

ASIANIA

SPORT FOR ALL



ASSOCIATION

JASFA

Volume 10 Number 1 2010

Journal of
Asiania
Sport For All

EDITORIAL

We are very pleased to be able to present the new ASFAA Journal 2010, 10th Journal of Asiana Sport for All. After the decision of publication of quality ASFAA Journal at the 26th ASFAA Board Meeting in Macau in 2009, I started to organize the editorial board for the new ASFAA Journal.

The 1st editorial board meeting of Journal of Asiana Sport for All (JASFA) was held on March 10, 2010, in Beijing, China. Three members from Japan and two members from China consist of the editorial board. I was appointed to be a chair of the editorial board. The editorial board members including Dr. Ren Hai and Dr. Yang Zeyi from China, Dr. Sho Nishizawa and Dr. Makoto Chogahara from Japan were present. The Guidelines of Contributors, the Reviewer Form of ASFAA Journal and the review process were discussed and decided. The reviewers for contributed papers were appointed at the meeting.

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Yasuo Yamaguchi, Ph.D.

Chief Editor, Editorial Board

Board of Director, ASFAA (Asiaia Sport for All Association)

(<http://asfaa.org/>)

Professor, Kobe University, Japan

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Health and Socio-Psychological Factors Related to the Stages of Exercise Behavior Change in Japanese Older Adults

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Abstract

The purpose of this study was to identify health and socio-psychological factors related to the stages of exercise behavior change in Japanese older adults. Data were collected from a sample of 412 who were students of senior colleges for the older adults in Osaka prefecture from July to September in 2007 using questionnaire. The variables consisted of personal attributes, stages of exercise behavior change, health factors and socio-psychological factors. Stages of exercise behavior change consisted of 5 stages, such as precontemplation, contemplation, preparation, action, and maintenance. The average age of the subjects was 67.5 ± 4.7 years old. Male samples were 47.3% ($n=195$) and female samples were 52.7% ($n=217$). Fifty two percent ($n=195$) of the sample were in the maintenance stage. Health behavior, human support, and exercise self-efficacy were gradually likely to

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become higher with progress of the stages of exercise behavior change. All variables in this study were the highest in the maintenance stage. Walking, Health behavior, human support, exercise self-efficacy, outcome expectation, and flow experience were the lowest in the precontemplation stage. Cognition of health status was the lowest in the contemplation stage. Health and socio-psychological factors, on the whole, related to the stages of exercise behavior change adequately in older adults.

Key words: stages of exercise behavior change, transtheoretical model, self-efficacy, older adults, health behavior

Introduction

In recent years, promotion of physical activity based on behavioral science is the center of attention in the field of exercise and sport in Japan (Takenaka, 2009; Yamaguchi, 2007; Aoki, 2005; Oka, 2000; Kitada et al., 1997). The stages of behavior change in transtheoretical model (TTM) are applied to measurement of exercise level in “a specific medical checkup for metabolic prevention, and specific health guidance” conducted by administration (Ministry of Health, Labour and Welfare, 2008).

One model that has been applied to exercise behavior with success is the TTM (Prochaska and DiClemente, 1983). Although this model was developed for the cessation of a negative behavior (i.e., smoking), it has also been applied to the acquisition of and adherence to such positive behaviors as exercise (e.g., Marcus et al., 1992; Nigg & Courneya, 1998). TTM has been widely applied to understand the process by which individuals change their life styles. It acknowledges that people differ in their readiness to adopt and maintain a specific behavior. TTM can be better understood in terms of the following key constructs: (a) stages of behavior change, (b) self-efficacy,

(c)decisional balance, and (d)processes of change. The principal concept is the stages of behavior change. It consists of precontemplation, contemplation, preparation, action, and maintenance. As applied to regular exercise, the stages range from the earliest stage (precontemplation) to the last stage (maintenance). Some researchers indicated that people could be classified per their exercise level by the stages of behavior change, and TTM contributes to make sedentary people more active (Takeda et al.,2002; Shimomitsu et al.,1999). Nevertheless, little is known about the factors when applying the stages of exercise behavior change to the Japanese older adults. Factors related to the stages of exercise behavior change had to be taken into consideration.

Some remarkable research about factors related to the physical activity in older adults can be seen in Japanese previous research. Takai (2003) indicated that poor condition of health status motivated people to start exercising. Ishizawa (2002) pointed out that older adults who were exercising regularly tended to walk a great distance in daily life. Inactive people were not satisfied with their health behavior. Human support, such as exercise instructors and exercising peers, affected to the motivation for exercise (Nishida et al., 2000; Nakayama et al., 2004). Concerning psychological factors, self-efficacy was the most significant variable related to the stages of exercise behavior change (Oka,1999; Sallis et al.,1999; Marcus et al.,1992). Self-efficacy is defined as a confidence to perform a behavior required to achieve a certain outcome (Bandura,1997). In other words, self-efficacy for exercise and sport can be a predictor of exercise adherence and adoption. It is often called “exercise self-efficacy” (Sugihara,1997). With respect to other items in psychological factors, outcome expectations and flow experience were regarded as a significant variables related to exercise and sport involvement (Sugihara,1995; Hinoue,1996; Yamaguchi,1994).

These variables could provide important data to support the need for development of physical activity intervention. However, samples were not divided into some detailed groups giving information of behavioral and cognitive level. Aoki(2005) examined factors related to the stages of exercise behavior change in Japanese older adults. Socio-psychological factors (exercise self-efficacy, perceived benefits of exercise, perceived barriers of exercise, ADL, positive social support from family, negative social support from family, and positive social support from friends) were identified in the study. Characteristics of each stage were analyzed with ANOVA. ADL and social support(family and friends) were quite important elements among all variables.

This study examined health and socio-psychological factors by using the stages of exercise behavior change in TTM. The purpose of this study was to identify health and socio-psychological factors related to the stages of exercise behavior change in Japanese older adults.

Methods

Samples and procedures

Cross-sectional design was used in this study. Samples (n=518) were aged 60-84 years old students (mean= 67.5, S.D.=4.7) going to senior colleges. Senior colleges are often established with systematic curriculum by public (e.g., municipalities, local government, and ministry) and private organization. The samples in the study were comprised of 3 senior colleges in Osaka city. All of them were organized by public organization (i.e., Osaka prefecture, Osaka city, and the social insurance agency) and considered to have equivalence as samples.

Students can learn a variety of programs (e.g., foreign languages, exercise and sport, and music) without an entrance examination. The

purpose of establishment is to provide opportunities for continuing education among the elderly. Students ought to pay tuition and attend school for 1-3 years until completion. Therefore, the participants can afford to pay money for the programs and the level of ADL (activities of daily living) tends to be high. They are expected to have knowledge of lifelong learning and become leaders in a community.

The survey was conducted from July to September in 2007. Questionnaires were distributed to students by a researcher in quiet classroom conditions in Osaka city. Informed consent and ethical procedures conformed to guidelines of the “Act on the Protection of Personal Information Held by Administrative Organs”. Students answered the questionnaires at the time, while questionnaires took 7-12 minutes to complete. They were collected after accomplishment by a researcher. Four hundred and twelve data (male=195, female=217) were analyzed in the study, while the return rate was 79.5%.

Measures and analyses

Table 1 shows variables and measures in this study. The variables were consisted of (a) personal attributes, (b) stages of exercise behavior change, (c) health factors, and (d) socio-psychological factors (Sugihara et al.,1995; Hyogo prefecture, 2006; Prochaska et al.,1983; Marcus et al.,1992; Chogahara,1999; Oka,2003; Yaguchi et al.,1993; LaRue et al.,1979; Nakamaya, 2002) .

Table 1 Variables and measures

Variables	Operational Definition	Measures
stages of exercise	stages of behavior change in exercise and	1. I do not exercise and I will not start it within six months.
behavior change	sports involvement	2. I do not exercise and I hope to start exercising within six months.
		3. I exercise, but not regularly.
		4. I have just started exercising regularly within the last six months.
		5. I have been exercising regularly for more than six months.
walking	daily walking	1="less than 2000" ~ 6="more than 10000"
cognition of health status	cognition of health status compared with same generation and gender	1. poor 2. a little bit poor 3. neither 4. a little bit good 5. good
health behavior	health behavior consisted of 14 items	1="yes" 0="no"
human support	supports by exercise instructors, family, friends, and exercising peers	1. not at all 2. not very 3. neither 4. a little bit 5. a lot
exercise self-efficacy	confidence for distress, stress, lack of time, and bad weather	1. not confident at all 2. not confident very much 3. neither 4. confident a little bit 5. confident very much
outcome expectations	ten positive and three negative expectations for regular exercise and sport involvement	1. disagree 2. agree a little bit 3. agree 4. quite agree
flow experience	enjoyment or satisfaction in exercise and sport involvement in 50 years old	1. did not feel at all 2. felt a little bit 3. quite felt 4. felt very much
gender	gender of the samples	1="male" 0="female"
age	age of the samples	age
height	height of the samples	height
weight	weight of the samples	weight
family structure	family structure of the samples	1. single 2. live with spouse 3. live with children or parent(s) (double generations) 4. live with children and parents (triple generations) 5. others

Personal attributes consisted of gender, age, height, weight, and family structure. The stages consisted of 5 stages, such as precontemplation, contemplation, preparation, action, and maintenance (Prochaska et al., 1983; Marcus et al., 1992). The stage of exercise behavior change shows an exercise behavior in the past and present, and a readiness for incentive. It indicates a process reaching continuation from the beginning of the exercise and sport involvement. The validity and reliability for Japanese subjects were demonstrated (Chogahara, 1999). Participants chose one stage between five stages. Regular exercise and sport were defined as "more than a minimum of twenty minutes per one time and more than three days per week". Basic recommendations from ACSM (American College of Sports Medicine) and AHA (American Heart Association) reveal the guidelines for adults over age 65 (or adults 50-64 years old with chronic conditions, such as arthritis) in 2007. In the recommendations, they need to "do moderately intense aerobic exercise 30 minutes a day, five days a week" or "do vigorously intense

aerobic exercise 20 minutes a day, 3 days a week". Focusing on health enhancement in older adults, this frequency is reasonable to use in the study.

The five stages identified for regular exercise and sport are as follows:

1. Precontemplation: I do not exercise and I will not start it within six months.
2. Contemplation: I do not exercise and I hope to start exercising within six months.
3. Preparation: I exercise, but not regularly.
4. Action: I have just started exercising regularly within the last six months.
5. Maintenance: I have been exercising regularly for more than six months.

Health factors consisted of walking, cognition of health status, and health behavior. Participants rated their walking level (1=less than 2000 and 6=more than 10000) (Hyogo prefecture, 2006) . Cognition of health status meant the cognition of health status compared with same generation and gender (LaRue et al.,1979; Yaguchi et al.,1993). Participants rated their health status level (1=poor and 5=good). Health behavior consisted of such 14 items as nutrition, sleeping, and stress in daily life (Hyogo prefecture, 2006) . Participants answered "yes" or "no", and each score was summed in the analysis (maximum score was 14).

Social factor consisted of human support (Nakayama et al.,2002). Human support meant supports by exercise instructors, family, friends, and exercising peers. Each item was rated on a 5-point Likert scale ranging from 1(not at all) to 5(a lot). Coefficient alpha (internal consistency) reliability was strong ($\alpha=.843$). Each score was summed in the analysis (maximum score was 20).

Psychological factors consisted of exercise self-efficacy, outcome expectations, and flow experience. Exercise self-efficacy consisted of such 4 items as self-efficacy for distress, stress, lack of time, and bad weather

(Marcus et al.,1992; Oka,2003). Each item was rated on a 5-point Likert scale ranging from 1(not confident at all) to 5(confident very much). Coefficient alpha (internal consistency) reliability was strong ($\alpha=.920$). Each score was summed in the analysis (maximum score was 20). Outcome expectations consisted of 13 items including 10 positive (e.g., become health) and 3 negative (e.g., become busy) expectations for regular exercise and sport involvement (Sugihara et al.,1995). Each item was rated on a 4-point Likert scale ranging from 1(disagree) to 4(quite agree). Negative score was subtracted from the positive score in the analysis (maximum score was 37).

Comprehensive enjoyment and satisfaction in sport or hobbies are called “flow”(Csikszentmihalyi, 1975). It is defined as a situation of absorption in one activity and carelessness for anything. People feel that they can spend much time and energy on flow experience with great deal of enjoyment and satisfaction. It also indicates deep psychology when keeping balance between individual ability and environmental level in sport field. Various measurements (e.g., minor activities in daily life or rock dance) were developed (Csikszentmihalyi, 1975). In the study, “flow experience” meant feeling of enjoyment or satisfaction in exercise and sport involvement in 50 years old following previous studies (Sugihara et al.,1995). It was rated on a 4-point Likert scale ranging from 1(did not feel at all) to 4(felt very much). The 4-point and 5-point Likert scales were regarded as regular intervals. Data were analyzed using 1-way analysis of variance (ANOVA) F-tests with post-hoc Scheffe tests on SPSS11.5J.

Results

Descriptive findings of the sample are presented in the table 2. More than half of the subjects were females. The average age was 67.5 ± 4.7 years old. Approximately 70% of the samples were in their 60's. The subjects living

alone made up 16.7% of the whole sample. 4.6% of male subjects were living alone. 27.6% of female subjects were living alone. Fifty two percent of the samples were in the maintenance stage. 19.1% consisted of precontemplation and contemplation, these subjects didn't participate in exercise regularly. Preparation was 21.9% and Precontemplation was 17.9%. The significant differences in the stages of exercise behavior change between males and females were not found.

Table 2 Characteristic of the samples

Item and category	Male: n (%)	Female: n (%)	Total: n (%)	p
1. Gender	195 (47.3)	217 (52.7)	412 (100)	
2. Age				
60's	124 (63.6)	162 (74.7)	286 (69.4)	.018 (d.f.=2)
70's	68 (34.9)	49 (22.6)	117 (28.4)	
80's	3 (1.5)	6 (2.8)	9 (2.2)	
3. BMI				
slim (less than 18.5)	5 (2.6)	13 (6.0)	18 (4.4)	n.s. (d.f.=2)
normal (18.5-less than 25.0)	157 (81.8)	168 (77.8)	325 (79.7)	
overweight (25.0-)	30 (15.6)	35 (16.2)	65 (15.9)	
4. Family Structure				
live alone	9 (4.6)	59 (27.6)	68 (16.7)	.000 (d.f.=3)
live with spouse	116 (59.8)	99 (46.3)	215 (52.7)	
live with children or parents	64 (33.0)	46 (21.5)	110 (27.0)	
others	5 (2.6)	10 (4.7)	15 (3.7)	
5. Stages of exercise behavior change				
precontemplation	29 (15.8)	38 (19.8)	67 (17.9)	n.s.
contemplation	6 (3.3)	11 (5.7)	17 (4.5)	
preparation	42 (23.0)	40 (20.8)	82 (21.9)	
action	4 (2.2)	10 (5.2)	14 (3.7)	
maintenance	102 (55.7)	93 (48.4)	195 (52.0)	

Table 3 indicates the differences between health and socio-psychological factors according to the stages of exercise behavior change. There were significant differences at 0.1% level in all variables (walking, cognition of health status, health behavior, human support, exercise self-efficacy, outcome expectations, and flow experience). F value was the highest in exercise self-efficacy and next highest in human support. Cognition of health status was the lowest in these variables.

Table 3 Health and socio-psychological factors according to the stages of exercise behavior change

		F value	p
health factors	walking	9.648	p < .001
	cognition of health	7.718	p < .001
	health behavior	11.826	p < .001
social factor	human support	18.460	p < .001
psychological factors	exercise self-efficacy	24.902	p < .001
	outcome expectations	12.789	p < .001
	flow experience	15.434	p < .001

Figure 1 indicates the relationship between walking and the stages of exercise behavior change. The maintenance stage was the highest and the precontemplation stage was the lowest. The contemplation stage was the highest next to maintenance. Participants who did not exercise but intended to start exercising tended to walk a great distance in daily life.

Figure 2 shows the relationship between cognition of health status and the stages of exercise behavior change. The maintenance stage was the highest and the contemplation stage was the lowest. Participants who adhered to exercising regularly acknowledged their health status as good. On the other hand, participants who did not exercise but intended to start exercise and sport acknowledged their health status to be poor.

Figure 3 presents the relationship between health behavior and the stages of exercise behavior change. The maintenance stage was the highest and the precontemplation stage was the lowest. Health behavior was likely to become gradually higher as the stage went higher. People in the high stage cared for their health behavior. There were significant differences between the stages in four items, “exercise and sport”, “health check such as weight control”, “keep regular hours”, and “participate in the events and activities of health promotion” at 1% level. The “nutrition” had significant differences at 5% level.

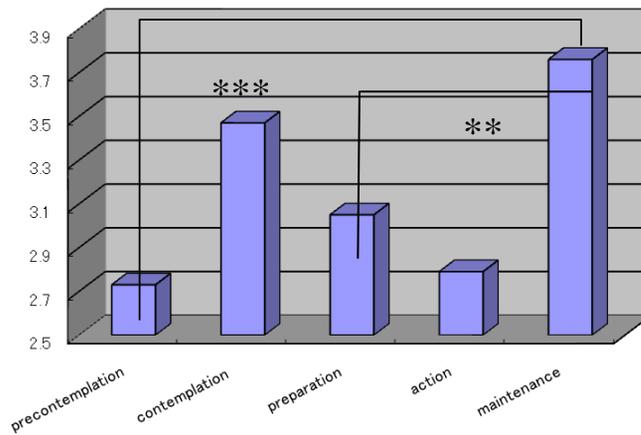
Figure 4 identifies the relationship between human support and the stages of exercise behavior change. The maintenance stage was the highest, while the precontemplation stage was the lowest as well as health behavior. Human support became gradually higher with progress of the stage. People at the high stage had a great deal of human support. Moreover, four items (i.e., exercise instructors, family, friends, and exercising peers) were compared with the stages of behavior change. There were significant differences in all items at 0.1% level.

Figure 5 indicates the relationship between self-efficacy and the stages of exercise behavior change. The maintenance stage was the highest and precontemplation stage was the lowest. Exercise self-efficacy was gradually likely to become higher with progress of the stage. As the stage went higher, confidence in exercising was likely to become significantly stronger. People at the high stage had a great deal of confidence for exercise and sport.

Figure 6 shows the relationship between outcome expectations and the stages of exercise behavior change. Outcome expectations were likely to become higher with progress of the stage, while the preparation stage was higher than the action stage. As the stage went higher, the expectations for exercise and sport were likely to become significantly higher. People at the high stage had good expectations for exercising. Moreover, outcome expectations consisted of 13 items, while each item was compared with the stages of behavior change. There were significant differences between stages in two items, "substantial life" and "humiliation" at 0.1% level. Five items, "become healthy", "become young", "reduce stress", "have confidence", and "feel tired in daily life" had significant differences at 1% level. Three items, "become in good shape", "progress with exercise and sports", and "become busy" had significant differences at 5% level.

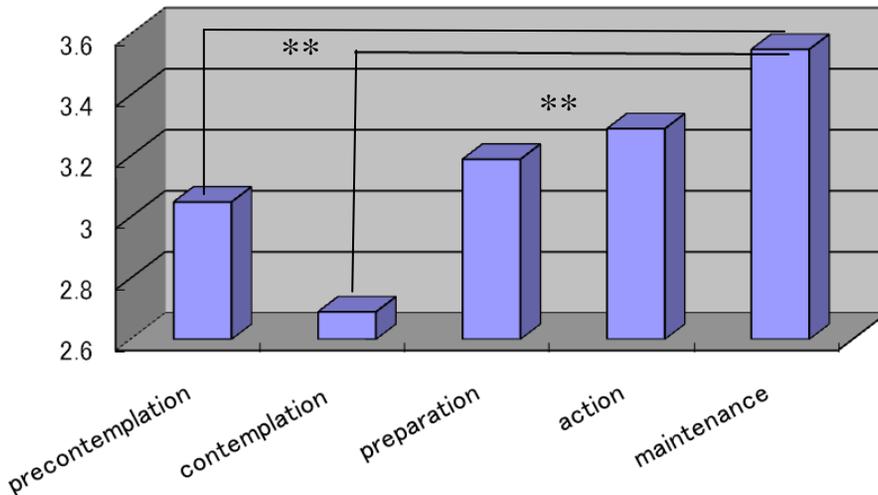
Figure 7 presents the relationship between flow experience and the stages of exercise behavior change. The maintenance stage was the highest

and the preparation stage was the next highest. People in the maintenance and preparation stage had good experience in exercise and sport involvement before. They received a great deal of satisfaction and enjoyment from exercise and sport.



p<.01 *p<.001

Fig.1 Walking according to the stages of exercise behavior change



**p<.01

Fig.2 Cognition of health status according to the stages of exercise behavior change

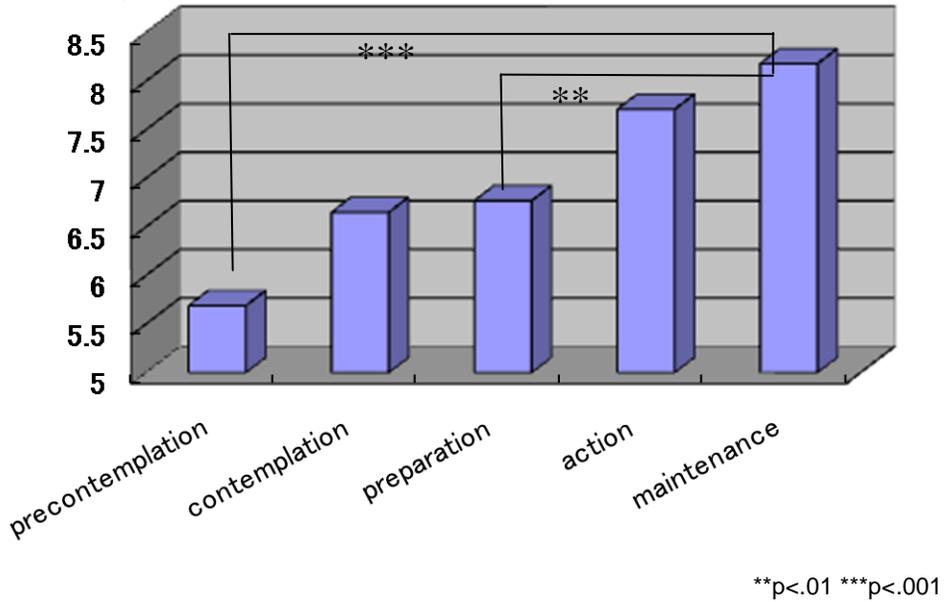


Fig.3 Health behavior according to the stages of exercise behavior change

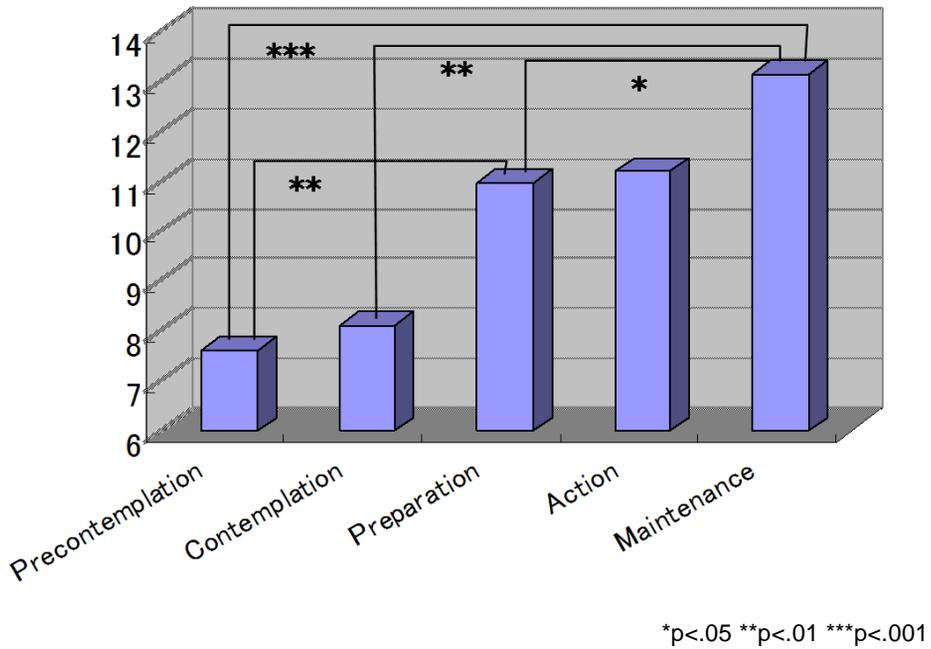


Fig.4 Human support according to the stages of exercise behavior change

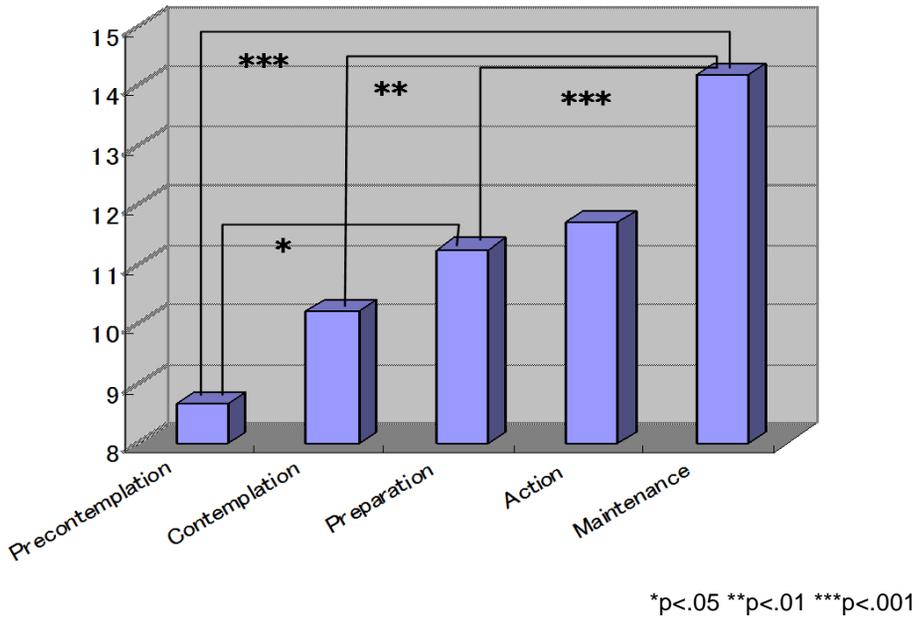


Fig.5 Self-efficacy according to the stages of exercise behavior change

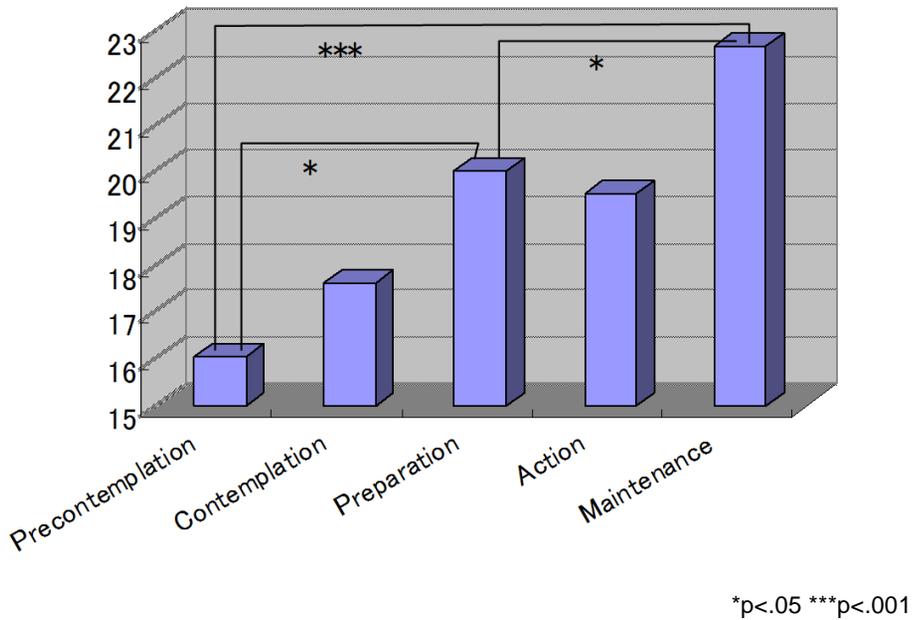
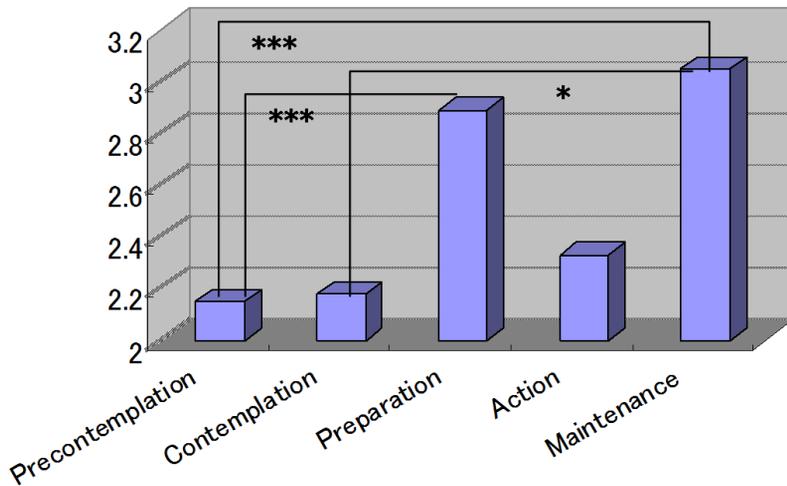


Fig.6 Outcome expectations according to the stages of exercise behavior change



*p<.05 ***p<.001

Fig.7 Flow experience according to the stages of exercise behavior

Table 4 indicates the characteristic of the health and socio-psychological factors according to the stages of exercise behavior change. The transverse line shows walking, cognition of health status, health behavior, human support, exercise self-efficacy, outcome expectations, and flow expectations. The vertical line indicates each stage of exercise behavior change. The marks show the score based on each stage (◎=very high, ○=high, △=intermediate, ▼=low, ×=very low). Five-point scales were determined by the rank order of each variable. Across the stages, the maintenance stage was the highest. The precontemplation stage was the lowest in walking, health behavior, human support, exercise self-efficacy, outcome expectations, and flow experience. The contemplation stage was the lowest in cognition of health status. Moreover, health behavior, human support, and exercise self-efficacy related to the stages of exercise behavior change deeply. They were gradually likely to become higher with progress of the stage. The results indicated that health and socio-psychological factors related to the stages of exercise behavior change adequately.

Table 4 Characteristic of the health and socio-psychological factors according to the stages of exercise behavior change.

	walking	cognition of health status	health behavior	human support	exercise self-efficacy	outcome expectations	flow experience
precontemplation	×	▼	×	×	×	×	×
contemplation	○	×	▼	▼	▼	▼	▼
preparation	△	△	△	△	△	○	○
action	▼	○	○	○	○	△	△
maintenance	◎	◎	◎	◎	◎	◎	◎

× : very low ▼ : low △ : intermediate ○ : high ◎ : very high

Discussion

People who are at risk of life-style related diseases need to be more active. One successful way to understand the context of exercising in older adults is an application of the stages of exercise behavior change in TTM. In addition, health and socio-psychological factors related to exercise and sport involvement in older adults were focused. Consequently, the purpose of this study was to identify health and socio-psychological factors related to the stages of exercise behavior change in Japanese older adults. Significant differences according to the stages of exercise behavior change were found in health and socio-psychological factors.

Health behavior, human support, and exercise self-efficacy related to the stages of exercise behavior change significantly. They were gradually likely to become higher with progress of the stage. It is clearly shown that exercise self-efficacy relates to the stages of exercise behavior change significantly in previous research (Oka et al.,1999; Shimomitsu et al.,1999; Marcus et al.,1992). Health behavior and human support are also likely to be correlative variables among older adults. These variables are effective in distinguishing between the stages of exercise behavior change. That is to say, the level of health behavior and human support can also become predict one's exercise as in the case of exercise self-efficacy.

Across the stages, the maintenance stage was the highest in all variables (i.e., walking, cognition of health status, health behavior, self-efficacy, outcome expectations, and flow experience). People who adhered to exercise regularly got high score in health and socio-psychological factors. On the other hand, the precontemplation stage was the lowest in walking, health behavior, human support, exercise self-efficacy, outcome expectations, and flow experience. This meant people who did not exercise regularly were short of them. Concerning cognition of health status, people in the contemplation stage regarded their health status as poor, compared with those in the precontemplation stage. This supported the result of previous research, which indicated that the bad condition of health status motivated to start exercising (Takai et al.,2003).

Health and socio-psychological factors related to the stages of exercise behavior change adequately. It seems that there are close connections between these factors and the readiness for exercise including behavioral and cognitive level. People who support exercising and sport involvement in older adults had to understand factors related to the readiness for exercise. Especially, factors in the contemplation stage should be considered to make sedentary people more active. People in the contemplation stage tend to walk in daily life, but feel their health status bad. In addition, they did not have good experiences for exercise and sport in middle-age. The solution for these issues should be a matter of great urgency.

There are some limitations to this study that warrant discussion. First, this study was a cross-sectional study and therefore, we are unable to confirm whether the individuals moved forward, backward, or remained in the same stage over time. In the future, longitudinal research is needed to ultimately determine the stage transition. Second, measurement errors often result from self-report measures (Sallis & Owen, 1998). Pedometer or some

instrument to keep records correct are needed to understand the accurate phenomenon. Third, people who are physically active are often attributed with positive characteristics (Langlieos et al.,2000). Students going to senior colleges were the samples in the study. There are limitations to generalize the results of this study. The random sampling is recommended to generalize the results of this study.

In conclusion, we have shown the relationship between health factors, socio-psychological factors, and the stages of exercise behavior change in Japanese older adults in this study. Walking, cognition of health status, and health behavior were used to examine the underlying structure of health factors. Human support was placed as a social factor. Self-efficacy, outcome expectations, and flow experience were used to examine the underlying structure of psychological factors. Across the stages, the maintenance stage was the highest. Health behavior, human support, and exercise self-efficacy related to the stages of exercise behavior change deeply. Health and socio-psychological factors related to the stages of exercise behavior change adequately. Plans and strategies considered the differences between individual stages are quite important to improve the level of exercise and sport involvement in older adults. Further information based on scientific research will be demanded in broad fields.

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Talent Identification and Development in Sports in Singapore

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Abstract

Interest in effectively identifying and developing sports talent has increased over the years. For example, the Australian Institute of Sport (AIS) has launched the Talent Search programme with the objective of identifying and developing sport talents for the Sydney Olympics 2000. Similar approaches have also taken place in the United Kingdom, South Africa and Malaysia. For a resource scarce nation like Singapore, an articulated pathway for talent identification and development is critical to her success in sports at an international stage. This paper presents the overview of the talent development programmes and initiatives in Singapore that nurture talents in sports.

Key Words: talents, talent identification, talent development, sports, Singapore

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Introduction

The people are said to be the only natural resource that Singapore has. Although so, Singapore still stands at a disadvantage in the international sporting scene when competing with larger nations due to her smaller population size and correspondingly smaller talent pool (Tan, Koh & Azhar, 2009). Thus, there is a need to efficiently and effectively manage this resource.

Sports talent identification serves the purpose of identifying the best talents such that they can be nurtured with the best coaching, training and sports science support available (Arnot & Gaines, 1986; Regnier, Salmela & Russell, 1993; Vaeyens, Lenoir, Williams & Philippaerts, 2008). According to Arnot and Gaines (1986), accurate talent identification can prevent different types of loss – loss resulting from resources spent on coaching, training and sports science support for the less talented and from the mismatch between athlete and sport. For a small nation with limited resources like Singapore, talent identification and development are vital in upholding the nation's place in the international sporting scene. As a nation, there are a few stakeholders involved in the identification and development of talents at various levels. They include the Ministry of Community Development, Youth and Sports (MCYS), the Ministry of Education (MOE), the Singapore Sports Council (SSC), the Singapore Sports School (SSP) as well as the National Sports Associations (NSA). Each organisation has its specific role but they complement the work of other organisations and contribute to raising the standard of sports in Singapore.

This paper presents an overview of the programmes and initiatives for sports development in Singapore. Their role in talent identification and development will be discussed in detail below.

Ministry of Community Development, Youth and Sports (MCYS)

The Ministry of Community Development, Youth and Sports (MCYS) formulates the broad policies to provide direction for sports in Singapore (MCYS, 2010). As such MCYS oversees all issues pertaining to sports in Singapore.

Singapore Sports Council (SSC)

The Singapore Sports Council (SSC) is a Statutory Board under MCYS. The role of SSC is to operationalise MCYS' policies on sport. The Singapore Sports Council (SSC) is the government organisation for promoting participation in sports. There are three important thrusts for SSC – to cultivate a sporting culture, achieve sporting excellence and create a vibrant sports industry (SSC, 2010).

The sports excellence team in SSC promotes international sporting excellence in selected sports. There are 6 main components to the Excellence strategy. These include identifying and investing only in selected sports, systematically providing for the athletes to assist them throughout their sporting careers and beyond, expanding the coach pool and improving coaching capabilities, expanding the use of sports science and medicine, as well as increasing opportunities for overseas competitions and nurturing national pride for our athletes and coaches (SSC, 2010).

SSC works in partnership with the NSAs to assist the NSAs in achieving their objectives through funding, assistance in capability development, and provision of support in areas such as sports medicine and sports science. Through such measures, customized frameworks for sporting success are developed; to identify and bridge gaps in the existing systems within each NSA.

Programme for Athletes' Career and Education (PACE)

To help elite athletes excel in both education and career while pursuing sports achievement, SSC developed the Programme for Athlete's Career and Education (PACE) (SSC, 2010). PACE aims to help elite athletes balance sporting achievement with their education and career goals; to help ex-national athletes develop a career after sports. A pool of potential employees is also made available for the corporate partners and they could show support to the local sports talent.

When athletes join this programme, SSC assists them to find a job that fits their education, experience and career goals. They will also go for job preparation workshops, educational counseling and career development planning. Programmes that will aid athletes in their personal development in areas such as financial planning, public speaking and entrepreneurship are also planned. The PACE consultants will work with the athletes to ensure that they receive customized solutions and services.

PACE also helps the athletes to develop holistically in order to excel both within and out of sport, and effectively integrate their sporting achievements with their educational and career goals (SSC, 2010).

National Sports Associations (NSA)

The National Sports Associations (NSAs) play an important role in talent identification and development in their respective sports. NSAs are responsible for nurturing elite athletes from the youth team to the national team. NSAs work with the different government bodies such as SSC to ensure that athletes in the NSAs receive top-notch training and quality support services. As different associations have different methods and protocols, a case study of table tennis will be discussed below.

Singapore Table Tennis Association (STTA) – Youth Development Pathway

The STTA developed a clear pathway for youth development showing how elite table tennis players move from playing at schools and zone centres to joining the Youth Development Squad (YDS) after selection trials and continue to move on to the National Youth Team and the National Team.

The YDS caters to players between the ages of 10 to 12. However STTA do admit students who are 9 years old if they have met the selection criteria. The selection trials for the STTA YDS occur half yearly and eligible players will be sent a letter of invitation to the selection trials. These players are identified by coaches from zone centres and National Youth Ranking List. Assessment of players who are selected into the YDS is a continuous process. Players who are unable to meet expectations in terms of training progress, competition performance, discipline and attendance may be asked to leave the squad.

High potential players under 18 years of age may be recommended by their coaches from YDS and Singapore Sports School to join selection for the National Youth Team (NYT). Similarly, top players in the National Youth Ranking list will also be invited for the selection trials for the National Youth Team. Assessment for the NYT runs on the basis as that of the YDS and athletes need to meet expectations made of them (STTA, 2010).

Ministry of Education (MOE)

It is important that the Ministry of Education (MOE) is involved in sports talent identification and development. With the ministry having access to all schooling children, talent identification and development at this level would be most extensive. Some of the strategies used to identify and develop talents in schools include PE lessons, Co-Curricular Activities (CCAs) and inter/ intra school competitions.

Typically, talented students in the different sports who were not already in the respective CCAs will be spotted during PE lessons. These students would then be channeled to the corresponding CCA for further training and development. While most of the students join CCAs by expressing interest, there are some schools which require the students to go through standardized selection trials. Talent scouting also takes place at the interschool competitions where students from around Singapore meet and pitch their abilities against each other.

Talent Development Framework for Sports

In 2007, MOE announced the launch of the Talent Development Framework for sports which aims to build on the existing efforts in sports talent development in schools. There are three key strategies to the Talent Development Framework – development of talented athletes in Primary Schools through the Junior Sports Academies (JSAs); development of talented athletes in Secondary Schools/ Junior Colleges/ Centralised Institutes through the Youth Sports Academies (YSA); and enhancement of resources for schools' talent development efforts.

Within this framework, MOE will work with primary schools to identify and develop sporting talents. An inclusive approach is adopted for Talent Identification. Athletes will be identified from both athletes who are already playing the sport and from those who may not necessarily be playing the sport but deemed to have the potential to do well. Selection of athletes is based on competition results, scouting, nomination from schools and National Physical Fitness Awards (NAPFA) test results. At the selection trials into the JSA programme, the athletes are further tested for generic motor skills such as balance and agility, hand-eye coordination and spatial awareness, as well as sports specific skills and match play.

Athletes who are identified at the selection trials undergo a two-year programme at Primary 5 and 6 at the JSAs. Under the guidance of top-notch coaches, they train 1- 3 times weekly depending on the sport at the JSAs. Besides receiving quality coaching and sparring partners, the JSA athletes have the opportunities to participate in overseas competitions and training to benchmark their standards with their overseas peers. The JSA athletes are also provided with medical and sports science support during the two year programme.

This year, MOE launched the Youth Sports Academy (YSA). The YSA is an extension of the JSA catering to youths between 13 to 18 years of age. When the YSA is fully in place, students would have a greater choice in the secondary and tertiary schools that they go to without worry that their athletic training would be compromised. The opportunities and quality training that the YSA athletes receive are similar to that of the JSA (i.e. coaching, sports sciences and provision of opportunities for competitions and benchmarking their standards with those in the region). There is, however, no direct entry into the YSA for the JSA athletes. JSA athletes would have to go through the selection trials with the rest of the applicants to ensure that the top talents are included in the YSA. For JSA and YSA, MOE work with NSAs to identify top-notch coaches for these programmes.

The Ministry has also developed resources for talent development and made them available to all schools. These include in-house skills tests for Badminton (2006), Basketball (2006) and Soccer (2003). Schools have found these tests useful in assessing the skills levels of the CCA students. There are also moves to improve the capacity of teachers and coaches involved in CCAs through the Sports Coaches Accreditation Programme. This programme provides courses in principles of coaching and Sports Science, workshops and lectures on sports specific skills, techniques and strategies in

coaching as well as coaching attachments opportunities to the coaches to improve coaching ability

Last year, MOE also launched the Athletes Profiling and Tracking System (APTS) to track and study the long term physical and sporting development of student athletes. The system will facilitate the maintenance and update of each athlete profile, their latest performance and development. Some of the information captured in the APTS is height and weight, NAPFA (National Physical Fitness Awards) results and sporting achievements till they are 30 years old. Profiling and tracking of elite athletes will enhance athlete's self-awareness of perceived strength and weakness and thus provides objective data to aid in short and long term goal setting for their training (MOE, 2009).

Singapore Sports School (SSP)

The Singapore Sports School (SSP), opened in 2004, is a specialized independent school providing conducive academic and training environment for youths aspiring to be sports athletes. The school currently boasts over 400 sports athletes who have benefited from the flexible academic scheme which enables them to balance their academic pursuits and sports training. The academic syllabus of the SSP is closely tied to those in mainstream schools at the secondary level, offered in a modular system, allowing students the flexibility of competing at sports events frequently without compromising their studies. To enable optimal matching of sports training and development with suitable academic pacing and assessment, SSP extended its academic pathways by offering:

- a 6-year SSP academic programme leading to International Baccalaureate (IB) Diploma for academically-able student;

a highly customized through-train Republic Polytechnic-SSP Diploma programme in Sports & Leisure Management conducted on the SSP campus. These academic pathways allow greater flexibility for our students to achieve academic excellence while pursuing sports excellence at the same time. The SSP nurtures athletes in 9 core sports and provides training for other sports on a case-by-case basis. For these students, a flexible programme will be worked out with the respective NSAs to offer the necessary training.

The admission to SSP includes the recruitment, selection, offer and entry phase. Recruitment of students is done through three different channels - self nomination by students and parents, recommendations by NSAs, schools and stakeholders as well as scouting of potentials at national and zone competitions by SSP. These potential students have to undergo preliminary selection trials at the Academy levels or during the Open house and shortlisted candidates will then be interviewed. Successful applicants will be offered places and confirmation of entry will only take place after the release of the PSLE results.

Their in-house Sports Science Academy integrates with the Sports Academies by offering services in Medical and Physiology, Psychology, Sports Biomechanics, Strength and conditioning, Physiotherapy and Sports Nutrition. They aim to provide integrated sports science services to empower and enhance young athletes for performance excellence. This is achieved through sports science-specific screening, profiling and testing to fine-tune and value add to training programmes, prevent injuries and improve performances. Educational sessions on sports science are conducted to empower the athlete to be responsible and to put their sports science knowledge into practice. Applied sports science research is also carried out to provide insights to optimize performance (SSP, 2010).

Singapore Youth Sports Development (SYSD) Committee

In 2008, MCYS and MOE formed the Singapore Youth Sports Development (SYSD) committee to raise overall youth sports participation, improve the existing youth sports development structure in Singapore and perform well at the Inaugural Youth Olympic Games (YOG). Through this effort, we can better maximise the potential of Singapore youth and produce winners in their chosen field.

Conclusion

MCYS, MOE, SSC, SSP and NSAs are key stakeholders that play an integral part in youth sports development in Singapore. Agency carries out its specific role, these roles are all complementary, and work toward the common objective of raising the standard of sports in Singapore. The set-up of the SYSD committee provides an important platform for collaboration and communication among stakeholders to address areas of concern in order to further improve youth sport development in Singapore.

Acknowledgement

The author would like to thank the following people for their inputs and suggestions. They are Ms Beverly Snodgrass from MCYS, Mr Eddy Tay from STTA and Mr Vincent Ong from SSP. Sincere appreciation is also extended to Mr Goh Ek Piang, Deputy Director Co-Curricular Activities Branch (DDCCA) for his inputs and support.

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A Review of Physical Fitness Status and Sports Nutrition Intervention for Chinese Students

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Abstract

Research results on Chinese students' physical fitness and health status over the past 20 years showed gradual improvement in their morphological development and nutritional status compared to that in 1995. However, there are still deep concerns on their continually declining constitution and physical fitness. This is mainly due to schoolwork overload, insufficient exercise and unbalanced nutrition compared to other countries. It has gained the Chinese government's full attention that it is critical to improve students' constitution, physical fitness and health using sport nutrition intervention. This review includes comprehensive data analysis in order to identify the core problems, causes and resolutions for the declining constitution and physical fitness of Chinese students.

Key words: student, constitution, physical fitness, health, exercise, nutrition intervention

Introduction

One fifth of the 2005 Chinese population was school students (250

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million, from elementary school to graduate school). The physical fitness and health of such a large population is very important for a country. It reflects national vitality and social civilization and progress. It is the embodiment of comprehensive national strength.

In 2000, the Chinese Department of Education and other five ministries organized a constitution and health research project with a test field of 34,000 students from 1947 schools and 31 provinces. Test items included 22 parameters such as body shape, physiological functions, physical performance, constitution, etc,. Since then, a student's constitution and health survey has been conducted once every two years, and a national physical fitness survey (including students) has been carried out once every five years. Results over the 15 years showed that morphological development increased gradually; nutrition status improved; and anemia prevalence rate declined. However, the physical characteristics such as speed, endurance, flexibility, explosive power, and strength declined significantly. In the meantime, low vital capacity, high incidents of overweight, obesity and myopia increased. ^(1, 2)

1 Improvements of morphological development, nutrition status and anemia prevalence rate

1.1 Morphological development improvements

The national physical fitness survey showed that the height, weight, and chest girth of students at all ages were greater in 2005 than in 2000. (Table 1, 2, and 3) Students' constitution and health survey results showed that the height, weight and other morphological development indicators also grew in a relatively short time interval from 2002 to 2004. ^(1, 2, 3)

Table 1 The height of Chinese students in 2005 compared with in 2000 (cm)

Gender	Male Students				Female Students			
Year	2000		2005		2000		2005	
School	N	Height	N	Height	N	Height	N	Height
Primary (age 11)	9010	143.1	9869	144.7	8985	144.8	9713	146.1
	SD	7.48	SD	7.67	SD	7.78	SD	7.79
Middle (age 14)	9005	162.7	9666	163.7	8983	156.6	9622	157.0
	SD	8.41	SD	8.2	SD	5.88	SD	5.93
High (age 17)	8910	170.2	9790	170.8	8983	158.5	9719	159.0
	SD	6.24	SD	6.39	SD	5.69	SD	5.71

Table 2 The weight of Chinese students in 2005 compared with in 2000 (kg)

Gender	Male Students				Female Students			
Year	2000		2005		2000		2005	
School	N	Weight	N	Weight	N	Weight	N	Weight
Primary (age 11)	9013	35.4	9869	37.5	8984	35.3	9713	36.9
	SD	8.47	SD	9.22	SD	7.92	SD	8.40
Middle (age 14)	9007	49.8	9666	51.6	8995	46.4	9622	47.4
	SD	10.72	SD	11.45	SD	7.80	SD	8.11
High (age 17)	8910	58.9	9790	59.6	8977	50.9	9719	51.2
	SD	9.73	SD	10.12	SD	7.04	SD	7.29

Table 3 The bust of Chinese students in 2005 compared with in 2000 (cm)

Gender	Male Students				Female Students			
Year	2000		2005		2000		2005	
School	N	Bust	N	Bust	N	Bust	N	Bust
Primary (age 11)	8999	67.5	9861	68.7	8977	67.1	9704	68.1
	SD	6.79	SD	7.55	SD	6.57	SD	7.05
Middle (age 14)	8990	76.8	9655	77.3	8991	75.9	9613	76.2
	SD	7.04	SD	7.68	SD	5.98	SD	6.32
High (age 17)	8911	83.3	9784	83.0	8977	79.2	9707	79.1
	SD	6.11	SD	6.55	SD	5.53	SD	5.58

1.2 Nutrition status improved, anemia prevalence rate declined.

The percentage of low weight in primary school students (7-18 years old) and malnutrition rate decreased by 1.1% and 7.6% in year 2000 as compared to in 1995. In 2000, the percentage of low weight and malnutrition rate in 19-22 year-old university students decreased by 10.5% and 31% compared to 1995. The anemia prevalence data in 2000 showed a decrease. For example, the hemoglobin detection rate for 7-year-old urban boys and girls decreased from 28.3% to 20.7% and 29.0% to 23.4%, respectively. For rural boys and girls, the decreases are from 33.4% to 25.6% and from 35.4% to 27.8%, respectively. Compared to 2000, the 2002 detection rate of malnutrition for students decreased slightly. However, there were significant decreases in the numbers of cases of lower body weight and the prevalence rate of several common diseases (low hemoglobin and tooth decay). ^(1, 2, 3)

2 Overall declines in student physical fitness

When China's economy grew and national living standards improved, the students' level of body growth and nutritional status gradually improved. Also,

the prevalence of several common diseases began to decline. Unfortunately, in the past 20 years, the modern lifestyle and diet has led to less exercise and unreasonable nutrition intake. The exam-oriented education system also brought excessive academic burden and caused lack of physical exercise. The ultimate results are continuously declining physical fitness and an increase in overweight and obese students.

2.1 Decline in the physical fitness of Chinese students

In 2000, physical fitness characteristics in speed, endurance, flexibility, power and strength of Chinese students declined compared to that in 1995. In 2002 speed, power and strength of Chinese students decreased as compared to that in 2000.

In addition, in 2002 the vital capacity of Chinese students continued to decrease. The vital capacity of Chinese students in 7-18 year-old male and female students decreased by 168 milliliters and 78 milliliters, respectively, when compared to that in 2000. The situation is similar for 19-22 year-old university students. ^(1, 2, 3)

2.2 Increase in obesity

Compared to 2000 and 1995, the national survey of 7-18 year-old students in 2005 showed significant increasing obesity rates. The increases are from 5.9% to 10.1% to 11.4% for urban boys, from 3.0% to 4.9% to 5% for urban girls; from 1.6% to 3.7% and 5.1% for rural boys; and from 1.2% to 2.4% to 2.6% for rural girls (Figure 1). ^(1, 2, 3)

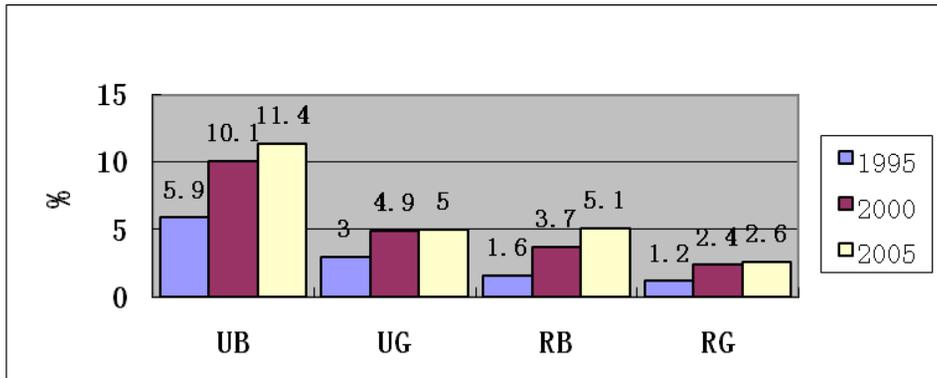


Fig. 1. The detectable rate of obesity of Chinese 7-18 year-old students in 1995, 2000 and 2005

(UB, urban boy; UG, urban girl; RB, rural boy; RG, rural girl)

3 The difference in constitution and physical fitness between Chinese and Japanese students

Although the morphological development of Chinese students has greatly improved, there was still a gap compared to other Asian developed countries, such as Japan. In 2000, the height and weight of Chinese students were below their age-groups in Japan except for the height of 17-year-old high school girls (Table 4).^(2, 3, 4)

Table 4 Comparison of body shape between Chinese and Japanese students in 2000

School	Gender	Height (cm)		Body weight (kg)	
		Japanese	Chinese	Japanese	Chinese
Primary (age 11)	Male	145.2	143.1	39.4	35.4
	Female	146.8	144.8	39.8	35.3
Middle (age 14)	Male	165.5	162.7	55.5	49.8
	Female	156.7	156.6	50.9	46.4
High (age 17)	Male	170.7	170.2	63.2	58.9
	Female	157.9	158.5	53.5	50.9

In addition to the gap in the morphological development, the physical fitness of Chinese students was worse than that of Japanese students. In 2000, three physical fitness tests were carried out by both countries using the same method. They were grip strength, pull-up and 50-meter run. Comparing the data from the two countries showed similar results for the 50-meter run between the 19-year-old female college students, and standing long jump results for the 10-year-old high school and 16-year-old elementary school male students. However, the overall physical fitness of Chinese students was shown to be lower than that of the Japanese students (Table 5).^(2, 3, 4)

Table 5 Comparison of physical performance between Chinese and Japanese students in 2000

Age	Country	Gender	Standing long jump (cm)		Grip (kg)		50m run (second)	
			mean	SD	mean	SD	mean	SD
10	Chinese	M	156.90	18.28	13.30	4.25*	9.70	0.89*
		F	146.20	17.96*	11.90	4.29*	10.20	0.94*
	Japanese	M	147.59	19.08	17.85	3.95	9.31	0.80
		F	147.59	19.08	16.84	3.86	9.62	0.79
13	Chinese	M	191.00	22.76*	24.90	7.89*	8.50	0.79*
		F	161.80	18.64*	19.50	5.30*	9.50	0.82*
	Japanese	M	198.85	23.22	31.69	7.35	7.95	0.66
		F	167.89	22.41	24.62	4.47	8.85	0.77
16	Chinese	M	225.60	20.26*	37.00	7.44*	7.60	0.59*
		F	170.70	17.83	23.20	5.50*	9.30	0.82*
	Japanese	M	224.42	24.97	42.33	6.93	7.41	0.65
		F	165.93	24.60	26.76	4.79	9.13	0.96
19	Chinese	M	234.00	18.96*	41.00	7.64*	7.50	0.54*

Age	Country	Gender	Standing long jump (cm)		Grip (kg)		50m run (second)	
			mean	SD	mean	SD	mean	SD
		F		172.20	18.81*	24.50	6.31*	9.30
	Japanese	M	232.13	22.60	44.01	6.45	7.45	0.53
		F	166.96	20.39	27.30	4.46	9.28	0.74

*, Comparing with Japanese students, P<0.05

4 The causes for the decline of constitution and physical fitness of Chinese students

4.1 Inadequate physical activities

Adequate duration and appropriate means of exercise are essential factors for the constitution and physical fitness of students. In 1999, Fan *et al* carried out a survey of the extra-curricular activities for students in 72 schools with a total 13416 valid responses. Without considering the duration and intensity of the activities, during the weekend, 23%, 35%, 27%, 8% , and 7% and of the objects had 0, 1, 2, 3, and 4 times of physical activities, respectively. From Monday to Friday, besides regular physical education in the school, the times of physical activity of the primary school students was significantly greater than that of middle school students, with 33% of primary school students taking part in extra-curricular activities five times or more. During the same time period, 21% high school and 21% college students performed extra-curricular physical activities twice. ⁽⁵⁾

4.2 Schoolwork overload

In 2000, the Japanese Youth Research Institute conducted a survey of extra-curricular activities of randomly selected Chinese (2712), Japanese

(2109), and American (2429) middle school students. Results showed that study time outside school in China was the longest, with 30% of students studying for more than two hours. The United States was second with 35-40% of the students studying for more than one hour. Last was Japan, with 31.5% of middle school students studying less than 1 hour and 41.8% of high school students with no studying outside school. (Table 6)⁽¹³⁾

Table 6 Study time outside school of students in China, Japan and the United States

Study time outside school	China		Japan		The United States	
	M	H	M	H	M	H
Rarely	2.9	8.3	18.4	41.8	11.8	12.6
Less than 1h	7.5	10.6	31.5	24.8	35.1	33.4
1hr and more	21.6	21.6	29.8	18.6	39.5	35.4
2hr and more	29.7	29.0	14.3	9.2	10.7	13.6
3hr and more	24.1	20.6	3.6	2.1	1.8	2.4
4hr and more	13.1	9.1	2.2	3.4	0.9	2.1

M: middle school; H: high school

4.3 Unbalanced nutrition intake

The malnutrition of Chinese students is caused by insufficient intake of some nutrients such as high quality proteins, Vitamin A, Vitamin B, calcium, iron, and zinc. Additionally, the incidence rate of overweight or obese students increased due to a high intake of fat and calories.

4.3.1 Malnutrition

Due to the lack of nutritional knowledge of students and their parents, students did not have breakfast or had breakfast or lunch of a poor quality.

Therefore, students showed high incidence of malnutrition. According to the 2000 and 2004 Chinese constitution and health monitoring network reports for Chinese students, the incidence rate of lower body weight and malnutrition of Chinese students has remained over 20% and 3%, respectively (Table 7, 8).^(2,3)

Table 7 The distribution of lower body weight of Han nationality students in 2002 and 2004 (%) [$<P_{80}(1-10\%)$]

Year	Urban		Rural	
	Male	Female	Male	Female
2002	21.80	20.96	26.94	22.47
2004	20.69	21.24	27.33	22.56

Table 8 The distribution of malnutrition of Han nationality students in 2002 and 2004 (%) [$<P_{80}(1-20\%)$]

Year	Urban		Rural	
	Male	Female	Male	Female
2002	4.71	3.29	4.82	3.00
2004	4.45	3.60	5.34	3.36

4.3.2 Nutritional deficiencies and imbalances

Currently Chinese students' nutritional deficiencies and nutritional imbalances mainly manifested in the following aspects:

① Iron deficiency

Because the dietary proportion of plant-derived iron is too high, the quality of iron is poor and the iron absorption and utilization is low. The data in a 2002 physical fitness survey showed that the detection rate of low

hemoglobin in 7 to 17 year-old Han nationality students ranged from 12.8% to 19.5% ⁽²⁾

② Shortage of calcium intake

The calcium intake of students was only 40.6% of corresponding standards due to low consumption of dairy products and beans in their daily diet.

③ Inadequate intake of vitamins and trace elements

The caloric intake of Chinese students in their diet is sufficient for their energy supply according to the basic standard. However, low protein supply, small proportion of high-quality protein, inadequate intake of zinc, iron, vitamin A and other nutrients remain as problems.

④ Poor dietary habits

With the improvement of domesticity, more and more students in primary and middle school have become picky eaters, or even anorexia. Many students have become habitual snack eaters, avoiding eating staple and whole grains, and leading to an increasing number of students with malnutrition.

4.3.3 Overweight and obese

The 2004 report from the constitution and health monitoring network of Chinese students showed that in the past 20 years obesity rates of students increased up to 100 times, and the overweight rates increased up to 20 times. It was injurious to health of Chinese students (Table 9, 10 ; Figure 2,3) ^(5,7,8)

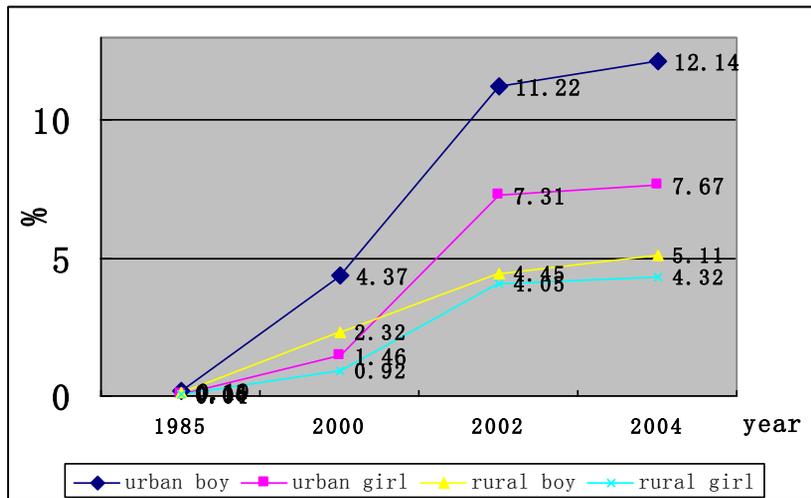


Fig. 2 The increase of obesity rate of Chinese students from 1985 to 2004

Table 9 The increase of obesity rate of Chinese students from 1985 to 2004 (%)

Year	Urban		Rural	
	Boy	Girl	Boy	Girl
1985	0.19	0.04	0.15	0.06
2000	4.37	1.46	2.32	0.92
2002	11.22	7.31	4.45	4.05
2004	12.14	7.67	5.11	4.32

Table 10 The increase of overweight rate of Chinese students from 1985 to 2004

(%)

Year	Urban		Rural	
	Boy	Girl	Boy	Girl
1985	1.13	0.45	1.5	1.66
2000	10.38	4.34	5.94	3.67
2002	12.22	12.45	6.86	9.99
2004	13.05	12.67	7.75	10.26

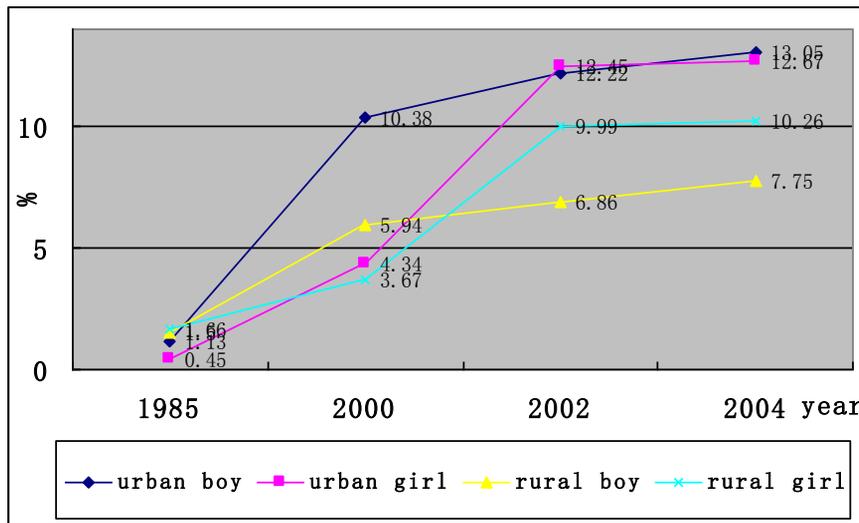


Fig. 3 The increase of overweight rate of Chinese students from 1985 to 2004

5 Countermeasures for improving constitution and health of Chinese students

5.1 Sports intervention and adjustment of everyday schedule

The Chinese government has paid attention to its students' constitution and health. In order to promote student physical growth, development, physical fitness and health and to motivate students to participate in regular physical activity and pursue a healthy lifestyle, a scientific evaluation and instruction system for physical fitness must be established. Since 2000 the China General Administration of Sport has begun the "National Physical Fitness Surveillance" conducted once every five years. In 2002, the Ministry of Education set up "The Constitution and Health Monitoring Network of Chinese Students", to be conducted once every two years. This was followed by an expansion of experiments, repeated discussion and finally, in 2002, the formation of "The National Standard of Constitution and Health for Students

(Pilot program)". The "standard" was revised in 2006 and officially enforced in 2007. (17, 18)

Table 11 Evaluation index and the corresponding score from The National Standard of Constitution and Health for Students

Group	Evaluating Indicator (test index)	Score	Notes
1 st and 2 nd grades in primary school	standard weight for certain height	20	A
	Sit and proneness, throw earthbags	40	B
	50m run (25m out and home run), standing long jump, rope skipping, kicking shuttlecock	40	B
3rd and 4th grades in primary school	standard weight for height	20	A
	Sit and proneness, throw solid sphere, sit-up	40	B
	50m run (25m out and home run), standing long jump, rope skipping	40	B
5th and 6th grades in primary school	standard weight for height	10	A
	vital capacity for BMI	20	A
	400m run (50m×8) out and home run, step test	30	B
	Sit and proneness, throw earthbags, sit-up, grip for BMI	20	B
	50m run (25m out and home run), standing long jump, rope skipping, basketball dribble, soccer porpoising ball, volleyball under pass	20	B
Middle, high school and	standard weight for height	10	A
	vital capacity for BMI	20	A

Group	Evaluating Indicator (test index)	Score	Notes
college	1000m run (M), 800m run (F), step test	30	B
	Sit and proneness, throw earthbags, sit-up (F), pull-up (M), grip for BMI	20	B
	50m run, standing long jump, rope skipping, basketball dribble, soccer dribble, volleyball under pass	20	B

A: Must be measured

B: Select one test

To enhance student's constitution and health, the Chinese government issued serious policies in 2007 as following:

- 1) Full implementation of "The National Standard of Constitution and Health for Students";
- 2) Promote the Nationwide Sunshine Sports project to hundreds of millions of students;
- 3) Effectively reduce the heavy academic burden on students;
- 4) Ensure that students exercise one hour per day.

In September 2008, "the myopia prevention and control program" issued by the Ministry of Education included the following regulations:

- 1) No homework for students in 1st and 2nd grade of elementary school;
- 2) Homework to be limited to one hour or less for other grades in elementary school;
- 3) Homework to be limited to 90 minutes or less for junior high school students;
- 4) 10 hours sleep of a day for elementary school students;

- 5) 9 hours sleep of a day for junior high school students;
- 6) 8 hours sleep of a day for high school students.

5.2 Combination of nutrition and exercise intervention

To improve student constitution and health, exercise intervention and living arrangements are not enough. It is necessary to combine nutrition with exercise and establish a sports nutrition intervention system. The exercise nutrition intervention should start with the following four methods: ⁽¹⁸⁾

5.2.1 Aerobic exercise plus diet supplements including sports drinks, energy bars and formula for recovery can be practiced to improve cardiopulmonary function.

5.2.2 Strength training program plus diet supplements including whey protein, protein bars and creatine could be administrated to enhance strength, speed and power.

5.2.3 Aerobic exercise and strength training program plus diet supplements including slimming bars, protein powder and L-carnitine could be used to reduce body fat and improve body composition.

5.2.4 Lack of knowledge in sports nutrition was an important cause for the undesirable constitution and health of Chinese students. It is critical to train professional sports nutritionists to supervise students in sports nutrition. In the last three years, we have trained more than 2,000 professional sports nutritionists who have played active roles in improving the constitution and health of Chinese students.

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Aiming for an Active World

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On the threshold of the 21st century we look back on a hundred years, in which sport grew into one of the most conspicuous cultural phenomena. From a minority pastime it developed into a significant segment of today's world. Sport is providing modern heroes and devils, lunch break topics, travel motives, business booms, professional careers, national identities, theatres of mass entertainment. Sport indeed represents the process of globalization at its best!

Only 50 years ago a new wave in the development of modern sport began its successful course around the world. From the second half of the 20th century the sport development besides the established elite sport grew into an additional and globally extending branch called Sport for All.

Inclusion, in contrast to competition, has been the key word for this movement. Its concept is an open strategy where everybody can participate: from the young to the very old, regardless sex, race, culture and economic conditions. The sport system thus has adapted to the challenges and changes of contemporary life styles. More than one billion participants are estimated in Sport for All today and the figures are ever increasing. The purpose of this paper is to examine the development of Sport for All from a socio-historical perspective.

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The First Period of Sport for All Development

In retrospective the first years of national and international Sport for All development thus can be evaluated the first period of Sport for All development. It has been the years of

- Quantitative growth of participants and participation rate in Sport for All
- Establishment of new national organizations in Sport for All in addition to the already existing sport bodies
- Development of mass programs and events in Sport for All to attract new participants
- Launch of national marketing campaigns to promote Sport for All and active life styles in the whole population

In conclusion the first period of Sport for All development had its strong focus on the individual.

The message of Sport for All was predominantly directed to each individual member of society.

The major aim was to attract as many people as possible to get physically active and adapt to an active life style. According to the present data available we have done this with some success – and we have to continue in this direction! However, we have to ask ourselves as national Sport for All leaders the question: is the job done? No, the job is not done. The world of the 21st century knocks at our doors with new challenges. Sport is today confronted with the challenges of a changing world.

There are challenges ahead of us that harden the efforts and at the same time improve the chances of Sport for All. Are we prepared to cope with these global challenges? Let us first ask the question what are the new

challenges the world is facing presently? In the following ten of the major global challenges are named:

1. the explosion of health costs
2. a lack of understanding for those who are different
3. the thread of terrorism and wars
4. the lack of equal opportunities for men and for women
5. the growing age pyramid
6. the role of globalization and thus disappearance of traditional cultures
7. the lack of exercise on the part of young people
8. the pollution of our environment and global warming
9. a global economic crisis
10. the increase of virtualization

Are we aware of these challenges? Can Sport for All contribute to the fighting of these social challenges? The answers to these questions might lead us to

The Second Period of Sport for All Development

We have to understand that Sport for All is much more than a leisure time for the masses but also indispensable when society as such is concerned. The new and future message is that Sport for All is not only directed to the individual but is also embedded into a social context.

Sport for All is taking over a new responsibility. To fully exploit the opportunities prevailing in Sport for All means to fully unfold its cultural, social, integrative, health and economic qualities. What we might need is an Extension of Perspective Strategy with the result of presenting Sport for All

- not only as beneficial for the individual

but also for society as such

- not only as individual
but also as social process
- not only as final purpose
but also as medium to change society

This adaptation however is not fully explored, not completely understood and applied – neither in the sport clubs, sport organizations, in the sport departments neither of cities and states nor in the sport media or the sporting goods industry. The overestimated predominance of top sport and the leading role of top sport representatives and structures – instead of a balanced system of elite and inclusive sport - is an obstacle in the unfolding of sport to be a true asset available for all and thus to unfold its social, cultural, health, volunteers, business qualities to the fullest.

Sport for All aims for more. It gains a new dimension and strengthens its political and social significance. It offers its services for health and integration, for peace and solidarity. It aims for an active world. It aims for making the world a better place!

Do not get me wrong: I am not saying that Sport for All can solve all the serious problems the world is facing globally. However, we can pay a contribution to make the world a little bit better. The significance, recognition and visibility of SAPA will increase to the degree we as leaders succeed to present Sport for All as a major means to improve society. Yes, I personally believe due to its manifold social benefits not only in the health field Sport for All should play a much stronger role in our social lives.

By the way, already in Quebec, 1995 during the UNESCO World Forum a resolution was passed stating “that a detailed cost-benefit analysis of the contribution of SAPA to a wide variety of individual, health, community, social,

economic and international factors be undertaken to “build the case for physical activity and sport”, and be shared with all governments, national and international organizations”

Let me explain to you how Sport for All (including Sport for All) can meet today’s global challenges and can pay its fair share to make the world a better and more active place.

1. Challenge: The Explosion of Health Costs

We eat too fat and too sweet, we drink too much alcohol, we allow too much stress, and we smoke. And we are sitting too much. Humans that for a hundred thousand years were hunters, gatherers, farmers, workers, walkers have turned in what the Americans call „couch potatoes“, overweight sedentarians, with high blood-pressure, high cholesterol and a much too low physical activity level.

It has been estimated that at least a third of the national health costs could be avoided by some behavior changes (HOLLMANN, 1996). For my home country that would mean that we would every year be richer by 100 billion Euro. When saving this money we would be able for instance to build the schools, parks, culture centers and employ all the necessary personnel to improve life quality. And what is true for this country is in principle true for all nations. Our biggest financial resource is the avoidance of habit (and environment) caused illnesses. (PALM, 1998) Active health can be seen as the biggest money saver of our time.

The Answer of Sport

There is abundant scientific prove that strategies to increase physical activity are the most effective weapon to combat obesity, chronic diseases etc. (to be continued) Already in 2005 the TAFISA General Assembly has

adopted the Resolution on “Physical Activity, Sport for All and Health” emphasizing the significant role SAPA can play fighting obesity and chronic diseases.

An Active World promotes good health and an active life style.

2. Challenge: A lack of Understanding for Those who are Different

Today’s societies are multi-cultural and the integration of minorities and immigrants will be one of the most important social and political challenges of the next decades. Formerly largely homogeneous societies are now facing the challenge of integrating people from different nationalities that bring in new cultural and religious traditions and abilities to take part in the dominant culture. The reasons for international migration are manifold and happen for the reasons of medicare, unemployment, religious discrimination, political prosecution, natural disasters or any other circumstance that puts one in a bad situation.

The Answer of Sport

Sport plays a central, but some times underestimated role in social integration. Sport has a vital local and regional socio-political responsibility. It can be proved that sport is one of the best tools to bring different cultures together. As compared to other cultural activities, sport is the most attractive and consistent platform for social integration. It can foster mutual understanding and integration by overcoming language barriers and creates common denominators.

An Active World concept brings people of different origins and abilities together.

3. Challenge: the Thread of Terrorism and Wars

No other than Nelson Mandela, Nobel Price Winner, said

“Sport has the power to change the world, the power to inspire, the power to unite people in a way that little else can... sport can create hope... it is an instrument for Peace”

When talking about a better world, one can refer to many aspects, but none of them as important as peace. Many former war places can be found all over the world, the only difference between them is the degree of how these countries' or communities' relations are today. Prejudices and hatred caused by wars can prevail in a society for decades. It is important for these communities to get together and lose their attitude towards each other.

The Answer of Sport

Sport goes beyond the differences that are at the core of conflicts, and is taught in a structured way which promotes dialogues and meetings between communities. It encourages understanding, mutual respect and brings human beings together (Peace and Sport). Sport has been effectively used to bring communities to a harmonious co-existence. In Kenya for example the Tegla Lorupe Foundation brought together youth warriors from South Sudan, Kenya and Uganda to have them involved in sports activities. But there are many other good examples in the world.

4. Challenge: the Lack of Equal Opportunities for Men and for Women

Formally, men and women may be equal, but reality is different: Women are still less involved in the design of many areas of our society than men. As

the United Nations Population Fund (UNFPA) correctly states gender equality is, first and foremost, a human right and cornerstone of advanced development. However, women have less access to medical care, property ownership, credit, training and employment than men do and are less involved in politics. They are underrepresented in decision making positions. Their vocational opportunities are often limited and they are frequently paid less for the same job.

The Answer of Sport

The number of women and girls active in sports has been increasing dramatically over the last decades. Their increasing “conquest” of sport is an expression of a mutual impact from modern roles of femininity and a new understanding of sport. Sport allows females to have important social experiences which reinforce their feeling of self confidence in a special way. In sport women and girls will find a social field for experimentation in which competition, success and failure and coping with one’s own limits can be experienced. Sport gives them the opportunity to easily cross physiological and cultural borders which is also reflected in the fact that females are conquering traditional male dominated sport disciplines. But women also take over increasingly positions and responsibilities in sport which helps them to gather experiences for other fields of life. This increasing gender equality in the sport system has a signaling effect for other branches of society!

An Active World concept implements gender mainstreaming.

5. Challenge: the Growing Age Pyramid

What we have to analyze, is the expanding life-span – we move from a traditionally youth dominated to a senior citizen society. The growing life

expectancy in the industrial and postindustrial countries is astonishing: no generation before in history had the chance to reach a lifespan as long as now and in the years ahead – and this is not only valid in the developed countries but as the World Health Organization observes this applies to a remarkable extent also in the so called developing nations.

The Answer of Sport

We know some major contributors to living longer: it is the improved health care, it is better nutrition, it is ongoing physical activity in later years and it is involvement in social life.

The trainability of the aging body beyond sixty – which was denied in physiology textbooks still in the nineteen sixties - is much higher than believed just 40 years ago. Research has proved that muscular strength and aerobic capacities can be trained into the eighties and nineties of the human life-span and flexibility and coordination can be preserved to quite some extent by respective habits and activities. It is based on large-scale research that we can say today: 2/3 of age “un-wellness” is avoidable through physical activity. It is no more a minority like the noble and the rich that will be able to enjoy these biologically and socially provided privileges when reaching seventy and eighty years.

Moreover, an active life prevents loneliness which is considered as one of the major risk factors with old people and helps to socialize that is to say to get in touch with other people on a regular basis.

An Active World offers activities and good company in old age!

6. Challenge: the Role of Globalization and thus Disappearance of Traditional Games and Sports

Globalization is changing the world: we observe a globalized music culture. We experience that fashion is globalized. The Hollywood dominated film industry is one of the big globalizers. Under the pressure of the major languages many idioms are in danger to be extinct in the next few decades. Modern sport itself is an example of globalization – and the Olympic Games may be the first world wide distributed global culture: nearly a quarter century before the film industry and a century before the internet.

In a modern multi-cultural society, where the entire world is connected, holding on to one's traditions becomes evermore difficult. Many of those have been created hundreds or thousands of years ago and have prevailed until today. These traditions are an important part of a culture as many people identify themselves over these traditions with the culture. It is recognized that the retention of traditional sports within different societies is declining

No doubt this process of globalization holds enormous advantages in productivity, information, economic prices, access to former privileges etc. But we also have to watch the influence on discarding artful traditions and human diversity. This falls in line with a natural fear and worry of people to lose their regional and local roots and cultural identity.

The Answer of Sport

We have to find a new balance between the effects of globalization and regional and local community life. This includes the rediscovery and development of traditional sports and games as a major contribution of sport to strengthen the cultural identity of a people. There is indeed a clear tendency that these sports and games are coming back to life again. This can be proved by scientific and practical events taking place, books being published and organizations established on this sector. Thus, sport provides a strong counterpart to the effects of globalization.

7. Challenge: the Lack of Exercise on the Part of Young People

Fewer children, especially in cities, participate in sports activities. This leads to increased health problems and a growing number of obese children. According to the American Heart Association (AAH) inactive children, compared to active children, weigh more, have higher blood pressure and lower levels of heart-protective proteins. Even though heart attack and stroke are rare in children, evidence shows that the process leading to those conditions begins in childhood (AAH). This trend has to be reversed as fast as possible to ensure a healthy adulthood for these young children.

The Answer of Sport

The right education on health during childhood is an important step stone to a healthy adulthood. Inactive children are more likely to be inactive in their adulthood and unhealthy eating habits are also more likely to prevail. Children need to learn about why physical activity is important for them, and what food is good for them. We need to have an active dialogue on the difficulties children face all around the world to participate in physical activity and have access to healthy food. Moreover, the “social space” of sport supports the force of integration in society. Sport helps children to get in touch and to learn how to treat one and another with respect and solve conflict. Many aspects of a social skill set that sets a prerequisite in a modern world are taught from leadership roles to team work, but also discipline and the respect for rules and regulations. These social skills are necessary to create a frame where everybody can live, work and play together.

An Active World teaches children for life!

8. Challenge: the Pollution of our Environment and Global Warming

To keep a bright outlook on our future, we will have to face global challenges that threaten our environment, in order for us to preserve it. The urban pollution, global warming and the destruction of the rainforest are just a few of the greatest environmental threats of our times. We will have to protect our environment, in order for us to stay healthy, maintain our standard of living and prevent wars. One of the challenges will be the education of the broad public about these environmental issues.

The Answer of Sport

An active dialogue on the environment is an important aspect which we want to include into our mission even as a sport for all organization. The environment is such a crucial topic, that as a member of society nobody can avoid the responsibility for the future. Therefore, we want to be a role-model and promote eco-friendly solutions in our sport events and congresses. Our events and congresses are viable platforms to make the general public aware of other organizations where they can get involved and help the environment. Everybody is affected by the global outcome of unsustainable environmental policies.

An Active World includes a pro active strategy to protect our environment and nature!

9. Challenge: A Global Economic Crisis

The global economy is currently suffering from a crisis that has affected most countries in the world. A bundle of causes has contributed to slowing

down the rise in gross domestic product and every impulse is needed to fight and overcome the current situation.

The Answer of Sport

The importance of the leisure economy is growing. This sector has achieved considerable growth rates even in this current phase of weakness - the earnings generated by sport economy amounts to billions of dollars worldwide. It includes tourism, automobile industry, patrol industry, beverage industry, publishing business, textile industry etc. and creates numerous jobs. Economic growth due to products and services related to sport strongly depends on the number of participants, the frequency of participation and on the role of sport in the lifestyles of people in the country. Thus there is a close relation between an increase in sports activity and the revenues of the multi layered sports market.

It is not the top-level sports which contribute the most turnover. The trigger for this growth primarily comes from mass sports.

An Active World is the trigger for the growth of economy!

10. Challenge: the Increase of Virtualization

I have of course written this text with my computer without ever dipping the pen into ink. Without getting up from my seat I can buy books via the internet, reserve the flight to Antalya, and inform myself on the temperature this day in Antalya without even opening the newspaper. I can communicate in writing with my brother-in-law in Athens without going to the letter-box. The world with many of its offers and requests is just 20 centimeters in front of me – it takes some mouse-clicks and I arrive in the library of the University of Melbourne.

For the first time in history it is possible to live nearly without physical activity. We have the first generation where children learn to switch on a Sony or a games computer before they play hide and seek – if they play hide and seek any more at all. It appears that the activity of the human body disappears out of daily life.

The Answer of Sport

Sport brings back physical activity into our lives and helps to experience the world in an authentic way. Through sports we have again direct access to the elementary powers of original life. To run a marathon makes you feel what distance means, to compete in shot put gives you a new feeling of weight and to start wind surfing helps you to understand what body coordination means. Back to the roots of life is what sport can provide.

Moreover, it offers you adventure, satisfaction and suspension for nothing. Just think about what the first dive from a 5 meter board means for a child. Remember the first time you finished a hole in par! The first goal you scored. Through sport you get it for nothing and nearly without risk!

Finally, sport brings you in physical touch with other people. In a time where depression through loneliness counts one of the primary risk factors it is sport that provides you with face to face contact and helps you to socialize!

In every game, every dance, every wrestling match, hiking event etc words and gestures bring real interaction into life, are forms of communication and elements of community included.

An Active World helps to experience life first hand!

Conclusion

In the last minutes we have looked at a chain of global challenges and

the contributions sport can provide to meet these challenges for the benefit of society. We have confronted sport with a distinctively different world than the one that sport grew up in when the bygone century began.

In the new Millennium Sport must adapt to new challenges but also to new opportunities. To be successfully tackling the challenges ahead of us we have to be prepared to take over new responsibilities. To fully exploit the opportunities prevailing in Sport for All means to fully unfold its cultural, social, integrative, health and economic qualities. That is what the Extension of Perspective Strategy is all about.

I am totally convinced: when the bygone century was the century of highly competitive sport then the new Millennium should become the century of Sport for All. The century in which sport gives the people activity, health, togetherness and more peace among each other. Indeed, in a joint effort we can make the world a better place. This is what the term "Active World" stands for!

Present State of Sports Participation among Teenagers in Japan

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Abstract

The aim of this study is to obtain an understanding of the state of participation in sports by pre-teenagers and teenagers which was thought to be necessary to promote "Sports for Everyone" in Japan. Concerning the question about frequency of participation in sports and physical activities, 14.4 % of the respondents answered that they had not done any sports and physical activities in the last year. The proportion who did sports and physical activities seven times or more a week was 31.4%. The top three sports and physical activities frequently performed in the previous year for boys were soccer, baseball and basketball; and for girls, badminton, volleyball and basketball. According to the results of a question about sports clubs, 49.3% of respondents stated that they were currently members of sports clubs. Respondents answering that they had not done any sports and physical activities in the last year were asked why. Multiple answers were permitted. The reasons were "no time"(45.6%), followed by "there is something I want to do rather than sports and physical activities"(22.5%), "it's troublesome"(20.9%). The proportion of the respondents who watched sports at stadiums, gymnasiums or other sites in the last year was 46.1%.

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Key words: sports participation, young people, spectator sports, bipolarization, sports clubs

Introduction

The Sasakawa Sports Foundation (SSF) conducted a nationwide survey in 2001 to gain an understanding of the state of participation in sports by pre-teenagers and teenagers which was thought to be necessary to promote “Sports for Everyone” in Japan. The survey questioned people aged between ten and nineteen years old concerning matters related to and including their participation in sports and physical activities. In more detail, the survey questioned sports participation in terms of frequency, duration and intensity, sports facilities, the availability of coaching, reasons for participating or not participating in sports, watching of sports, sports clubs and after-school classes. We obtained useful information about participation in sports by the age group questioned, including their requirements for sports. Four years on, in 2005, SSF commissioned a similar survey, with additional questions concerning sports volunteer work, and an increase in the number of people questioned, to 2,500.

A survey commissioned by the Ministry of Education, Culture, Sports, Science and Technology, the “Survey into Physical Strength and Exercise Ability”, indicates a leveling off in the decline in children’s physical strength. SSF believes this is because of the emerging of the effects of the ministry’s plan to raise the physical strength of children and support in the establishment of sports facilities for children (places where children can be), and because of comprehensive local sports clubs, which now exceed 2,000 in number nationwide. SSF also runs projects to encourage children to enjoy sports. The environment for children to do sports is improving bit by bit.

SSF commissioned another survey in 2009, mainly to conduct a comparison with the results of the 2001 and 2005 surveys. The survey had

additional questions concerning study time, advisers, and dreams and hopes for the future, and the number of people surveyed were increased from 2,500 to 3,000. The survey revealed trends and disparities from the results of eight and four years ago for each item.

Research Methodology

This survey was carried out from June 20 to July 7, 2009, using the household drop-off survey method with a questionnaire. The subjects were 3,000 randomly selected boys and girls aged from ten to nineteen years throughout the country. The number of valid responses was 1,989 (a response rate of 66.3%).

Research findings

1. Participation in Sports and Physical Activities by Frequency

Concerning the question about frequency of participation in sports and physical activities, 14.4 % of the respondents answered that they had not done any sports and physical activities in the last year, which is higher than the 12.5% revealed in the 2001 survey, and the 11.7% in the 2005 survey. The proportion who did sports and physical activities less than once a week was 9.3%, a similar result to the 9.6% in the 2005 survey, and the proportion who did sports and physical activities seven times or more a week was 31.4%, which was a dramatic rise from the finding in the 2001 survey. Including the 8.7% of respondents who did sports and physical activities at least five times but less than six times a week, and the 10.5% who did sports and physical activities at least six times but less than seven times a week, about half of the children aged ten to nineteen did sports and physical activities a minimum of

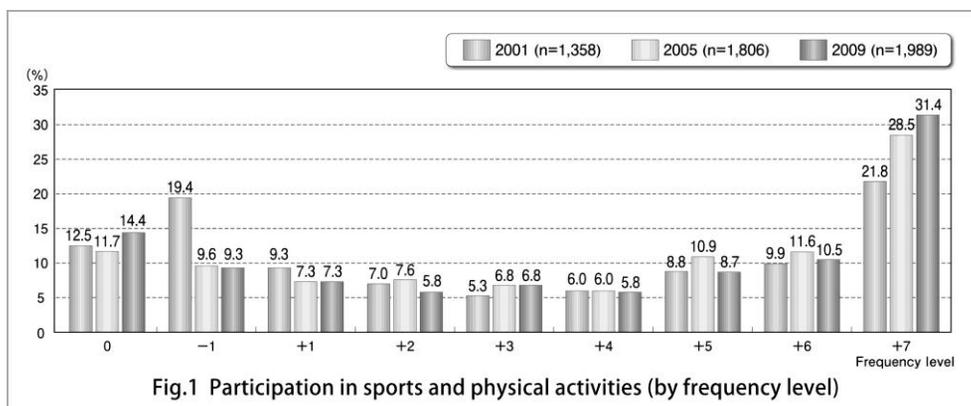
five times a week. The 2005 survey showed an elimination of bipolarization in participation in sports and physical activities by children aged ten to nineteen; contrarily, the 2009 survey revealed growth in bipolarization.

2. Types of Sports and Physical Activities

The top three sports and physical activities frequently performed in the previous year for boys were soccer, baseball and basketball; and for girls,

Table 1 Definition of frequency level

Frequency level	Participation in sports and physical activities
0	None over the last twelve months (0 times/year)
-1	Less than once a week (1 to 51 times/year)
+1	1 to 2 times a week (52 to 103 times/year)
+2	2 to 3 times a week (104 to 155 times/year)
+3	3 to 4 times a week (156 to 207 times/year)
+4	4 to 5 times a week (208 to 259 times/year)
+5	5 to 6 times a week (260 to 311 times/year)
+6	6 to 7 times a week (312 to 363 times/year)
+7	7 or more times a week (more than 364 times/year)



badminton, volleyball and basketball, which are similar results to the findings in the 2001 and 2005 surveys. Frequently performed sports and physical activities in fourth place and onwards for boys were muscle building, jogging / running, playing catch, swimming and table tennis; and for girls, muscle building, skipping rope, jogging / running, walking, and swimming. The percentage of girls doing muscle building increased two-fold.

Table 2 Participation rates by sports and physical activities and by sex (multiple answers permitted)

Boys (n=909)			Girls (n=794)		
		%			%
1	Soccer	34.8	1	Badminton	21.5
2	Baseball	30.7	2	Volleyball	19.8
3	Basketball	18.7	3	Basketball	17.8
4	Muscle building	12.2	4	Muscle building	12.8
5	Jogging/Running	12.0	5	Skipping rope	12.0
6	Playing catch	11.4	6	Jogging/Running	11.8
7	Swimming	11.2	7	Walking	11.5
8	Table tennis	10.7	8	Swimming	11.0
9	Dodgeball	8.5	9	Dodgeball	9.6
10	Badminton	7.4	10	Soft Tennis	8.6

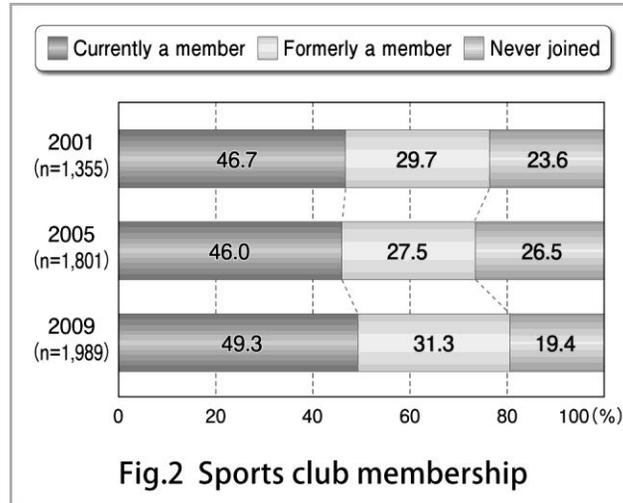
Table 3 Participation rates by sports and physical activities (multiple answers permitted)

2001 (n=1,181)			2005 (n=1,594)			2009 (n=1,703)		
		%			%			%
1	Basketball	18.7	1	Soccer	20.3	1	Soccer	20.1
2	Soccer	16.5	2	Basketball	17.0	2	Basketball	18.3
3	Baseball	15.1	3	Baseball	14.5	3	Baseball	17.4
4	Badminton	13.0	4	Volleyball	13.7	4	Badminton	14.0
5	Swimming	11.6	5	Badminton	12.6	5	Muscle building	12.5
6	Volleyball	11.4	6	Swimming	10.9	6	Volleyball	12.3
7	Jogging/Running	10.1	7	Table tennis	9.2	7	Jogging/Running	11.9
8	Muscle building	9.8	8	Dodgeball	8.5	8	Swimming	11.1
9	Bowling	7.7	9	Muscle building	8.2	9	Table tennis	9.2
	Table tennis	7.7	10	Jogging/Running	7.8	10	Dodgeball	9.0

3. Membership of Sports Clubs

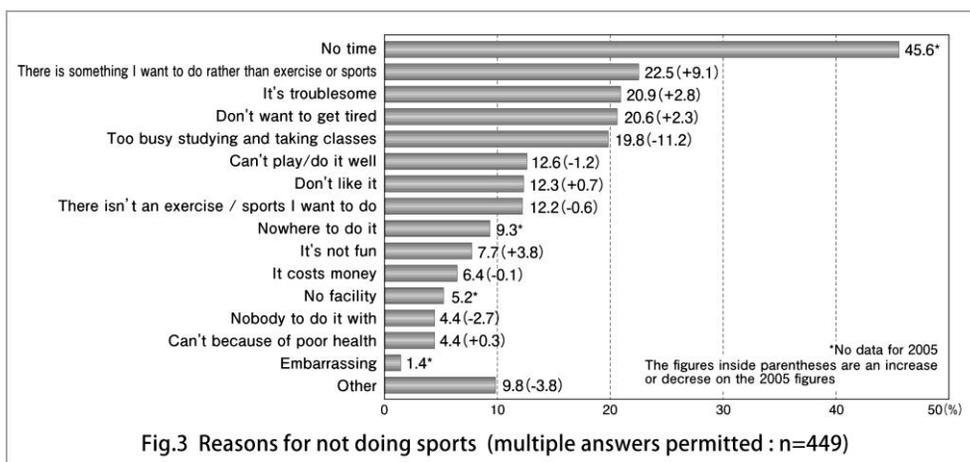
According to the results of a question about sports clubs (including private sports clubs such as private swimming clubs and gymnastics clubs, local sports clubs such as Sports *Shonendan*, and school sports clubs), 49.3% of respondents stated that they were currently members of sports clubs, 31.3% that they had been members of sports clubs, and 19.4% that they had never been members of any sports club. In other words, about half of the respondents were members of some kind of sports club, and less than 20% had never been members of any sports club. Comparing with the 2005

survey results, the percentage of respondents in sports clubs rose by 3.3%, and those who had never been, decreased by 7.1%.



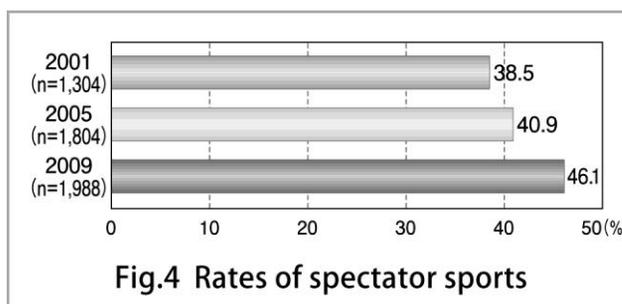
4. Reasons for Non-Participation in Sports and Physical Activities

Respondents answering that they had not done any sports and physical activities in the last year were asked why. Multiple answers were permitted. The reasons were “no time”(45.6%), followed by “there is something I want to do rather than exercise or sports”(22.5%), “it’s troublesome”(20.9%), “don’t want to get tired” (20.6%) and “too busy studying and taking classes”(19.8%). By gender and comparison with the 2005 survey results, the percentages of male respondents who gave the reasons of “too busy studying and taking classes” and “there isn’t an exercise / sports I want to do” increased. The percentage of female respondents who gave the reason of not doing sports and physical activities as “it’s not fun” increased.



5. Attendance of Spectator Sports

The proportion of the respondents who watched sports at stadiums, gymnasiums or other sites in the last year was 46.1%, up 5.2% on the 2005 survey. The most-watched sports were professional baseball (15.0%), high school and university baseball, etc. (11.6%), basketball (7.3%), volleyball (6.5%) and J League soccer (5.8%). Of those, only the percentage for J League soccer dropped, by 1.3%.



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Strength Training for Children 7-14 Years of Age: A Report of a Sport for All Initiative from the Indonesian Olympic Committee

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Abstract

In 2009 the Indonesian Olympic Committee (KOI) was awarded a \$US 20,000 grant from Olympic Solidarity from the Sport for All funding program to develop a series of systematic strength and conditioning training programs and DVD for children 7-14 years of age. These programs were developed to suit the age of the children over this period and exercises were selected that did not require the use of specialized equipment so that all children could participate in the program. The majority of exercises require the use of the child's body weight or use of common items such as a chair, desk or water bottle etc. The programs are progressive in design with a series of physical performance tests that are required to be achieved prior to progressing to more advanced training routines. The entire program including videos of each exercise has been placed on the KOI website www.olympic.or.id in the Training section so that anyone from around the world can follow the programs. While the development of these programs has been clearly directed at the young, the author believes they could be applied to any age

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group as long as they are used in a sensible progressive nature.

Key words: Weight training, junior fitness development, physical conditioning

Introduction

There is much scientific evidence to demonstrate that when appropriately performed strength training is a safe and effective exercise to be engaged by children. However, all children should avoid the performance of maximal lifts. This report and associated DVD has been developed by the Indonesian Olympic Committee (KOI) to provide information to coaches, parents, administrators and teachers so that young healthy children from 7 to 14 years of age can safely perform effective strengthening exercises to improve their fitness, health and athletic ability from a young age. The information contained in this report is largely based on the Australian Strength and Conditioning Association Position Stand entitled: "Resistance Training for Children and Youth" (see www.strengthandconditioning.org) and adapted to suit Indonesian conditions. The production of this material and associated DVD were funded by the International Olympic Committee (IOC) through a grant from the Olympic Solidarity funding system "Sport for All" program.

It is the recommendation of the Indonesian Olympic Committee (KOI) that the following training load intensities and exercise selection strategies be adopted when training children:

- Level 1: Beginning children's program - Modification of body weight exercises and light load work for relatively high repetitions. Designed for children 7 to 10 years of age.

- Level 2: Intermediate children's program - Body weight and free weight

exercises using relatively light resistances of 1 to 5 kg. Designed for children 11 to 14 years of age who have already passed the Level 1 program and validation tests.

This report contains a basic description of the program and its application throughout Indonesia. Full details of the exercise programs including videos of all exercises and physical tests are freely available from the KOI website www.olympic.or.id in the Training section.

It is the position of Indonesian Olympic Committee that all programs performed by children must be strictly coached by an adult. Further, when supervising groups of children the ratio of coaches to children is recommended to be 1 coach for every 10 children and that the children receive comprehensive instruction on relevant safety issues prior to the commencement of training. Safety instructions include ensuring the child:

1. Performs the exercises correctly
2. Completes an adequate warm up
3. Carefully follows all instructions given
4. Does not act foolishly and
5. Works within their physical capacity

Program Design

A number of programs are developed for children to follow starting at 7 years of age and progressing through to 14 years of age. As an example of how the exercises are modified throughout these age groups, at the age of 7 years the Wall Sit exercise is used to develop leg strength (see Figure 1). Initially this exercise is performed for 20 s 1 time and is progressively increased in duration over several months until 60 s can be achieved for 2

repeated sets of this exercise.

Figure 1 The Wall Sit exercise suitable for 7 year olds.



With continued training using the program three times per week the child will be ready to progress to the Walking Lunges exercise by age 9. This exercise will further develop leg strength using a dynamic movement which requires good balance and is depicted in Figure 2.

Figure 2 The Walking Lunge exercise suitable for 9 year olds



With continued training using the program three times per week the child will be ready to progress to using additional weight when performing the Walking Lunges exercise by age 12. The weight should be between 1 kg to a maximum of 5 kg and should be progressed slowly. This additional weight can be applied using small dumbbells, water bottles or bags filled with sand if no dumbbells are available. This exercise is shown in Figure 3.

Figure 3 Walking lunges using light 1 to 5 kg dumbbells or water bottles in each hand for 10 to 20 m suitable for 12 year olds who have already passed the Level 1 program and validation tests.



With continued training using the program three times per week the child will be ready to progress to performing the Single Leg Squat exercise by age 14. This exercise is quite advanced and requires good strength, balance and co-ordination. However, if the child has been consistently following the program three times per week from the age of 7, as outlined in the program, then the Single Leg Squat exercises should be readily achieved at this stage. This exercise is demonstrated in Figure 4.

Figure 4 One legged squats bending the knees to a 90 degree angle for 5 to 10 repetitions each leg. Suitable for 14 year olds who have already passed the Level 1 program and validation tests.



The above four exercises demonstrate the progression for one lower body exercise beginning with the simple Wall Sit exercise at age 7 and progressing to the more advanced Single Leg Squat exercise at age 14 years. The complete program involves approximately 10 such exercises and each is progressively increased in a similar manner to that described above.

The complete programs have been developed with minimal equipment requirements, such as a strong chair, bench or table and exercise mat so that they may be adopted by the greatest number of children who may not have access to specialized strength training equipment and can perform the exercises from home with their families, at school with their class friends and teachers, or at the park with their sports team and coach. Coaches are encouraged to improvise with the equipment available and if a bench is too hard to perform an exercise on then use a towel or mat over the bench to make it more comfortable for the children to use. However, in all cases ensure the bench, table or chair is strong enough to hold the child's bodyweight and never place the child in danger by using faulty equipment or poor technique (eg using a chair or table that collapses under the child's weight or doing an exercise with incorrect placement of the neck etc).

It is recommended that the exercises be performed with a group of children in a room with motivational music playing that the children enjoy and with a large clock on the wall with a second hand so that the children and coach can time their exercises using motivational countdown techniques. The performance of the exercise session should be a fun experience for the children with the coach providing lots of positive encouragement during the exercise class.

The programs are designed to provide the reader with some clear direction in the development of child strength training programs. However, it is understood that each child is an individual and hence the reader should

see the programs as models to be modified, within sensible parameters, to the specific requirements of the individual child, the local conditions, available equipment and time constraints. Further, while logical progressions have been outlined these progression should be made only when the children are ready for advancement and some children may not be able to obtain the standards set. The important fact is that each child should work at a level of intensity that is suitable for their individual capacity and they do the best that they can.

The programs and tests developed in this program are based on normal healthy children and are designed to be progressed slowly as the children adapt and get stronger. If any child experiences any problems, pain, dizziness, difficulties etc during the performance of any of the exercises or tests they should immediately stop exercising and seek medical advice regarding their exercises.

May the information contained within this document assist all individuals to improve their physical condition and achieve a well balanced life between work, exercise, culture, education, family and community service which is at heart of the philosophy of Olympism.

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The Report of 2009 Youth Olympic Summer Camp in Chinese Taipei

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Abstract

The main purpose of this report is to present the performance of the 2009 youth Olympic summer camp in Chinese Taipei. The modern Olympic Games which revived in Athens, Greece, in 1896, are more than one hundred years. As time goes by, it becomes an international and multi-culture event which is recognized by the nations all over the world. However, the modern Olympic Games have faced many challenges and promoting Olympic education is the only way to solve those problems. In order to promote Olympic education in Chinese Taipei, the Olympic studies centre in Taiwan Sport University held the Olympic summer camp. The camp followed five topics: ecological education, green issues, experience of the Olympic movement, deep culture tourism and social and human relationship education. The summer camp held very successful. We believed that all the participants would learn a lot after their four-day trip and be a better man in the future.

Key words: Olympic education, green issues, culture tourism, and social and human relationship education

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Introduction

The modern Olympic Games which revived in Athens, Greece, in 1896, are more than one hundred years. As time passing, it becomes an international and multi-culture event which is recognized by the nations all over the world. The main philosophy of the Olympic Games is Olympism that exalt and combine in a balanced whole the qualities of body, will and mind. Blending sport with culture and education, Olympism seeks to create a way of life based on the joy of effort, the educational value of good example and respect for universal fundamental ethical principles. However, the modern Olympic Games have faced many challenges, such as the issues of over-commercialization after 1984 Los Angeles Games, the arguments of human rights in Beijing Games in 2008, and the problems of doping in almost every four years. To promote Olympic education become the only way to solve those problems, especially to use the philosophy of Olympism as seeds to plant in youth's mind.

Besides, environmental issues have become more and more critically important. The authorities of the Olympics are also to encourage and support a responsible concern for environmental issues, to promote sustainable development in sports. For example, 2008 Beijing Olympic Games took the successful experience of Sydney Games in 2000 to build a green Olympic park. They used many protection technologies such as the solar power energy Olympic Villages, water recycled systems, and green building-material. Sport, culture, and environment have become necessary elements of the modern Olympic Games. Therefore, green issues were also one of the core concepts of this summer camp and that was the reason why we chose Yugwang elementary school to be our campsite. Hence, Olympic studies centre, in Taiwan Sport University, held 2009 youth Olympic summer camp at Yugwang elementary school on June first to fourth in order to

promote Olympic education, health and fitness of youth, and green issues.

The purpose of this report is to present the performance of the 2009 youth Olympic camp in Chinese Taipei. In order to clarify the performance, the report will divide into four sections to present.

Ecological Programs

1. The environment of Yugwang elementary school

Yugwang elementary school locates in the mountain area of Pinglin in Taipei County. The connection of cell phone is very weak. The campus which locates in the protection area of Feitsui reservoir has more than one thousand animals and plants, such as the hundred-year-old cherry blossoms, the Taipei tree frogs, the ecological pool, the rare plants area, the hometown of queen-butterfly, the original plants area, the ecological path and etc. The campus with so many plentiful and particular ecological environments is just like a natural library and is also an important learning platform.

Living in such a beautiful environment, the teachers of Yugwang don't waste this gift. They integrate all the environmental resources around the campus to practice the idea of "Pinglin industry educationize, Yugwang education industrialize". They also divide those resources into three categories included natural ecology, cultural heritage, and humanistic heritage and further they classify the resources to four items such as a series of special agriculture, natural ecology, experiential discovery, and deep tourism. Totally, there are twenty different kinds of programs under those categories. Besides, Yugwang also cooperates with Hehuan resort, Huliaotan resort, imaginative tourism plantation, and big-tongue-lake tea tourism plantation to teach experiential programs, for example river ecology, wild camp training, tea-making and etc.

"Let knowledge to go out of book, and let ability to get in life" is the motto

of Yugwang. Most of the participants of the summer camp came from city centre. They were used to get knowledge from reading. Outdoor program is a good opportunity for them to experience the 'real'. This philosophy conforms to Olympic education. That is "Learning, Practicing, and experiencing Olympism by participating in Olympic Games". The most important one is that all participants can extend this philosophy to other aspect of life. Living in natural environment, participants learn the greatness of the nature, learn to respect it, and then they arise thought of environment protection.

2. The idea of Green Issue

Green issues are not original in the Olympic developing history. In the beginning, there were few host cities concerned about environment, and the only one objective of building Olympic stadium was to pursuit the biggest and the most modern. However, the environment of earth is getting bed to worse. This situation gives not only the host cities which wasted a lot of resources before many challenges, but also influence the development of the Olympic movement.

International Olympic Committee and the host city start to concern about this big issue seriously. For example, the Olympic Co-ordination Authority for 2000 Sydney games included 'green' commitments in the form of environmental guidelines as part of the bid to host the Games. There has been a growth of 'green' consciousness, policy and practice in the context of sport. For example, the environmental dimension was one crucial element of Sydney's winning bid to host the 2000 Olympics. Sydney won by a small margin of votes, and its commitment to environmental issues, defined in its Environmental Guidelines for the Summer Olympics seemed to be influential in swaying some voters. These guidelines focused on environmental protection and sustainable development of Olympic sites. They included

commitments to the preservation of natural ecosystems; the protection of existing landscapes, habitats and animal and plant species; rehabilitation of wetlands; replanting of indigenous flora and fauna; and control of pests and weeds using nontoxic substances (Symington and Angel 2000). Sydney now claims to be a world-first Green Games' (Richardson, 2000). From now on, 'green' is the fundamental principle to hold the Olympic movement.

3. Experience in the Olympic Movement

a. Physical activities

Participating physical activities is a good approach to experience the Olympism. We designed four different games such as basketball, baseball for kids, dodge ball, and precision boules. Unlike official games, we changed the rules of those games to fit for kids and made them more attractive. It was avoidable to have some clashes during the game, especially when the players paid too much attention to win and loss. Even, some players questioned about why they have to shake hands with the rivals to represent appreciation after the game. However, an adage said: "to be not elated by success nor disturbed by failure". That is what Olympism is. After more and more games, those participants realized that consequence (win and loss) of the game are not the only thing, and there are more valuable things waiting them to vibrate. They gradually learned to know the meaning of sportsmanship, fair play, and human dignity.

b. Share of the Olympic stories

The president of summer camp, Professor Frank Lu, used some slides and videos to introduce the origin and development of the Olympic Games. The participants were all attracted in the stories and asked a lot of interesting question. Besides of sharing the Olympic stories, professor Lu chose some

classical video included 2004 Athens Olympic Games opening ceremony, 2008 Beijing Olympic Games opening ceremony, and the quintessence of 2008 Beijing Olympic Games.

c. Simulation of the Olympic Games

“Learning by doing” is an important educational philosophy. We designed the program of simulation of the Olympic Games. In this program, we wanted all participants to choose one nation to represent, and then, they should make the national flag by themselves. First of all, the participants have to learn the background (location, culture, population, flag, and etc) of those countries in order to make a decision. It is a good way to cultivate global perspective and to do culture exchange education. Besides flag-making, we also asked participants to make the laurels by themselves. In this way, they could feel about the pride of the games. After everything is ready, we started our simulative Olympic Games. First stage, the national flag which represented by participants marched into sport ground in letters of NOC order. Then, we played Olympic anthem and raised Olympic flag. Finally, the president of the summer camp, professor Lu, declared opening of the games of the xxx Olympiad. After opening ceremony, we designed ten funny physical activities. At the end of the Games, we awarded Laurel and gave a small gift to the winners - every participant is winner.

The simulation of the Olympic Games is a whole new experience to all participants. They learned to identify themselves and cultivate international vision through culture exchange. “To learn each other, to know each other, to respect each other, and then to love each other”. Yes, the main value of multi-culture is to ‘respect’. Just like what the charter mentions: any form of discrimination with regard to a country or a person on grounds of race, religion, politics, gender or otherwise is incompatible with belonging to the

Olympic Movement(Olympic Charter, 2007).

4. Deep culture tourism—the philosophy of Wang’s tea plantation

In shinning morning, we visited Jui-Lien Wang’s family, who was one of our participants, studied in Yugwang elementary school. Daddy Wang is the winner of Shen-Nong reward which is rewarded by the Council of Agriculture in order to encourage local tea farmers. After chatting with daddy Wang, we found that he has a strong responsibility and insistence. He wants to pass down traditional culture that he learned from his ancestors. He thinks that Pinling has its own executive ecological environment, and therefore we have our own tea culture. He insists to use natural resources without any chemical fertilizer to plant tea.

He also said that many participants face a big challenge from commercialization, and marketing orientation pushes tea farmers to use chemical fertilizers to increase quantities. However, those chemical elements would do serious damage to natural environment. That is what daddy Wang deny mostly. But how does daddy Wang resist to this un-avoidable challenge, one of participants asked. “Passing down our own culture is more important than anything,” daddy Wang said with an affirmative intonation. “Insistence is a kind of taste and respect natural environment is my responsibility.” He continued said, “My mother told me that not to loss yourself because of money.” A simple word touched daddy Wang’s heart. Besides to the tea, we also saw the same insistence on his daughter, Jui-Lien. This spirit of responsibility touched all of us. We believed that when daddy Wang sees his customers drinking his tea with highly praise, every effort of insistence is worthy.

5. Social and human relationship

Human relationship education is one of important concepts of Olympic education. Professor Chen who works in National Chi Nan University in Chinese Taipei said that 'relationship' is core human experience from birth to death and the main element is how people can influence or depend on each other. The degree of dependence can divide from first stage: zero touch (non-relation), to second stage: awareness (one way attitude or image), then to third stage: weak touch (both sides have little interaction), and to the final: co-relationship. It is a continued process from light, middle, to strong dependence. Thus it can be seen that cultivating human relationship is a process and it could include some elements as follow. That is also the main purpose that our summer camp wants to reach.

- a. Personality: Honest (sincere, real, frank, or genuine), thoughtful (friendly, positive attitude), and ability (social skill, intelligence) are popular personalities. Our trained instructors played an important role between all participants. They combined the personalities above to treat those kids and let them to feel comfortable, and further, imitated to treat their partners.
- b. Familiar: Familiar can cultivate like, called 'exposition effect'. Only if one person who often stands in front of you, you can increase the degree of like. In summer camp, all participants lived together 24 hours and they had good opportunities to familiar with each other in a short time.
- c. Intimacy: Intimacy can improve familiar. It can make people to feel close. Therefore, we designed many teamwork activities to let them to work with each other.

- d. Co-experience: they developed a co-experience in their mind when they worked together. Of course, in the beginning, participants with same age, coming from the same school, would feel familiar, but after team work activities, they broke the old experience and make a new relationship with new friends due to their new co-experience.
- e. Reward: People will like a person who gives a positive reward. And those positive rewards have to come from their deep heart instead of any cheating. During whole camp, instructors used positive rewards to encourage our participants. Especially, when they got frustration, instructors would tell them a positive story to teach them that failure is not a terrible thing, instead it may be a power that pushes you to move foreword.
- f. To be loved: An advertisement said “Smiling to the world, and then the world will smile to you”. When we get close to someone who treats us pleasant, it will help to attract and like each other.

Conclusion

Nowadays, A policy called ‘moral movement’ has been promoted in Chinese Taipei. According to the plan, the moral movement divided into three parts included ‘morality’, ‘taste’, and ‘quality’, so the movement is also called ‘three moral movements’. Under ‘three moral movements’, there are four fields which included ‘morality’, ‘arts’, ‘reading’, and ‘environment’. The main objective is to enhance the morality, tasty and quality of the people. To review the fundamental principles of Olympism, “Olympism is a philosophy of life, exalting and combining in a balanced whole the qualities of body, will and

mind. Blending sport with culture and education, Olympism seeks to create a way of life based on the joy of effort, the educational value of good example and respect for universal fundamental ethical principles”. Therefore, we can improve people’s morality by promoting Olympism.

The youth Olympic summer camp was based on those principles. We designed different programs to teach them the meaning of the Olympic stories and the importance of protection environment. We also help the participants to discover themselves and further to learn multi-culture. We want them to know their own culture and then love themselves, and want them to know multi-culture from other parts of the world and then respect to others. Of course, environment is also our purpose. The environment of Yuwang elementary school gave us a good opportunity to learn from the nature. We believed that all the participants would feel fulfillment after their four-day trip and be a better man in the future.



Photo1 History of the tea farmer illustration.



Photo2 Ecological illustration.



Photo3 Ecological environment.



Photo4 Ecological illustration.



Photo5 Physical activities.



Photo6 National flag drawing.



Photo7 The laurels.



**Photo8 Opening ceremony of
Simulation of the Olympic Games.**



Photo9 Competition.



Photo10 Competition.



Photo11 Competition.



**Photo12 Closing ceremony of
Simulation of the Olympic Games.**

Sensitization towards the Needs of Children-Sport and Mind

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Abstract

Children are real assets of our society. Parents, teachers or adults are working for the benefit of children but do they really doing the same is a big question in front of the society as the suicidal rate is increasing day by day among young students and proneness towards various psychological disorders such as depression, anxiety, stress, crime, aggression, coronary heart diseases, asthma etc. are increasing tremendously among young children, despite of the fact that parents and teachers are caring more and spending more money on the development of their children. Therefore the question among us is why all this is happening. This article is to bring awareness among the parents and teachers about some salient needs and concerns of children to provide them better health and well-being.

This concept of childhood was taken into the Workshop which was organised by the All India Association of Sports For All at Delhi in India along with the guest participation of South Korea Sport For All Academy. It is new to our society. Earlier the child was considered to be an incomplete human being, but capable of performing like an adult. It is to be remembered that the child is an individual in its own right. The child has certain needs which are common to adults such as, nutrition, clothing, health, shelter, security etc. There are, however, certain special needs for which awareness in the society

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is required (Malhotra,1992). The child needs opportunities for growth and development, care and protection, recreation, creativity and many more (Villagrana,2010). Besides, children are dependent on adults for the fulfillment of their needs and are not in a position to lobby for them. Thus the responsibility of adults becomes manifold to provide for children what they rightly deserve.

Children too feel unhappy, anxious, fearful, and angry. They may lack concentration, be forgetful, impulsive, have difficulty in controlling anger, and fight. They may have difficulty in getting their mind off certain thoughts; may suffer unexplained headaches, stomachaches, anorexia, or insomnia; may have trouble in maintaining friendships or dealing with people; and may feel like hurting themselves or others. These are not uncommon scenarios. They all indicate that all is not well with this child and should be taken seriously. On many occasions these reflect child's reaction to his/her circumstances of life or his phase of development. In fact, most parents, teachers and other adults are not sensitive to pick up these subtle forms of behavioral indications and often ignore or neglect them (Kupersmidt, 1991). It is only when the problem becomes severe and disabling that some attention is paid to the child. In early stages it is much easier and simpler to intervene and push the developmental trajectories into a healthier and adaptive course. Research shows that psychosocial assistance is important to reinforce acceptance and integration of coping with the illness in one's life and early interventions can prevent psychiatric disorders later in life (Schmidt et. al., 2010).

Children are the real investment of parents, society, nation and of a world. For what we care utmost in our lives, for which we do all the struggles of life happily, for whom we can easily scarifies our lives, for what we think most- a car, a home, a job, a carrier. None of these, most of the time we think about the future but what in future ... ya our children. The happiest moment

of every women and men in their life is the moment when for the first time they take their baby in their hands. Our children are our assets. Children are our concerns. We always plan for how to give the best facility to them and encourage them to reach at the best positions in every walk of life. Like a good investor parents give their best and expect them to be the best. The concerns of parents, teachers or adults can be divided in three categories:

Emotional concerns

Emotions play very important role in our lives. People express though emotions. Emotions of rage, fear, happiness, anger, sorrow, shock, anxiety, etc., all are equally important and they help us in making adjustments at various points of time (Lu, 2010). Emotions help us get success when used at right time in right way and at right proportion is known as emotion quotient or emotion management. Emotional quotient shows the emotional intelligence of the person. The child is short tempered, he/she easily get annoyed, lack interest, have poor concentration all are emotion concerns of parents and teachers for the children. It is found that the correlation between preschool-age aggression and aggression at age 10 is higher than that for IQ. (Kazdin, 1995). Poor management of emotions influences the child's intelligence level. Also it is found that early appearing aggressive behaviors are the best predictors of juvenile gang membership and violence. (Bank et. al.,1993).

Behavioral concerns

These are the concerns about the explicit tendencies of the child, which can be observed. In the early years of life children are very pure; they express their thoughts in terms of behavioral acts. Whatever is in is out. They are not good in manipulation and are impulsive. They are not much aware of

the consequences of their actions. They don't know about right and wrong, they go for things which make them feel good. The major behavioral concerns of the parents are that they don't listen, don't respect, stubborn, don't obey, don't eat and lie. Campbell (1995) estimated that approximately 10-15% of all typically developing preschool children have chronic mild to moderate levels of behavior problems. Children who are poor are much more likely to develop behavior problems with prevalence rates that approach 30% (Qi & Kaiser, 2003).

Psychosocial concerns

Psycho-social concerns are related to the psychological and social needs of children. It includes learning disorder, high anxiety, conflicts, psychosomatic disorders and depression etc. Social environment in which child is living is affecting his psychology i.e. the way in which he thinks. It is found through many researches that children who are identified as hard to manage at ages 3 and 4 have a high probability of continuing to have difficulties into adolescence (Campbell & Ewing, 1990; Egeland et al., 1990; Fischer et al., 1984). Research shows that when aggressive and antisocial behavior has persisted to age 9, further intervention has a poor chance of success. (Dodge, 1993). Society transfers the cultural heritage from one generation to another with its diversities and uniqueness. Its role is very crucial because it has to integrate people coming from different cultures, having different belief systems, owes the responsibility to make every children comfortable by providing culturally fair means.

The personality of children doesn't grow in vacuums, family members at home and teachers and friends at school have a remarkable say in their development. Most of the time children reflect emotional, behavioral and psychosocial development of the people around him. Irrespective of

acknowledging this fact adults blame children.

What do needful children show?

Children have special senses to understand the people around them. They always got to know how people around them are evaluating their potentials. This sharp and special sensing ability further defines many things such as the self esteem, self image and level of confidence within a child. When related others devalue the working habits, likes and dislikes of children, unspoken needs arises in children (Heavey,1989). As a result needful children show many:

- Temperamental difficulties,
- Early aggression,
- Language difficulties and
- Noncompliance.

Further children show childhood peer rejection, aggression, withdrawal, and perceived competence result into behaviour problems in preadolescence (Kupersmidt, 1991). These are the ways through which children wants to convey something to the relevant others around them. Young children with challenging behavior are rejected by peers, receive less positive feedback, do worse in school and are less likely to be successful in kindergarten (Haager, 1995).

Think from the perspective of a child

There is a always a big difference in age of child and parents, teachers or other adults. This difference makes adults more experienced then them. Adults always feel that since they are more experienced the children should

listen to them, children don't know anything because they are very young therefore dictate do's and don'ts to them. Adults usually forget that children is also experiencing and wants to experience many things in his own way, they don't want to use others experience rather wants to learn by their own. When children are constantly guard by Adults lots of questions starts arising in their little minds such as:

- Do I know anything?
- Am I capable of doing anything?
- What I want to become?
- Why do I listen to others?
- Others are better than me.
- How do I show them that 'I am the best'?
- My teacher love his/ her more than me.
- She always selects her for the competitions not to me.
- My parents love my siblings more than me.
- Why they always teach me "Do's and Don'ts". Am I incapable of deciding what should I do and what I should not?
- Is playing with friends is so bad that my mother allow me to play only for an hour?

Mind is always active; it is working all the time, processing the information coming from various sources from surroundings. This processing and interpretation makes one person's personality different from the other. Childhood is age for the development of basics i.e. the values, concepts, attitudes, temperament, self image, self esteem and sense of "I". That's why it is most crucial period of everyone's life; it defines the destiny of the individual.

Knowing one's own Self

Parents, teachers and other adults usually have bundle of problems with their children. When adults feel themselves incapable of controlling i.e. perceived control over their children, they scold and punish them. Sometimes this anxiety, frustration and aggression lead to household violence and child abuse (Heavey, 1989). Adults always think about the child but do they ever analyze their own behavior? Before we give our opinions about others it is important to know our self. There are always some antecedents and predictors are working behind every act of an individual. To develop the sensitization towards the needs and concerns of children parents should analyze and understand their behavior. As a parent or guardian or teacher the answers to few questions can help us in the attainment of satisfactory answers.

- The problems that adults face with children are truly the problem of children or are the manifestation of their own fears, anxieties and frustrations?
- Isn't it the reflection of their incapability? And rather than blaming to their own selves they easily blame children?
- Why adults always want them to behave in a way they want them to behave?
- Are adults satisfied with their own lives?
- Are adults feeling the peace and harmony within themselves?
- Can adults say that they are perfect?
- Are adults really happy with their achievements?

If not than why parents, teachers and other adults want children to follow them and become a part of a blind and endless race? Why they want them to

be like them? It's very important to understand the purpose of life? These questions are very easy but still hard to answer.

Sports and Mind- SAM

Middle childhood (ages of approximately 6-10 years) is a period when children enter the larger culture (primarily through schooling) and develop the intellectual and social skills therefore they need to function effectively outside their family environment (Eccles,1999). Children spend more and more time with non-family members, including peers and teachers. They spend less time under supervision of parents, more under supervision of teachers and other adults, such as coaches, youth group leaders, or teachers. Consequently, they spend more time with peers outside the immediate influence of parents and become more concerned with social expectations of peers and adults. With increased freedom, children feel greater demands to be "good," show respect, and accommodate to social demands of situations, such as the classroom or non-familial social settings (Dodge & Colker, 1992). With increasing social experience and the development of new intellectual skills, children:

- Master fundamental skills considered important by culture, such as reading and arithmetic;
- Develop self-awareness, such as knowing how to go about learning;
- Develop skills in consciously planning, coordinating, and evaluating progress, and modifying plans, based on self-evaluation;
- Develop abilities to reflect on themselves and understand that others have different points of view.

Under these external pressures, many children begin to lose confidence

in them and may not find their interests in music, science, sports, or other areas. When living a simple life become hard then sports is the easiest way to come back to the lighter pace of life. It not only rejuvenates our mind and body but also helps us in facing many hard facts of life (Taylor et. al., 2010). It helps in living a life happily. Sports and psychology together helps in fulfilling two major objectives.

- To understand how psychological factors affect an individual's physical performance and
- To understand how participation in sport and exercise affects a person's psychological development, health and well-being.

Sports psychology aims to integrate mind and body for the growth and development of the individual. The positive affect of mind and body helps in leading a healthy life.

Work areas of Sports Psychology

Stress is known as the cause of most of the diseases of mankind. The aftereffects of stress can be easily seen among children in the form of asthma, cardiovascular diseases, ulcer, hypertension, obesity etc. Sports focus not only at the physical level but also at the mental health level of the children. Exercises strengthening muscles, cardiovascular system, honing athletic skills and helps in weight loss. It enhances the psychological development through motor skills, cognitive development, and conceptual ability. Sport psychology *increase performance* by managing emotions and minimize the psychological effects of injury and poor performance. Following are certain things we learn easily through sports;

- **Cohesion** – Group cohesion refers to the extent to which a team or group shares a sense of shared task or social bond.
- **Imagery** – Refers to ‘imagined’ sensations, for example visual imagery is known as ‘visualization’.
- **Attention Focus** – Being able to block everything out, e.g., a crowd.
- **Motivation** – There are two types of motivation: intrinsic motivation, meaning inner motivation, e.g., self accomplishment, and extrinsic motivation, meaning outer motivation, e.g., money or awards.
- **Internal Monologue** - Maintaining positive thoughts during competition by keeping a running conversation going in one’s mind.
- **Criticism** - A tenet of motivational theory that is necessary to improve performance. The delivery is imperative as criticism can either better performance or drastically reduces it. There are three types of criticism- Destructive, Self, and Constructive. The best utilization of constructive criticism is through the sandwich approach. In using the sandwich approach, you would first a compliment, then offer directions and critical feedback, and then follow up with another compliment.
- **Control**- To be a good human being it is important to have control over one’s desires and emotions regardless of distractions. Sports helps in managing one’s emotions and controlling one’s own emotions and desires for the benefit of team.
- **Confidence**- Sports brings a confidence with in the individual make him more extrovert and open to face the problems of life with courage.

All these are those capabilities of a person which helps him in achieving success and happiness at every move of life. Along with these capabilities sports also helps in the development of some skills normally i.e. without putting much efforts.

Skills taught through Sports

Certain specialized skills need a heavy training for their mastery such as typing, computer literacy, engineering etc. A sport is a medium through which we can easily develop certain behavioral skills just by play way method. It helps in dealing with school avoidance behavior and improves the mental health of the child (Knollmann, et. al., 2010).

- **Goal Setting-** Goals should be tangible, specific, and realistic and have a time targeted for completion. There must be realistic plans to achieve the intended goal. It sounds very heavy but when children play they learn it easily.
- **Visualization-** It is the imagination of once goals, and abilities so that one can calculate his efforts and put his energy in right direction.
- **Self-talk-** Intrapersonal communication is the active internal involvement of the individual in symbolic processing of messages. The individual becomes his or her own sender and receiver, providing feedback to him or herself in an ongoing internal process.
- **Awareness-** is a term referring to the ability to perceive, to feel, or to be conscious of events, objects or patterns, which does not necessarily imply understanding.
- **Team building-** building a team and working as strong team members is big skill, which children learn easily through play.
- **Team spirit-** the feeling of “we” emerge over the feeling of “I” when play with others in a team. The selfish desires and needs dissolve for the sake of benefit of the team.
- **Leadership-** How to command, organize, direct, execute, get the work done by others is a skills that can only be learned through practice.

Sports are good medium to provide such opportunity to the children where they can develop such skills.

Regular physical activity is essential for the physical, mental, psychological and social development of children and adolescents. Involvement in sport can boost children's health, improve academic performance and help reduce crime. Sport, recreation and play are a fun way to learn values and lessons that will last a life time as it enhance the emotional intelligence. They promote friendship and fair play. They teach team work, discipline, respect, and the coping skills necessary to ensure that children develop into caring individuals. They help prepare young people to meet the challenges (Lu, 2010) they will face and to take leadership roles within their communities. Team games make them to learn management skills.. A hyperactive child who finishes his work quickly and then starts talking, fighting, throwing things on others or any such undesirable activity can be treated to an extent through sports. An active involvement in any sports channelizes his energy in a proper direction (Kuschel A, 2007). As a result rather than showing a destructive behavior his mind gets involved in excelling in the sports activity of his interest. Through that he learns to concentrate and to have patience.

Through cultural sensitivity enforced in adults developmentally appropriate practices can be encouraged. According to Cummins (1991), "culture-fair activities actively involved in expressing, sharing, and amplifying their experiences within the classroom." Research shows that children with disabilities also benefit from the interactive or experiential approach because it emphasizes the child's engaged exploration (Swedo, 1987; Willig, Swedo, and Ortiz, 1987; Wolery, 1994d).

Action Options for Adults

The school community can take the following steps to implement an effective early childhood program that takes into account the diverse needs of young students (Malhotra, S. 1995; NAEYC, 1991; NAEYC, 1995; NAEYCNA, 1990; Kuschel et al., 2007; Vitaro F,):

- Regularly review school and Government policies related to educational equity, and develop policies essential for achieving developmentally appropriate practices.
- Provide adequate staffing and assistance to meet the many needs in diverse classrooms.
- Learn about cultural diversity and early education. Ensure that the school has a goal of valuing diversity.
- Require early childhood educators to have formal training in child development, children with special needs, language acquisition, appropriate instruction and assessment techniques, curriculum development, and strategies to involve diverse parents.
- Encourage teachers to reflect on their classroom practice to ensure they are providing positive learning experiences for all students.
- Provide education, encouragement and incentives for teachers and parents to be more sensitive towards needs and concerns of children.
- Believe that all children are capable of learning. Set high standards and maintain high expectations for all students while understanding that children have natural developmental differences as they grow.
- Develop an awareness of culture and an understanding that culture influences all humans.
- Participate in instructional teaming and collaboration with psychological and physical education teachers or bilingual resource specialists to

ensure that appropriate educational strategies are used for children with diverse needs.

- Using a trans-disciplinary approach, consult with other professionals both inside and outside the school building to develop reachable goals for each child.
- Structure the physical environment including physical space, toys, and materials to promote play, engagement, and learning for all the students in the classroom. Keep in mind children with disabilities when designing the classroom environment.
- Use naturalistic teaching strategies to respond to individual students within the context of naturally occurring classroom activities. Such strategies are helpful for enabling children to reach individual goals and for challenging insensitive behavior when it occurs.
- Use flexible assessment strategies to build on each child's strengths. The assessment plan must note any accommodation or support the child needs to be successful in the classroom. Keep in mind the major purposes of assessment in programs for young children: instructional planning needs identification, program evaluation, and communication with parents.
- Become aware of various cultural influences and social conventions that affect how children and their parents and families communicate and interact. Children may differ in their cultural patterns in perception or communication styles, such as wait time for responses, eye contact in answering, and style of interacting with adults. Teachers should adjust instruction accordingly.
- Use multicultural resources in the classroom: family stories, children's literature, parent storytelling, music and drama, and field trips.
- Use parents as resource people and involve them in specific curriculum

activities in the classroom.

- Regularly share information and goals with parents through letters, newsletters, phone calls, and parent group meetings. Send children's work home on a regular basis. Communicate using the home language of the parents.

'Alone no one can change the world but together we can.' This is what is required to uplift the needs and concerns of children in society. Children who grow up to be responsible adults with righteous standards of living are no accident. Behind them always lies a mother, a father, teacher or adults who are around to take care. The ones who responsibly and diligently look out for their child from birth to adulthood, until they can look out for themselves drive children to properly grow into mature, well-behaved and highly achieving adults. But the utmost important thing is to make sure that your child doesn't just know that he is loved, but feel it and from the heart. Great parents fill the "emotional tank" of their child at all times; thus, giving him confidence, courage and a strong foundation to grow well.

Note: This Article was presented in the International workshop organized by India Association of Sport for All in Delhi from 25th, June to 3rd, July, 2009.

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INFORMATION

The 11th ASFAA Congress

Mach, 2010, Tel- Aviv, Israel

<Presentations>

1. ***Prof. Alon Eliakim***- Meir Medical Center, Kfar Saba, Israel
The effect of a combined intervention on body mass index and fitness in obese children and adolescents-summarizing ten years of experience
2. ***Prof. Muqing Yi***- Center of Sport Nutrition, National Institute of Sports Medicine, China
The Prevalence of Overweight and Obesity and Interventional Strategies in China
3. ***Mr. Wim Florijn***- TAFISA Board Member, The Netherlands
Fighting against Obesity, is there any chance?
4. ***Mr. Wolfgang Bauman***- TAFISA secretary General, Germany
The Challenge of "Globesity"
5. ***Hon. Brian Dixon***- ASFAA vice president, 'Life Be in it' Australia
Active Launceston
6. ***Dr. Yasuo Yamaguchi***- ASFAA and TAFISA board member, Japan
Physical Activity and Obesity in Japan: Present State and Strategies for Sport for All and Physical Activity

7. **Dr. Naama Constantini**- Director Sport Medicine Center, The Hadassah-Hebrew University Medical Center, “Har HaTzofim”, Jerusalem, Israel
Survival Of The Fittest

8. **Dr. Anita Ghosh**- ASFAA Board Member, India Sport for All President, India
The art of Reducing Obesity

9. **Dr. Min- Soo Kim**- ASFAA Board Member. South Korea;
Prof. Myung Wha Kim- Department of Sport Health and Management, Woosong University, South Korea
Exercise Therapy of Abdominal Obesity

10. **Dr. Danny Nemet**- Meir Medical Center, Kfar Saba, Israel
Health Promotion Intervention in Kindergarten Children

11. **Mr. Leonard Thadeo**- TAFISA board member. Ministry of Information, Culture and Sport, Tanzania
Obesity in the modern world

12. **Dr.Ziva Shtal**- Head of Nutrition Department Ministry of Health, Israel
Integrated health- One small step for a big change

13. **Dr. Ilan Fellmann**- Federal Ministry for Defense and Sport, Department for International Sports affairs and relations, Austria
OECD Health Data 2009- How does Austria compare

14. **Dr. Meera Sood**- Delhi University, India
"Obesity"- Termite of Wellness in the Modern Society

15. **Hon. Isaac Braz**- TAFISA Honorary Member, Deputy Chairman Israel
Sport for all, Israel
Obesity in modern society

16. **Mr. Thomas W. Tsai** - President, Olympic committee, Chinese Taipei
Fighting Obesity- Current Approaches in Chinese Taipei

17. **Ms. Avishag Nevo** - Nutritionist, Israel
Smart food choices

**The 1st ASFAA Sport for All Training Course
November, 2010, Macau, China**

<Lectures>

1. **Dr. Kang-Too Lee**- TAFISA President
Aiming for an Active World

2. **Prof. Ju-Ho Chang**- Founding President of ASFAA
What is Olympism?

3. **Mr. Wolfgang Baumann**- Secretary General of TAFISA
The significance of volunteerism in Sport for All- the German Experience

4. **Prof. Frank H. Fu**- The Hong Kong Baptist University
The Development of a Sports Culture for Hong Kong Youth
5. **Bae Dixon**- Director- Business Development & Marketing, TAFISA
TAFISA Triple AC Program: Utilising the City Setting to Encourage Participation in Sport for All and Physical Activity
6. **Prof. Chi Jian**- Vice President of Beijing Sport University
Human Resource management and development in Sport for All programmes
7. **Prof. Ren Hai**- Professor of Beijing Sport University
Current status of Sport for All in Asia and challenges it faced
8. **Mr. Sarjit Singh**- Vice President of ASFAA
Sport Policies- For an Effective Management of a Non-Governmental Organization
9. **Prof. Lu Yifan**- Professor of Beijing Sport University
Exercise Science and Keep Popular Health

GUIDELINES FOR CONTRIBUTORS

Language and types of contribution

The Journal of Asiana Sport for All contains several forms of contributions: Articles (8-15 pages), reports (3-8 pages), congress/event reports (2-3 pages), and keynote lecture (8-15pages) including tables figures, and photographs). All manuscripts must contribute to the development of Sport for All and must be submitted in English.

Abstract

An abstract of 100-200 words and 5 key words maximum must also be supplied, typed on a separate sheet, together with a biographical note of 25 to words.

Quotations

All direct quotations of 35-40 words or more should be displayed as indent text, but still double-spaced.

Notes

Try to avoid using too many notes. Where they are necessary, they must be brief and should appear at the bottom of the page.

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All manuscripts are reviewed by the editorial board of ASFAA. When revisions are requested by the journal's editorial board, authors must resubmit the revised manuscript within 3 weeks. If resubmission takes more than 3 weeks, the manuscript will be treated as a new submission.

Manuscripts should be submitted in Word format (40 lines), and the file should not exceed 4 MB. For figures, tables and photographs, up to 10MB of PDF, Word, and Excel files can be uploaded.

Top and bottom margins: 2cm

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Full name, organization of authors and contact details (postal address, e-mail address)

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Photographs are classified in the same category as figures. Figures and tables should be numbered separately and consecutively (e.g., Figure 1, Table 1). Capitalize only the first word of the caption.

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List all entries cited in the text, or any other items used to prepare the manuscript, alphabetically by author and year of publication in a separate, headed, reference section.

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Laura, R. & White, S., Eds.(1991) Drug controversy in sport: The socio-ethical and medical issues. Sydney: Allen & Unwin.

Tsai, M.J. & Jwo, H. (2004) Self-determination perspectives on exercise behavior regulations. Paper presented at the 8th ASFAA Congress, Chinese Taipei.

Yamaguchi, Y. (2002) Sport, tourism, sport volunteers and Sport for All. *Journal of Asiana Sport for All* 3(1), 29-36.

Deadlines for the 11th edition ASFAA Journal:

May 25th, 2011.

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China

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