intensity, frequency, and duration of physical activities related to walking; light, moderate, and strenuous sports and entertainment activities; muscle strengthening and endurance exercises; work-related activities including walking and standing up; lawn and garden care; care for another individual; house repairs; and heavy and light household activities performed by the participants within the last week (10).

The PASE is a self-reported questionnaire that consists of 12 questions regarding the frequency and duration of leisure time activity, household activity, and work-related activity during the previous 7-day period. The questions are scored differently. Participation in leisure time and strengthening activities are scored as never, seldom (1 or 2 days per week), sometimes (3 or 4 days per week), and often (5–7 days per week). Duration of these activities is scored as less than 1 h, 1–2 h, 2–4 h, and more than 4 h. Household and work-related activities are scored as yes or no. In work-related activities, paid or unpaid work is scored in hours per week. The total PASE score is computed by multiplying either the time spent in each activity (hours per week) or participation (i.e. yes or no) in an activity by empirically derived item weights and then summing the overall activities. The overall PASE score ranges from 0 to 400 or more and high scores show better physical activity levels (10).

2.4.2. International Physical Activity Questionnaire (IPAQ)

Of the physical activity questionnaires, the IPAQ is the only questionnaire for which a Turkish study version had already been made. However, this questionnaire is not specific to the elderly; it usually applies to the general population.

The IPAQ consists of 27 questions in 4 fields of activity involving work-related, house and gardening chores, transport, and leisure time activities. The activities in each field are detailed as walking and moderate and severe physical activities. The total score calculation for the IPAQ is the sum of duration (minutes) and frequency (days) for all types of activity in all the fields (14).

2.4.3. Short Physical Performance Battery (SPPB)

The SPPB is commonly used for evaluating the physical and functional health states of the elderly living within society and it consists of 3 objective tests evaluating the lower extremity functions: a timed 8-foot walk; 5 timed, repetitive chair stands; and a hierarchical test of standing balance. From 5 points (0-4) a summary score is assigned for each test. Scores between 1 and 4 achieved by the participants show the progressive performance required to perform the test according to the given periods of time (15).

2.4.4. Short Form-36 Quality of Life Questionnaire (SF-36)

The SF-36 was developed and put to use by the Rand Corporation in 1992. It consists of 36 items and comprises 2 main headings as physical and mental components. The physical components consist of the subsections called general health (GH), physical functioning (PF), role limitations because of physical health problems (RP), and bodily pain (BP), whereas the mental components consist of mental health (MH), role limitations because of emotional problems (RE), vitality (V), and social functioning (SF) (16,17).

2.4.5. Mini Mental State Test (MMST)

The MMST evaluates the cognitive status of the elderly. It contains seven domains, each with an assigned point value totaling 30. MMST scores higher than or equal to 24 are considered as normal cognitive function, while scores lower than 24 indicate cognitive impairment. Low MMST scores have also been associated with an increased risk of falling in elderly adults (18).

2.5. Statistical analysis

The statistical analyses were performed by using SPSS 15 for Windows. The mean \pm standard deviation for the variables specified through measurement (X \pm SD) and the percentage (%) value for the variables specified through counting/enumeration were calculated. P < 0.05 was accepted as statistically significant.

The psychometric characteristics of the PASE questionnaire were evaluated in terms of reliability and validity. The test-retest reliability of the questionnaire was evaluated based on the interclass correlation coefficient (ICC).

The ICC values are identified as fair for <0.40, moderate for 0.40–0.59, substantial for 0.60–0.79, and excellent for \geq 0.80. To evaluate the internal consistency, Cronbach's alpha, the value of which was expected to be higher than 0.70, was used. To evaluate the strength of linear relationships, Pearson's correlation coefficient was used (19).

The validity of the PASE was taken into consideration through concurrent convergent validity and criterion validity by using Pearson's correlation coefficient. Concurrent convergent validity is the structure formed by certain elements thought to be related to one another or by the relationships between those elements. Ultimately, it is about proving the fact that it has measured the theoretical construct claimed to have been measured by the measuring device. To that end, the PASE was compared with the SPPB and SF-36. Criterion validity is the validity of a measuring device that can be determined by comparing that measuring device with other known and accepted measurements. If there is a high correlation between the new questionnaire and the criterion, then the new questionnaire can be said to have criterion validity. The important point here is that the criterion is the standard, the reliability and validity of which has already been proved. For this purpose, the IPAQ was used in this study.

3. Results

A total of 80 participants, 29 of whom were female and 51 of whom were male at varying ages between 65 and 86, were incorporated into the study, and the mean age proved to be 69.52 ± 5.33 years. The demographic characteristics of the participants are shown in Table 1. The MMST, PASE, IPAQ, SPPB, and SF-36 results of the participants are shown in Table 1, as well.

	Participants (n = 80)
Age, years, X ± SD	69.71 ± 04.62
65–74, n (%)	65 (81.25)
75–84, n (%)	14 (17.5)
≥85, n (%)	1 (1.25)
Height, cm, X ± SD	167.30 ± 09.51
Weight, kg, X ± SD	77.31 ± 13.44
Body mass index, kg/m ² , X \pm SD	27.73 ± 4.92
MMST, X \pm SD (min-max, 0-30)	27.40 ± 1.84 (24-30)
PASE, X ± SD (min–max, 0–400)	121.79 ± 54.71 (3-261)
IPAQ, min/week, X ± SD (min–max)	3337.93 ± 2327.74 (0-9732)
SPPB, X ± SD (min-max, 0-12)	9.77 ± 2.34 (1-12)
SF-36, X ± SD (min-max, 0-800)	564.90 ± 163.96 (122.5-770)

MMST: Mini Mental State Test, PASE: Physical Activity Scale for

the Elderly, IPAQ: International Physical Activity Questionnaire,

SPPB: Short Physical Performance Battery, SF-36: Short Form-36

Table 1. The demographic characteristics of the participants and results of outcome measures.

3.1. Content equivalence of the PASE

It was determined that the activities given as examples in some of the questions in which the physical activities of the participants were evaluated were not commonly performed within Turkish society, and these activities were replaced by those requiring physical activities at the same intensity and known more commonly in Turkish society. Separately, several activities done commonly in Turkish society were also added into the questions. The physical activities to be applied at the same intensity rate were obtained from the activity list formed by the author (10).

The modified questions are summarized in Table 2.

- The shuffleboard game and golf with power cart activities from among the mildly intense activities were eliminated and replaced by table tennis, swimming, and prayer activities instead (3rd question).
- Softball, which was among the moderately intense activities, as well as ice-skating and golf without cart activities were discarded, and volleyball, brisk walking, and cycling activities for transportation purposes were added instead (4th question).
- The skiing activity, which was among the intense/ severe type of activities, was eliminated and replaced by football and field hiking activities instead (5th question).
- Physiotherapy and pull-up activities as well as weights were added to the activities performed for exercise purposes (6th question).

Table 2. Cultural adaptation results of the PASE.

Quality of Life Questionnaire.

Activities used in the original PASE	Activities used in the Turkish version of the PASE
Mildly intense activities	
Shuffleboard game and golf with power cart	Table tennis, swimming, and performing prayer
Moderately intense activities	
Softball, ice skating, and golf without a cart	Volleyball, brisk walking, and cycling activities for transportation purposes
Intense activities	
Skiing	Football and field hiking
Activities performed for exercise purposes	
	Physiotherapy and pull-up activities along with weights
Mildly intense household activities	
	Ironing, cooking, and clothing washing/hanging
Intense household activities	
	Car washing and changing the place of household furniture

- Ironing, cooking, and clothing washing/hanging activities were added to the mildly intense household activities (7th question).
- Car washing and changing the place of household furniture were added to the intense/severe type of household activities (8th question).

3.2. Reliability

Cronbach's alpha coefficient, used to evaluate the internal consistency of the PASE, was found to be 0.714 for the initial evaluation, which suggests that the internal consistency is at a good level. The correlations of the subheadings with the total score proved to be between 0.403 and 0.755 (Table 3). Work-related activities were performed with the lowest value of 0.403. The ICC value for test-retest reliability was found to be (0.993–0.997) 0.995 at the confidence interval of 95%, which suggests quite a high level of test-retest reliability. The ICC values of subheadings vary between 0.991 and 1 (Table 3).

3.3. Concurrent convergent validity

While a high level of positive correlation was found between the total score of the PASE and the total score of the SPPB (0.622, P < 0.001), an average level of positive correlation with the SF-36 was found (0.432, P < 0.001). No significant relationship could be found between the total score of the PASE and the subparameters of the SF-36 of bodily pain (r = 0.195, P = 0.084) and role limitations because of emotional problems (r = 0.179, P = 0.111).

The highest positive correlation between the total score of the PASE and the subparameters of the SF-36 (r = 0.545, P < 0.001) was found for the subparameter of physical functioning.

3.4. Criterion validity

A high level of positive correlation (0.742, P < 0.001) was found between the total score of the PASE and the total scores of the IPAQ. High positive correlations were found between subparameters of the questionnaires that evaluated the same fields (work-related activities: 0.566, P < 0.001; household activities: 0.648, P < 0.001; leisure time activities: 0.676, P < 0.001. Correlations between subparameters of the PASE and IPAQ and their total scores are shown in Table 4.

Table 3. Test-retest reliability and the correlations of subheadings with the total score with respect to the Turkish version of the PASE.

	r	ICC	95% CI
Leisure time activities	0.659*	0.997	0.995-0.998
Household activities	0.755*	0.991	0.986-0.994
Work-related activities	0.403*	1	1–1
Total		0.995	0.993-0.997

r, Pearson's correlation coefficient, correlation of subheadings - total score.

* P < 0.001.

ICC, Intraclass correlation coefficient.

CI, Confidence interval.

 Table 4. Correlation coefficients between the subparameters of the PASE and IPAQ and their total scores.

	IPAQ work-related activities	IPAQ leisure time activities	IPAQ household activities	IPAQ total score
PASE work-related activities	0.566*			
PASE leisure time activities		0.676*		
PASE household activities			0.648*	
PASE total score				0.742*

r, Pearson's correlation coefficient, * P < 0.001.

4. Discussion

In this study, the PASE was translated into Turkish, and its reliability and validity were evaluated with 80 healthy elderly participants. The Turkish version of the PASE, which evaluates physical activity, is the first Turkish scale designed particularly for the elderly. The results of the study suggest that the Turkish version of the PASE has powerful measurement qualities, which makes it a reliable and valid scale for fields of research and practice.

The mean scores in the studies conducted previously in terms of the reliability and validity of the PASE vary between 104.4 and 131.3 (12,20). In this study, the mean PASE score was found as 121.79 ± 54.71 , similar to the other studies conducted in this field. The differences in scores among these studies were mainly identified with the difference in the averages of ages due to decreasing physical activity with increasing age. Washburn et al. (12), in their study, found the mean age as 66.5, whereas Vaughan et al. found the mean age as 77.7 years in their study (20). The fact that the total score proved to be high in this study was identified with a younger mean age (age: 69.7). As in other studies, the inverse proportion (r = -0.253, P < 0.001) between the average age and PASE score seen in this study supports this view, as well (10,20-22). The mean PASE score was found to be 128.85 in the age group of 65-74, whereas this score proved to be lower at 91.20 in the age group of 75-86. Considering sex, an outcome supporting the other studies was achieved, and the male participants were determined to have participated in physical activities at higher levels and got higher PASE scores when compared with the females (10,12,21-23). Schuit et al. (24) and Ku et al. (25), in the studies they conducted, stated that female participants got higher PASE scores, which was identified with the fact that they had higher scores in household activities, depending on the sociocultural status of their own society.

The greatest contribution to the total physical activity score is made through household activities by 55.9%, which is approximate to those in the other studies (21,26,27). The most significant difference between this study and those in the literature in terms of the score percentages of subheadings is the percentage of work-related activities. In the conducted studies, the percentages of work-related activities were 7%, 18%, and 29%, whereas in this study, different from the results of the other ones, the score of work-related activities proved to be only 3.2% (12,24,26). This apparent difference is thought to have been due to the retirement age and system in Turkey. The average age of the individuals in our study was approximately 70 years. According to previous social security laws, employees could have retirement rights after working an average of 20 to 25 years in our country, so mostly they used to retire at early ages. As is known, in the United States and Europe,

individuals in this age group could retire at later ages. Therefore, it was predictable that the subheading level of work-related activities of the individuals in our study group were lower when compared to other studies.

On the other hand, the score percentage of leisure time activities proved to be 49.1%, which is higher than that in other studies. The reason for this is that walking activity, which is among the leisure time activities, is culturally preferred more in Turkish society than other societies. The percentage of the question about walking activity within the total PASE score is 20.9%.

The ICC values of the test-retest reliability of the PASE performed in different languages vary between 0.65 and 0.997 (22,27). While in these studies, the period of performing the retest varies between 3 days and 4 weeks, it is observed that as the period of time extends, the ICC value diminishes. In the current study, this period of time was selected as 1 week, which was commonly preferred in reliability studies, and a perfect test-retest reliability with ICC value of 0.995 was found. There is limited information in the literature as to the internal consistency of the PASE. The study conducted by Lolan et al. is the only one in this field, in which Cronbach's alpha value proved to be 0.73 (22). Cronbach's alpha value found in the current study is consistent with this study, which proved to be 0.714.

In the literature, various physical performance and functional status measures were used for the concurrent convergent validity of the PASE. It is known that a better perception of physical and social functions is highly associated with the physical activity level (10,28). For this reason, the SPPB and SF-36 were selected in the current study in terms of the concurrent convergent validity of PASE. The correlation values found at high (0.622) and average levels (0.432), respectively, are quite consistent with the literature (21,25,27,29).

In former studies, researchers preferred various indirect and direct physical activity measurement methods for the criterion validity, and they found correlation coefficients varying between 0.43 and 0.68 through the use of direct methods accepted as more valuable (24,26,30). The high correlation value (0.742) between the IPAQ and PASE, which was used in the current study, also makes a great contribution to the validity of the PASE. This argument is also supported by the high correlations (0.566–0.676) seen among the subparameters of the questionnaires that evaluate the same field.

The current study has several limitations. The sampling group of the study comprises elderly people living independently within society. It is thought that expanding the study in a way that would include all elderly people living in different living environments, such as in their own home, in nursing homes, and in care and rehabilitation centers, would be suitable in terms of forming a database pertaining to all of the elderly population in society by taking the results of the study into consideration.

Separately, it should also be kept in mind that the differences in seasonal and cyclic periods when the evaluation is performed may also affect the results, which is an important point to be taken into account in terms of the evaluations to be made as to physical activities. Thus, the study needs to be expanded in this direction.

Another limitation of this study was that the physical activity level was measured based on self-report by the elderly respondents and no objective assessment of physical activity or energy expenditure (e.g., accelerometer) was included as a validation measure. Further study is needed to address objective measurements.

Due to the increased elderly population in communities, the concepts of protection from chronic

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diseases and healthy aging have become more important. Knowing the level of physical activity of elderly individuals is important in terms of determining the health status and protective and preventive approaches. We think that the present study of the Turkish version of a physical activity questionnaire with international use in the elderly will guide physiotherapists and other health professionals working in this area.

In conclusion, the findings obtained in this study support the fact that the Turkish version of the PASE is a valid and reliable measuring tool for the Turkish population for the purpose of evaluating the physical activity levels of the elderly. This scale will be of great use to clinicians and researchers in evaluating and managing the physical activities of the elderly population in Turkey, which has been a major issue ignored until today.

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Appendix. Turkish version of the PASE.

YAŞLILAR İÇİN FİZİKSEL AKTİVİTE ÖLÇEĞİ (PASE)

YÖNERGELER

Lütfen bu anketi size uygun cevapları yuvarlak içine alarak ya da boşlukları doldurarak cevaplayınız. İşte bir örnek: Son yedi gün boyunca ne sıklıkta güneşi gördünüz?

[0.] HİÇ

[1.] NADİREN (1 - 2 GÜN)

[2.] BAZEN (3 - 4 GÜN) [3.] SIK SIK (5 - 7 GÜN)

Bütün öğeleri mümkün olduğunca doğru cevaplayınız. Tüm bilgiler kesinlikle gizlidir.

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BOŞ ZAMAN AKTİVİTELERİ

1. Son yedi gün içerisinde ne sıklıkta el işi yapmak, TV seyretmek, ya da kitap okumak gibi oturma aktivitelerinde bulundunuz?

[0.] HİÇ	[1.] NADİREN	[2.] BAZEN	[3.] SIK SIK
	(1 - 2 GÜN)	(3 - 4 GÜN)	(5 - 7 GÜN)

Cevabınız Hiç ise 2.soruya geçiniz.

1a. Bu aktiviteler nelerdir?

1b. Ortalama olarak günde kaç saat bu oturma aktiviteleriyle meşgul oldunuz?

 [1.] 1 SAATTEN AZ
 [2.] 1 FAKAT 2 SAATTEN AZ

 [3.] 2 - 4 SAAT
 [4.] 4 SAATTEN FAZLA

2. Son yedi gün boyunca herhangi bir sebeple yürüyüş için evinizden veya bahçenizden ne sıklıkta dışarı çıktınız? Örneğin, egzersiz veya zevk için, işe gitmek için, köpek gezdirmek için vb.?

[0.] HİÇ	[1.] NADİREN	[2.] BAZEN	[3.] SIK SIK
	(1 - 2 GÜN)	(3 - 4 GÜN)	(5 - 7 GÜN)

Cevabınız Hiç ise 3.soruya geçiniz.

2a. Ortalama olarak yürüyüşe günde kaç saat harcadınız?

[1.] 1 SAATTEN AZ	[2.] 1 FAKAT 2 SAATTEN AZ
[3.] 2 - 4 SAAT	[4.] 4 SAATTEN FAZLA

3. Son yedi gün boyunca, bowling, bilardo, yürüyüş (yanındakiyle sohbet edebilecek hızda), dart, atıcılık, masa tenisi, yüzme, bottan veya iskeleden balık tutma, müzikal bir programa katılmak, namaz kılmak ya da diğer benzer aktiviteler gibi hafif sporlarla / aktivitelerle / ibadet ile ne sıklıkta meşgul oldunuz?

[0.] HİÇ	[1.] NADİREN	[2.] BAZEN	[3.] SIK SIK
	(1 - 2 GÜN)	(3 - 4 GÜN)	(5 - 7 GÜN)

Cevabınız Hiç ise 4.soruya geçiniz.

3a. Bu aktiviteler nelerdir ?

3b. Ortalama olarak günde kaç saat bu hafif sporlarla veya eğlence aktiviteleriyle meşgul oldunuz ?

[1.] 1 SAATTEN AZ	[2.] 1 FAKAT 2 SAATTEN AZ
[3.] 2 - 4 SAAT	[4.] 4 SAATTEN FAZLA

4. Son yedi gün boyunca çiftler tenisi, dans, avcılık, voleybol, bisiklete binme (egzersiz amaçlı değil de ulaşım amaçlı), tempolu yürüyüş veya diğer benzer aktiviteler gibi orta dereceli sporlar ve eğlence aktivileriyle ne sıklıkta meşgul oldunuz?

[0.] HİÇ	[1.] NADİREN	[2.] BAZEN	[3.] SIK SIK
	(1 - 2 GÜN)	(3 - 4 GÜN)	(5 - 7 GÜN)

Cevabınız Hiç ise 5.soruya geçiniz.

4a. Bu aktiviteler nelerdir?

4b. Ortalama olarak günde kaç saat orta derece spor ve eğlence aktiviteleriyle meşgul oldunuz ?

[1.] 1 SAATTEN AZ	[2.] 1 FAKAT 2 SAATTEN AZ
[3.] 2 - 4 SAAT	[4.] 4 SAATTEN FAZLA

5. Son yedi gün boyunca tempolu koşu, profesyonel yüzme, bisiklete binme (egzersiz amaçlı), tekli tenis, aerobik dans, basketbol, futbol, arazi yürüyüşü, kürek çekme, ip atlama ya da diğer benzer aktiviteler gibi ağır sporlarla ve eğlence aktiviteleriyle ne sıklıkta meşgul oldunuz?

[0.] HİÇ	[1.] NADİREN	[2.] BAZEN	[3.] SIK SIK
	(1 - 2 GÜN)	(3 - 4 GÜN)	(5 - 7 GÜN)

5a. Bu aktiviteler nelerdir?

5b. Ortalama olarak günde kaç saat bu ağır sporlarla ve eğlence aktiviteleriyle meşgul oldunuz?

[1.] 1 SAATTEN AZ	[2.] 1 FAKAT 2 SAATTEN AZ
[3.] 2 - 4 SAAT	[4.] 4 SAATTEN FAZLA

6. Son yedi gün boyunca özellikle kas gücünü ve dayanıklılığını arttırmak için ağırlık kaldırma, ağırlıklarla fizyoterapi, mekik, şınav ve benzerleri egzersizleri gibi ne sıklıkta yaptınız?

[1.] 1 SAATTEN AZ	[2.] 1 FAKAT 2 SAATTEN AZ
[3.] 2 - 4 SAAT	[4.] 4 SAATTEN FAZLA

Cevabınız Hiç ise 7.soruya geçiniz.

6a. Bu aktiviteler nelerdir?

6b. Ortalama olarak, kas gücünü ve dayanıklılığını arttırmak için günde kaç saat egzersizle meşgul oldunuz ?

[1.] 1 SAATTEN AZ	[2.] 1 FAKAT 2 SAATTEN AZ
[3.] 2 - 4 SAAT	[4.] 4 SAATTEN FAZLA

EV İŞİ AKTİVİTELERİ

7. Son yedi gün boyunca toz alma, ütü yapma, yemek hazırlama, çamaşır yıkama - asma bulaşık yıkama - kurulama, gibi hiç hafif ev işleri yaptınız mı?

[1.] HAYIR [2.] EVET

8. Son yedi gün boyunca elektrik süpürgesiyle temizleme, yerleri silme , camları -duvarları slime, araba yıkamak, eşyaların yerlerini değiştirmek, ya da odun taşımak gibi ağır ev işleri ya da günlük işler yaptınız mı?

[1.] HAYIR [2.] EVET

9. Son yedi gün boyunca aşağıdaki aktivitelerden herhangi biriyle meşgul oldunuz mu?

Lütfen her maddeye EVET ya da HAYIR olarak cevap veriniz.

	<u>HAYIR</u>	<u>EVET</u>
a. Boyama, duvar kağıdı kaplama,elektrik işleri gibi ev tamiratları vb.	1	2
b. Kar ya da yaprak küreme, odun kesmek ve benzerlerini içeren çim veya bahçe bakımı	1	2
c. Bahçe işleri	1	2
d. Çocuk, bağımlı eş ya da başka bir yetişkin gibi başkasının bakımı	1	2

İŞLE İLGİLİ AKTİVİTELER

10.	Son 7 gün boyunca, gönüllü veya ücretli olarak çalıştınız mı ?
	[1.] HAYIR [2.] EVET
10a.	Gönüllü veya ücretli olarak haftada kaç saat çalıştınız?
	SAAT
10b.	Aşağıdaki kategorilerden hangisi işiniz ya da gönüllü çalışmanız için gerekli fiziksel aktivite miktarını en iyi tanımlar ?
[1]	Çoğunlukla hafif kol hareketleriyle oturma. [Örnekler: büro memuru, saatçi, oturan montaj hattı işçisi, otobüs şoförü, vb.]
[2]	Biraz yürüme ile oturma ya da ayakta durma. [Örnekler: kasiyer, genel büro memuru, hafif araç ve makina işçisi.]
[3]	Genel olarak ağırlığı 20 kilodan az olan eşyaları taşıyarak yürüme. [Örnekler: postacı, garson, inşaat işçisi, ağır araç ve makina işçisi.]
[4]	20 kilodan fazla olan eşyaları taşımayı gerektiren ağır el işi ve yürüme [Örnekler: oduncu, taş duvarcısı, çiftlik ya da umumi işçi.]

Toplam Skor :.....