

高齢者の健康推進生活 に関する研究

本研究では、小地域（一県）を対象として、生涯スポーツ学習推進関連事業を展開している市町村に在住の高齢者を対象に、健康・体力づくりを志向した生活様式や生活行動の実態を統計的調査によって明らかにすることを通して、生涯スポーツ学習推進事業の実施に伴う健康スポーツ生活への影響について検討することを目的とした。

本研究の特色は、日常生活における健康・体力づくりを規定する要因間の複雑な因果関係を相関分析的に検討したことである。

従来からヘルス・ライフスタイルに関する調査研究は欧米の先進国を中心に進められてきており、これらの多くは地域医療施策のための健康疫学的研究である。一方、スポーツ行政施策を支える調査研究は、特に北欧諸国において先進的に進められている。わが国では、社会経済発展の時代的特徴として、これらが同時に要求されていると考えられる。本研究は、先進国に特徴的な高齢化社会に連関するこのような健康・スポーツ生活に関する統計疫学的側面とスポーツ政策科学的側面の関係性の上に成り立つ学術的要求に応えるものである。

Development of attitudes toward health promotion behaviors in healthy adults and elders

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Abstract

The purpose of this study was to clarify development of attitudes toward daily health promotion behaviors from young to older adults. The health-promotion-oriented Japanese 76 males and 58 females, total 134 young and older adults, aged 20 to 84, answered the health promotion attitude questionnaire that was consisted of the items of health anxiety, daily health promotion behaviors, aims of daily sports activity. Factor analysis with principal component solution and varimax rotation was utilized to determine the factorial structure of attitudes toward daily health promotion behaviors. The means of each factor scores between age groups were statistically compared to analyze development patterns of attitudes toward health promotion behaviors. The three factors of anxiety toward adult diseases and fatigue, anxiety toward declination of health and physical condition and anxiety toward obesity were extracted from 8 items on health anxiety. The factor scores of health anxiety significantly correlated with age. The development pattern of anxiety toward obesity was reverse U-shaped tendency. The

attitudes toward daily health promotion behaviors were constructed of 7 factors that explained 66% of total variance of 20 items. From 11 items on the aims of daily sports activity, 3 factors of sports training oriented attitude, physical efficacy oriented attitude and mental efficacy oriented attitude were extracted. Most of factor scores correlated with age significantly. These results indicated that the selective factors and traits of the attitudes affecting daily health promotion behaviors were existed and developed in aging.

Introduction

The proportional degree of subjective factors of health promotion behavior and daily sports and exercise activities statistically varied after 50s year of age in reference to the national statistics in Japan. Most of regional governments should implement the strategic planning and program on health promotion and sports-for-all development in the aging society. The proportion and development of subjective evaluation on health and fitness, health promotion behaviors, and orientation of daily sports and exercise of the community

people have to be understood to prepare the health promotion and sports-for-all development planning in regional community exactly.

The purpose of this study was to clarify development of attitudes toward daily health promotion behaviors from young to old persons within the rural region area in Japan.

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Method

Sample and items

The health-promotion-oriented Japanese 76 males and 58 females, total 134 young and old persons, aged 20 to 84, answered the health promotion attitude questionnaire that was consisted of the 8 items on health anxiety, 20 items on daily health promotion behaviors, 11 items on aims of daily sports activity.

Statistical analyses

Factor analysis with principal component solution and OBLIMIN rotation using SPSS 6.1 was utilized to determine the factorial structure of the attitudes toward daily health promotion behaviors.

The means of each factor scores presented T-score among age groups were statistically compared to analyze development tendencies and patterns of the attitudes toward health promotion behaviors.

Results

Factorial structure

The anxiety on health and physical fitness was consisted from 3 sub-domains of

anxiety on lifestyle disease and fatigue, anxiety on declining of health and physical fitness, and anxiety on obesity and lack of exercise (Table 1). The attitude toward daily health promotion behaviors was consisted from 7 sub-domains of exercise and sports, leisure time, sleeping, competitive sports, having regular lifestyle, dieting, and drinking and smoking moderately (Table 3). The aim of activity of daily exercise and sports was consisted from 3 sub-domains of sports and training, prevent disease and health promotion, and pleasure and friendship (Table 2). The reason for inactivity of daily exercise and sports was consisted from 3 sub-domains of sports and training, prevent disease and health promotion, and pleasure and friendship. The selective way of daily exercise and sports activity was consisted from 3 sub-domains of public sports club type, individual activity type, and fitness club type.

The three factors with 59 % of total variance consisted of anxiety toward lifestyle diseases and fatigue, anxiety toward declination of health and physical fitness, and anxiety toward obesity and lack of exercise were extracted from 8 items on anxiety on health and physical fitness. The factor scores of anxiety toward health and physical fitness tended to correlate with age group. The development pattern of anxiety toward obesity and lack of exercise was reverse U-shaped tendency (Fig. 1 to Fig. 3).

The attitude toward daily health promotion behaviors was constructed of 7 factors that explained 66 % of total variance of 20 items. The factor of exercise and sports as the first factor was the most contributed to the total variance, followed by leisure time, sleeping, competitive sports, having regular

Table 1. Factor pattern matrix after OBLIMIN rotation on anxieties on health and physical fitness.

Variable	F1	F2	F3	H2
	Lifestyle disease & fatigue	Declining of health & physical fitness	Obesity & lack of exercise	
Lifestyle disease	0.82	0.20	0.11	0.72
Physical fatigue	0.73	-0.03	0.06	0.54
Mental fatigue and stress	0.63	-0.23	-0.08	0.46
Mental health	0.04	0.82	-0.04	0.68
Physical fitness declining	0.06	0.81	-0.11	0.67
Physical fitness	0.36	-0.51	-0.06	0.39
Obesity	0.03	0.05	0.86	0.75
Lack of exercise	0.02	-0.14	0.72	0.54
Eigenvalue	1.7	1.7	1.3	4.7
Contribution %	21.8	21.3	16.3	59.4
Relative Contribution %	36.7	35.8	27.5	100.0
Factor correlation	1			
Factor 2	-0.30	1		
Factor 3	0.24	-0.20	1	

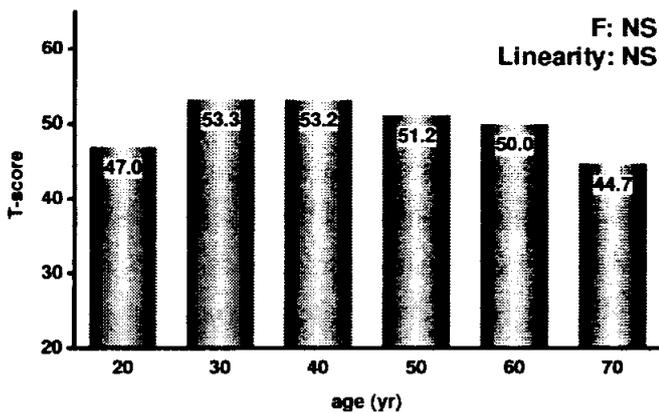


Fig. 1. Anxiety on lifestyle disease and fatigue.

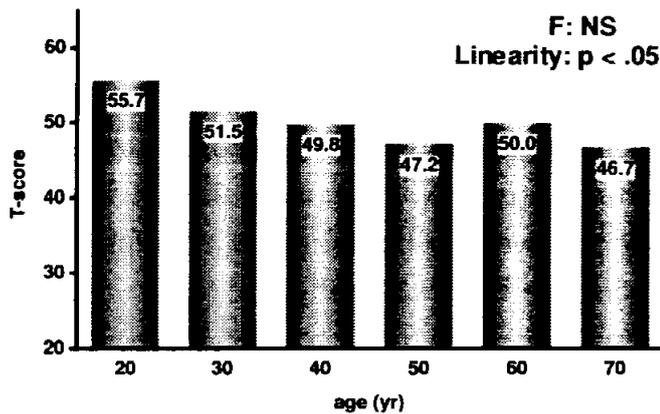


Fig. 2. Anxiety on declining of health and physical fitness.

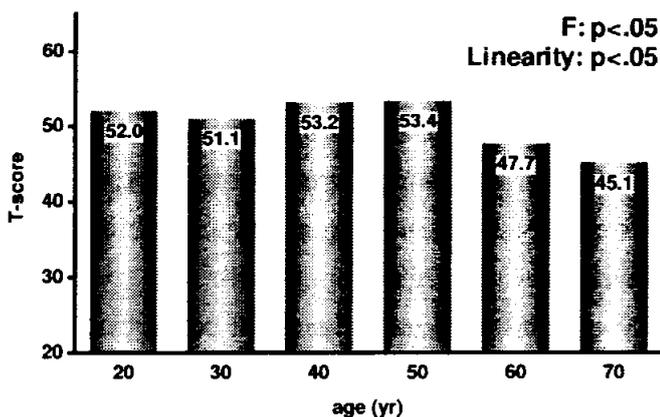


Fig. 3. Anxiety on obesity and lack of exercise.

Table 2. Factor pattern matrix after OBLIMIN rotation on aims of daily exercise and sports activity.

Variable	F1	F2	F3	H2
	Sports and training	Prevent disease and health promotion	Pleasure and friendship	
Challenge to new sports	0.76	-0.01	-0.01	0.57
Develop sports performance	0.73	-0.13	0.09	0.56
Mental training	0.65	-0.05	0.27	0.49
Rapport with family	0.61	0.06	-0.09	0.38
Prevent lifestyle disease	0.21	-0.77	-0.31	0.74
Get rid of obesity	0.08	-0.76	-0.14	0.61
Feeling lack of exercise	-0.26	-0.69	0.15	0.57
Health promotion and fitness	0.01	-0.67	0.07	0.45
QOL	0.24	-0.46	0.39	0.42
Pleasure and divert	-0.10	-0.04	0.87	0.76
Friendship	0.24	0.14	0.61	0.45
Eigenvalue	2.1	2.4	1.5	6.0
Contribution %	19.5	21.5	13.7	54.7
Relative Contribution %	35.6	39.3	25.1	100.0
Factor correlation	1			
Factor 2	-0.15	1		
Factor 3	0.18	-0.08	1	

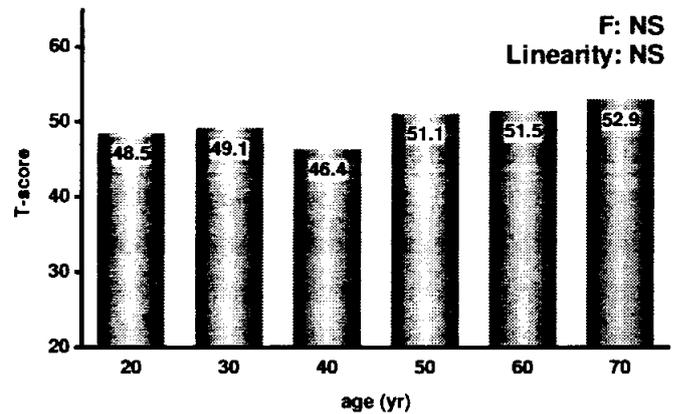


Fig. 4. Sports and training: Aims of daily physical activity.

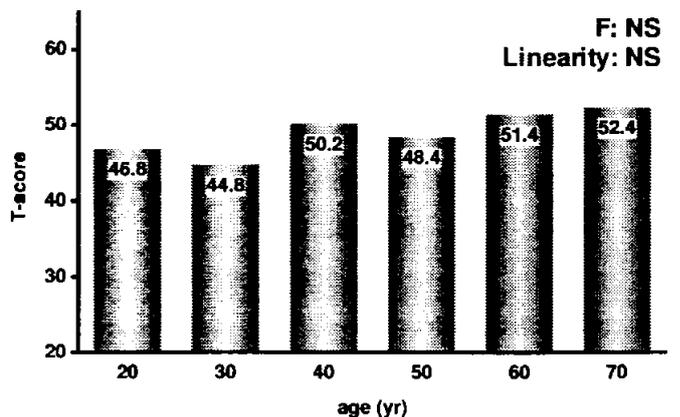


Fig. 5. Aging: reason for daily exercise and sports inactivity.

lifestyle , dieting, and drinking and smoking moderately (Fig. 6 to Fig. 8).

From 11 items on the aim of daily sports activity, 3 factors of sports and training, prevent disease and health promotion, and pleasure and friendship were extracted with 55 % of the total variance. Most of factor scores of age groups tended to correlate with age (Fig. 4). From 9 items on reasons for inactivity of daily exercise and sports, 3 factors of lack of social environmental condition, lack of subjective condition, and aging were extracted with 59 % of the total variance (Fig. 5).

Three factors with 59 % of the total variance consisted of public sports club type, individual activity type, and fitness club type were extracted from 9 items on selective ways of daily exercise and sports activity (Fig. 5).

These results indicated that the selective factors and traits of the attitudes affecting daily health promotion behaviors were existed and developed in aging.

Conclusions

The developmental tendencies and the sub-domains of attitudes toward daily health promotion behaviors from young to old

persons were investigated in this study. The anxiety on health and physical fitness was consisted from 3 sub-domains of anxiety on lifestyle disease and fatigue, anxiety on declining of health and physical fitness, and anxiety on obesity and lack of exercise. The attitude toward daily health promotion behaviors was consisted from 7 sub-domains of exercise and sports, leisure time, sleeping, competitive sports, having regular lifestyle , dieting, and drinking and smoking moderately. The aim of activity of daily exercise and sports was consisted from 3 sub-domains of sports and training, prevent disease and health promotion, and pleasure and friendship. The reason for inactivity of daily exercise and sports was consisted from 3 sub-domains of sports and training, prevent disease and health promotion, and pleasure and friendship. The selective way of daily exercise and sports activity was consisted from 3 sub-domains of public sports club type, individual activity type, and fitness club type. It was concluded that the selective factors and traits of the attitudes affecting daily health promotion behaviors were existed and developed in aging.

Table 3. Factor pattern matrix after OBLIMIN rotation on attitude toward daily health promotion behaviors.

Variable	F1 Exercise & sports	F2 Leisure time	F3 Sleeping	F4 Competitive sports	F5 Having regular lifestyle	F6 Dieting	F7 Drinking & smoking moderately	H2
Playing sports and exercise	0.76	0.13	0.00	0.18	0.02	-0.01	-0.07	0.63
Having physical fitness check	0.48	0.27	0.06	-0.04	-0.28	-0.23	-0.05	0.44
Community volunteer working	0.05	0.75	-0.12	-0.25	-0.07	0.06	-0.07	0.66
Taking hobby	0.27	0.71	0.13	0.07	0.13	-0.06	0.07	0.62
Having leisure	-0.23	0.60	0.04	0.38	-0.13	0.22	-0.02	0.63
Sleeping regular hours	0.11	0.04	0.82	0.08	0.05	0.19	0.12	0.75
Having enough sleeping	0.01	0.03	0.79	0.04	-0.19	-0.24	-0.11	0.73
Dressing up	0.16	0.13	-0.46	0.13	-0.35	0.18	-0.16	0.46
Playing competitive sports	0.14	-0.02	0.09	0.86	0.00	0.09	0.02	0.78
Keeping regular weight	0.05	0.01	0.02	-0.01	-0.82	-0.09	0.03	0.68
Having regular living hours	-0.20	0.00	0.40	0.09	-0.51	0.19	-0.21	0.54
Having breakfast every day	-0.05	0.01	0.16	-0.44	-0.48	0.40	0.03	0.62
Having health check	0.35	0.15	-0.04	-0.35	-0.42	0.14	-0.02	0.47
Eating out moderately	-0.08	0.11	-0.10	0.11	-0.02	-0.82	0.01	0.72
eating between meals moderately	0.45	-0.15	0.20	-0.17	0.32	0.49	-0.05	0.65
Drinking and smoking moderately	-0.03	-0.01	0.00	0.16	-0.06	-0.09	-0.87	0.79
Excessive drinking moderately	0.13	-0.11	-0.16	0.03	-0.02	-0.05	-0.85	0.78
Do not smoking	-0.18	0.26	0.12	-0.19	0.28	0.02	-0.79	0.84
Taking care having diet	0.21	-0.24	0.06	-0.12	-0.14	0.15	-0.53	0.44
Preventing lifestyle disease	0.30	0.08	-0.03	0.19	-0.26	0.21	-0.31	0.35
Eigenvalue	1.6	1.7	1.8	1.5	1.9	1.5	2.6	12.6
Contribution %	7.8	8.7	9.2	7.5	9.4	7.3	12.9	62.8
Relative Contribution %	12.4	13.9	14.6	11.9	15.0	11.7	20.5	100.0
Factor correlation	1							
Factor 2	0.15	1						
Factor 3	0.03	0.01	1					
Factor 4	-0.04	0.11	-0.02	1				
Factor 5	-0.15	-0.20	-0.04	0.00	1			
Factor 6	0.11	0.06	0.08	-0.06	-0.14	1		
Factor 7	-0.18	-0.11	-0.04	0.03	0.22	-0.16	1	

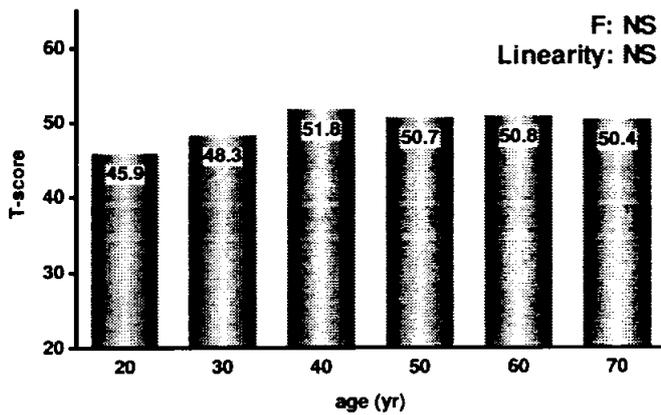


Fig. 6. Leisure time: attitude toward daily health promotion.

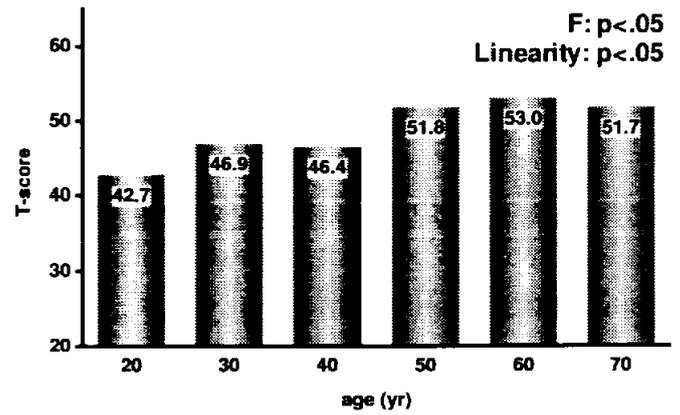


Fig. 8. Dieting: attitude toward daily health promotion.

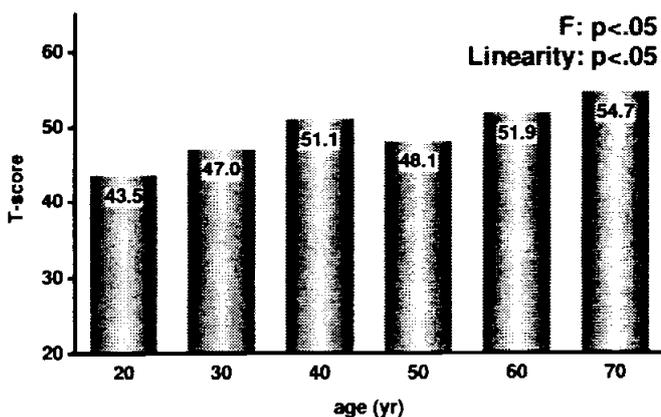


Fig. 7. Drinking and smoking moderately: attitude toward daily health promotion.

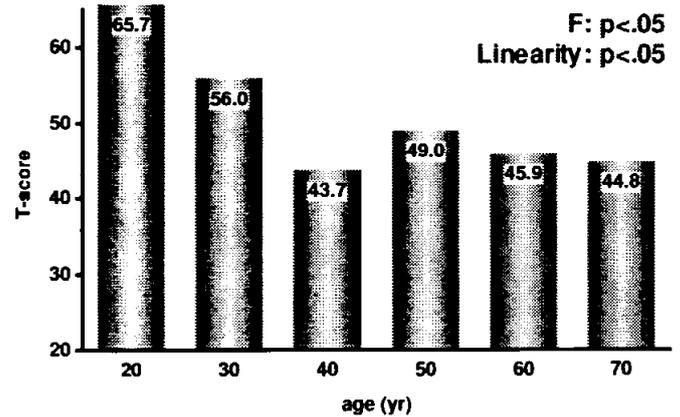


Fig. 9. Fitness club type: way of daily health promotion activity.