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The Hong Kong Recreation Management Association

香港康樂管理協會

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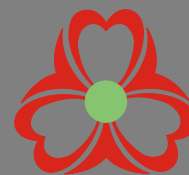
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INTRODUCTION

There is no doubt that regular participation in physical activities is psychologically and physically beneficial. However, similar researches on persons with disabilities, especially those with hearing impairment are sparse (Stewart, Ammons, & Ellis, 2001). Existing literature has showed that the number of studies on persons with hearing impairment is comparatively less than that on persons with mental retardation or on persons with mobility impairment. Furthermore, there is lack of research about the population in Hong Kong. Therefore, in order to better understand the characteristics on physical activity pattern and the needs of the population with hearing impairment, more researches are definitely needed to be carried out.

This study was designed to explore the perceived barriers in participation in physical activities by persons with hearing impairment. It showed that people with disabilities faced difficulties from various aspects.

REVIEW OF LITERATURE

Gender Barrier

Based on the study by Grimes and French (1987), disabled girls and women had suffered more barriers than males in sports participation. In their research, less disabled women had been found in organized sports events. The above situation could have been explained by the emotional and psychology factors.

In 1996, The Hong Kong Federation of Youth Groups conducted a survey on young people and discrimination. The survey found out that young people thought that gender discrimination (16%) was the second largest discrimination problem in Hong Kong. Yet whether gender discrimination would affect the participation in physical activity was not

mentioned.

Age Barrier

Lee (1993) pointed that people would decrease their physical activity when increasing age. Nevertheless, in the research by Wersch (1997), age-groups from aged 13-18 did not have significant differences on any competence scales which meant that younger people might not be influenced by their age in participating in physical activity.

Biological barrier

In 1987, Ferris found that ill health was one of the barriers to physical activity (as cited in Smith, Austin and Kennedy, 2001). Disability groups such as people with rheumatoid arthritis would have pain that might cause activities impossible (Smith, Austin and Kennedy, 2001).

Psychological barrier

In 1997, Campbell and

Oliver as I cited in Dowling, & Dolan, 2001) discovered that many disabled people would consider themselves to be ill, rather than impaired. Disabled people might suffer more or no less illness than any other person as a result.

Barrier of Personal Knowledge

According to Smith, Austin and Kennedy (2001), people with disability did not have knowledge on the programs, facilities, and recreation or leisure resources provided for them. In 1980, the study by Hutchison (as cited by Smith, Austin and Kennedy, 2001) found that people with physical disabilities were considered "lack of information" as an important barrier for participation.

Family Barrier

Asken (1991) believed that families might have been an obstacle for the disabilities to participate physical activities. Families might have presented an over-protective or demotivating attitude towards their disabled family member(s).

In 1986, Sherrill (as cited in Asken, 1991) reported that only 9% of the disabled athletes were influenced by their parents to take part in physical activities.

Peer's Barrier

In 1986, Sherrill (as cited in Asken, 1991) noticed that friends' support and encouragement were the primary source of influence for the disabled to participate physical activities.

According to Webster and Burgess in 1980 (as cited in Asken, 1991), 47% of the amputee believed that their friends and families had underestimated their abilities which might have blocked their chances in participating physical activities.

Moreover, people with hearing impairment seemed to be too dependent on their family. In the survey conducted by Hong Kong Society for the Deaf (1985), 66.67% of the people would "rely on family members" and 50.65% would "let family members handle everything". Such a dependent attitude may affect their attitude on physical activity.

School Barrier

Disabilities who receive special education in schools may also encounter barriers from the school itself. Krebs and Block (1992) suggested that the disabled might be facing three constraints, they were: Negative attitude of the administrators in schools towards the essential of activities, Inadequate training provided for staff and Lack of lifetime recreation skills provided to their students.

These factors might hinder their physical activity participation which the long run would make them hard to enjoy their life on physical or leisure activities.

Economic Barrier

A Baseline Survey on Public Attitude towards Persons with a Disability 1998 (Equal Opportunity Commission) showed the inadequacy of financial support for the disability. It stated "only 9.3% of persons with learning impairment and 8.3% of persons with mental handicaps were receiving Comprehensive Social Security Assistance. Less than one-third of the students, homemakers, and retired indicated insufficiency of their current financial support" (p.66).

Social Attitude

Asken (1991) declared that





physical disabilities did not face isolation but it was hard for the public to adopt disability. Social communities did have negative reaction towards the disabilities. This attitude or action might lead to segregation to the disabilities and make them less accessible to sports opportunities.

Enlightening enough, in a recent study of whether the society should cater especially for the needs of persons with a disability in the provision of services and facilities (Equal Opportunity Commission, 1998), over 90% of the people agreed that the society should cater for the needs of persons with physical handicap, sensory disability, chronic illness and mental handicap in the provision of services and facilities.

Notwithstanding, the social attitude would change if there are more interactions between the disability and the able-bodied. In the study by Miller and Cordova (2002), they stated that college students who participated in inclusion activities would have positive attitudes toward people with disabilities.

Facility Barrier

In Hong Kong, only 22% and 24% of the people thought that there were adequate public of the

facilities to support persons with visual impairment and mobility difficulties respectively (Equal Opportunity Commission, 1998). However, 63% and 56% of the people who took the survey claimed that people with sensory disability were not discriminated against when they were using the public and private services and facilities respectively. In the report, over 80% of the able-bodied people believed facilities provided for the disabled were inadequate.

In the Americans with Disabilities Act, Public Law, 101-336 (as cited in Seidler, Turner, & Horine, 1993), it required that any recreation or sports services/ provide need to offer reasonable accommodation to their participants, regardless of disabilities which had made a better environment for the disabled to participate in sports or leisure activities more easily.

Transportation Barrier

Although more transportation facilities, such as automobile or modified van, are provided for the disabled, however, Smith, Austin and Kennedy (2001) declared that mass transportation was often inaccessible for the disabled. Special programs, restrictions of the transportation for people with disability would cause

inconvenient as a result.

Media Barrier

According to Dummer (1998), media coverage could facilitate the public awareness and acceptance of disability and disability sport. The number of participation in physical activities would increase in disabilities as a result. However, in her study, one of the disabled interviewees expressed "we as Americans have so much choice, just so much to choose from, that I don't see us stacking up against baseball, football, hockey, tennis, golf, etc."(p.57). This reflected that "audience interest" was still low which affect the media coverage as a result.

Valentine (2001) discovered that the TV media in Japan had imputed a lot of images on people with hearing impairment to the public. Deaf boys were always building up with the image of sporting, strength and brave. On the other hand, girls were regarded as comparatively weak and just focus on activity such as cooking. These images would widely influence the general perception of the public on the gender difference among people with hearing impairment, which may result in the difference in physical activity participation when gender is taken into consideration.

Social Ineffectiveness

Because of the overprotection by parents and segregation from peers, people with disabilities could get inadequate feedback from others and would lead them to a poor social skill (Smith, Austin and Kennedy, 2001). Bedini's study in 1993 and Sneegas's in 1989 (as cited by Smith, Austin and Kennedy, 2001) discovered that their ineffective social skills would lead to a negative effect to the disabled participation rate in various physical activities.



METHOD

Selection of Subjects

A total of 180 subjects were invited to take part in this study. They were students from the four schools in Hong Kong that catered individuals with hearing impairment. The schools were Caritas Magdalene School, Hong Kong School for the Deaf, Lutheran School for the Deaf and Victoria Park School for the Deaf.

People aged within 9 to 22 were selected to be included in the study. It was believed that people aged 9 or above could understand the meaning of each question. As mentioned in the previous session, people in different age might have different level of physical activity, hence, all students were divided into aged below 13, aged 14-16 and aged above 16. Moreover, students with hearing impairment only were selected, others students with more than one disability were not included in this investigation.

Procedures

The perceived barriers of the people with hearing impairment were investigated in this study. The description of method of study was comprised of four parts, they are: Selection of subjects, Measuring instrument, Collection of data and Data analysis.

Measuring Instrument

A questionnaire on attitude of perceived barriers of physical activity developed by Myers and Roth (1997) was used in the study. Some researchers such as Plante (1999, para. 5) had also used the same questionnaire to study attitude, and a high consistency of results was achieved.

In the questionnaire, there were 29 questions in total, and that twenty-four of them were based on the study by Myers and Roth (1997).

In their study, 24 questions were divided into 4 main categories: Barrier of time-effort, Physical barrier, Social barrier and Specific barrier. Question numbers 1, 5, 9, 13, 16, 19, 22 and 24 were classified as the barrier of "Time-effort". Question numbers 2, 6, 10, 14, 17, and 20 were under the category of "Physical Barrier". Question numbers 3, 7, and 11 were regarded as the "Social Barrier". Question numbers 4, 8, 12, 15, 18, 21 and 23 were considered as "Specific



Barrier". All statements of the questionnaire were scored on a 5 point likert scale starting from "1"= Not important, "2"= Quite important, "3"= Important, "4"= Very important, and "5"= Extremely important.

In order that more potential barriers for the people with hearing impairment can be explored, after reviewing a number of researches on persons with disabilities, four extra statements were added to the questionnaire.

The first statement was "Participation in physical activities need money" which had been reviewed by the study of Smith, Austin and Kennedy (2001). The second was "Opportunity to contact physical activities". This factor had been observed by Smith, Austin and Kennedy (2001) and Hutchison in 1980 (as cited in

Smith, Austin and Kennedy, 2001). The third question, "Do not have the provision of suitable facilities" which had been made according to A Baseline Survey on Public Attitude towards Persons with a Disability (Equal Opportunity Commission, 1998). The last extra added question in the questionnaire was "Attitude of the public" which had been included in a study by Asken (1991) and Smith, Austin and Kennedy (2001).

As the questionnaire was in English, translation into Chinese version was made. Dr. Lena Fung, Associate Professor of the Hong Kong Baptist University, had given a great assistance in verifying the accuracy of the translation. In addition, both versions of the questionnaire were passed to a professional translator and also to the staff of all four schools for comments. They all found the translated version acceptable. Then 10 able-bodied people aged from 9 to 12 were asked to complete the questionnaire and to indicate whether the wordings were clear for understanding. The indication was that no further corrections seemed to be needed.

A Pilot Test was conducted with a sample of 15 people with hearing impairment who would not be included in the main study. The purpose of this was to ensure that the statements were understandable to the targeted population as well. Feedback suggested that the questionnaire was acceptable.

In the final version of the questionnaire to be used, there was a section to seek demographic information such as the age and the gender of the subjects.

Data Analysis

The Social Science SPSS statistical package was used for data

analysis in the study. In order to help understand age-groups differences, three age-groups were created: (1) aged ≤ 13 , (2) aged between 14-16 and, (3) aged ≥ 17 .

Various statistical procedures were used to analyze the data. The descriptive analysis was used to present the demographic information in the study. A 2 x 3 ANOVA was conducted to investigate the level of seriousness of each type of barrier across gender and age-groups. A Post-hoc test was employed to determine the difference between different age group. All statistical testing were set at .05 level of significant

RESULTS

Summary of demographic statistics

A total of 180 Questionnaires had been sent to school for people with hearing impairment. There were 162 returns in total. The return rate was 90%. Yet the various factors for those who did not return the questionnaire could be identified. Only 149 of replied questionnaires were used in the

Table 1
Descriptive Statistics of barrier (N=149)

Barrier	Mean	SD
Time-effort Barrier	2.76	.71
Physical Barrier	2.75	.75
Social Barrier	2.42	.81
Specific Barrier	2.77	.64

study because 13 pieces were uncompleted.

In the study, 42.3% of the subjects came from Lutheran School for the Deaf, 22.8% of the subjects came from Caritas Magdalene School, 18.8% came from Hong Kong School for the Deaf and 16.1% came from Victoria Park School for the Deaf.

In the total samples of 149, 53.6 % (n=80) were males and 46.4 % (n=69) were females.

The age range of the respondents was 9 to 22 years old. The percentage of the three groups were Group 1: 29.5 % (n=44), Group 2: 33.6 % (n=50) and Group 3: 36.9 % (n=55).

Descriptive Statistics

Time-effort Barrier

In Time-effort Barrier, there were 8 mean values and standard deviation values. The highest mean score was "Too much work" (3.14) and the lowest mean score in this group was "Too lazy" (2.34). The mean score in Time-effort Barrier was 2.76.

The highest mean score for male students in the Time-effort Barrier occurred in age-group 1 and aged ≤ 13 (2.94). The average scored in male was 2.76. For female, the highest score also occurred in age-group 1 (2.83) and the average score was 2.76. The highest score occurred in age-group 1 (2.88) and the average score was 2.76 in total.

Physical Barrier

In Physical Barrier, there were 6 mean values and standard deviation values. The highest mean score was "Get hot and sweaty" (2.94). The lowest mean score was "Uncomfortable" (2.56). The mean score of Physical Barrier was 2.75.

The highest mean score for male students in the Physical Barrier occurred in age-group 3 which aged ≥ 17 (2.92). The average scored in male was 2.79. For female, the highest score also occurred in age-group 3 (2.78) and the average score was 2.70. The highest score occurred in age-group 3 (2.87) and the average score was 2.75 in total.





Social Barrier

In Social Barrier, there were 3 mean values and standard deviation values. The highest mean score came to both "Don't like to exercise alone" and "Family does not encourage" (2.46). The lowest mean score was "Friends do not exercise" (2.34). The mean score of Social Barrier was 2.42.

The highest mean score for male students in the Social Barrier occurred in age-group 2 and aged 14-16 (2.94). The average scored in male was 2.53. For female, the highest score occurred in age-group 1 (2.53) and the average score was 2.30. The highest score occurred in age age-group 1 (2.55) and the average score was 2.42 in total.

Specific Barrier

There were 11 mean values and standard deviation. The highest mean score was "Social attitude" (3.48). The lowest mean score was "No convenient places" (2.40). The mean score of Specific Barrier was 2.77.

The highest mean score for male students in the Specific Barrier occurred in age-group 1 and aged ≤ 13 (2.87). The average scored in male was 2.83. For female, the highest score also occurred in age-group 1 (2.77) and the average score was 2.71. The highest score occurred in age-group 1 (2.81) and the average score was 2.77 in total.

Relationship between Barriers, age-groups and gender

The 2 X 3 way Analysis of Variance (ANOVA) was employed. Concerning the relationship between gender and each of the barriers, only a significant difference in Time-effort Barrier to participation in physical activities between male and female was found. After 2 x 3 ANOVA, a Post Hoc Tests was conducted. There

was no significant different between age groups (Table 2).

For the relationship between age-groups and each of the barriers, no significant difference had been found. A Post Hoc Tests was conducted after. There was no significant different between age groups.

DISCUSSIONS

There was no significant relationship between gender and the 4 barriers, namely, Time-effort

Barrier, Physical Barrier, Social Barrier and Specific Barrier. This result tends to reject the study conducted by Grimes and French (1987) which stated that female with disabilities always limited in participating physical activities. The occurrence of rejection could be explained. Grimes and French's study was conducted for more than 10 years before. It was believed that the society at that time did not have a strong concept on equal opportunity for genders. However, the issue of gender discrimination

Table 2
Summary of 2 X 3 ANOVA (N=149)

Source	SS	df	MS	F
Time-effort Barrier				
Gender	.02	1	.02	.03
Age	.92	2	.46	.91
Gender* Age	.16	2	.08	.16
Error	72.70	143	.51	
Physical Barrier				
Gender	.11	1	.11	.19
Age	1.08	2	.54	.95
Gender* Age	.16	2	.08	.14
Error	81.25	143	.59	
Social Barrier				
Gender	2.30	1	2.30	3.59
Age	1.48	2	.74	1.16
Gender* Age	1.23	2	.62	.96
Error	91.49	143	.64	
Specific Barrier				
Gender	.64	1	.64	1.52
Age	.24	2	.12	.29
Gender* Age	.03	2	.02	.04
Error	59.93	143	.42	
* $p < .05$				

Table 3
Descriptive statistics of different Barrier on different age and gender groups (N=149)

	Age-group 1		Age-group 2		Age-group 3	
	Male	Female	Male	Female	Male	Female
Time-effort Barrier	2.94	2.83	2.72	2.70	2.68	2.71
Physical Barrier	2.68	2.65	2.67	2.69	2.92	2.78
Social Barrier	2.57	2.53	2.67	2.17	2.41	2.33
Specific Barrier	2.87	2.77	2.86	2.68	2.78	2.66
Age-group 1: Aged ≤ 13 Age-group 2: Aged 14-16 Age-group 3: Aged ≥ 17						

might have gradually been improving over the last 10 years. As a result, it was not surprised that there were no significant mean difference in gender groups.

No significant difference between age-groups was found in all factors. As the subjects of the study were chosen from the only 4 schools for people with hearing impairment in Hong Kong, it was believed that the subjects were rather concentrated at the same age level and they were more or less under the influences by the similar peer, school and culture effects.

The relationship between Time-effort Barrier, gender and age-groups was not significant. In the 2 x 3 ANOVA, all the studies about age-groupings and gender were not significant too. The result was differed from most of the studies before. It is because time barrier was usually influence the able-bodied group, such as the study by Ho and Chui (1996) and the survey conducted by Allied Dunbar National Fitness Survey on 1992 (as cited in Biddle and Mutrie, 2001). Not much study on Time-effort Barrier on disabilities could be found. Moreover, the study group here is students. They may not face this barrier as they will not have the career and family burden at the present moment.

Either the relationship between Physical Barrier, gender and age or the 2 x 3 ANOVA showed that age-groupings and gender was not significant in this factor. The result was different from the study by Ferris in 1987 (as cited in Austin, Smith, & Kennedy) that some groups of people with disabilities would suffer pain when conducted physical activities. However, the subjects of this study had one kind of impairment only and they were all regard as physically healthy when they were

involved in the study. Moreover, generally, most of the games for the people with hearing impairment are modified. They may have found the games easy to play. "Too uncoordinated" factor may not be significant as a result. Besides, barriers such as "Uncomfortable" may not be applicable to Hong Kong's situation now as supporting facilities for disabilities are getting better. Factor "Look silly" was not significant as the games for the people with hearing impairment are modified, the supporting facilities were improved and the importance of sports activities of the disability had been positively change, which lead to a change in their attitude towards physical activities.

The Social Barrier was not significant when compared the relationship with the age and gender. In this barrier, 2 main factors could be classified, the peers effect and the family effect. Although some of the studies, like Asken (1991) with disabilities, Freedson and Evenson study in 1991, Dowda and Ross in 1990(as cited in Armstrong and Welsman, 1997) and Wankel and Kreisel study in 1985(as cited by Ho and Chui, 1996) with able-bodied people all had mentioned that family may influence the physical participation, some of the researches such as Sherrill study in 1986 (as cited in Asken, 1991), Buhrmester and Furman study in 1987, Gottlieb and Chen study in 1985 and Lee and Lomax study in 1990 (as cited in Armstrong and Welsman, 1997) showed that family may not be a significant factors in influencing the participation rate in physical activities as it will be varied by their gender, race, age and maturity. In Hong Kong situation, it is believed that the multi-interactions could be found between people with hearing

impairment and the society. With the support by other social services organizations and wide range of interaction with the media, influence by family is less important when comparing with other factors.

Besides, peer effect was found not in significant relationship with the age and gender groups. It was negatively related to the study by Anderssen and Wold study in 1992, Lee and Lomax study in 1990 (as cited in Armstrong and Welsman, 1997) for abled-bodied people and Sherrill study in 1986 (as cited in Asken, 1991) for the disabled. The result could be explained by the understanding that Hong Kong people's participation in physical activities would be affected by external channels like schools, media, social welfare supports and education. These various factors may divide the influence of peer and family effects. Furthermore, the reliability test in the Social Barrier was lower than .65, which means that the result might not reflect the real situation.

In Specific Barrier, it also did not have significant relationship between age and gender. For the factor concerning the provision a better facility system, Hong Kong





had passed Building Ordinance (1985) to utilize the need of the disabilities (Hong Kong Rehabilitation Programme Plan, 1999). Moreover, a Rehabilitation Act came into existence in 1995 which has been giving greater evaluation on the accessibility of facilities for the disabled.

Scoring in "Social Attitude" and "Do not have Channel" were relatively higher when compared with other statements. It was because the social discrimination on disability still exists in a number of foundations. Moreover, the exposure of the physical activities might not be enough in the present situation.

With the existence of social discrimination and lack of knowledge on physical activities, Specific Barrier was comparatively more serious in affecting the participation rate in physical activities. The ranking in other barriers were Time-effort Barrier, Physical Barrier and Social Barrier respectively.

It is believed that with the result of the study, it helps to provide more understanding for people with hearing impairment. Educators and professional in the industry could reference the study in planning their programs in future. However, there were limitations in the study. Firstly,

Generalization to the entire population of persons with hearing impairment was not possible due to the sample selected for the study. Besides, emotional factors were hard to be controlled during scaling. It is believed that subjects would be affected by their emotional status when they gave the answers. Finally, environmental factors were excluded. It was assumed that all subjects were under the same assistance by their teachers in finishing the questionnaire. Future research could focus on exploring the motivational factors that help the population to participation in sport activities. **RMA**

References

- Armstrong, N., & Welsman, J. (1997). Young people & physical activity. *New York: Oxford University Press.*
- Asken, M. J. (1991). The challenge of the physically challenged: delivering sport psychology services to physically disabled athletes. *Sport Psychologist*, 5(4), 370-381.
- Biddle, S. H., & Mutrie, N. (2001). Psychology of physical activity: determinants, well-being and interventions. *London, England: Routledge.*
- Bouchard, C. (1997). Physical activity and cardiovascular health: A national consensus (pp. 48-56). In Physical activity and prevention of cardiovascular diseases: Potential mechanisms. A. S. Lean (Eds). *Champaign IL: Human Kinetics.*
- Dowling, M., & Dolan, L. (2001) Families with children with disabilities: Inequalities and the social model. *Disability & Society*, 16(1), 21-35.
- Downs, P., & Williams, T. (1994). Students' attitudes towards integration of people with disabilities in activity settings: A European comparison. *Adapted Physical Activity Quarterly*, 11(1), 32-43.
- Dummer, G. M. (1998). Media coverage of disability sport. *Palaestra*, 14(4), 56-57.
- Equal Opportunity Commission (1997). A baseline survey on employment situation of persons with a disability in Hong Kong. *Hong Kong: Equal Opportunity Commission.*
- Equal Opportunity Commission (1998). A baseline survey on public attitudes towards persons with a disability. *Hong Kong: Equal Opportunity Commission.*
- Froelicher, V. F., & Froelicher, E. S. (1991). Cardiovascular benefits of physical activity. In Driver, B. L., Brown, P. J., & Peterson, G. L. (Eds). *Benefits of leisure* (pp 59-72). Venture Publishing.
- Grimes, P. S., & French, L. (1987). Barriers to disabled women's participation in sports. *Journal of Physical Education, Recreation and Dance*, 58, 24-27.
- Ho, J. K. M., & Chui, E. W. H. (1996). Family Sport. *Hong Kong: Hong Kong Sports Development Board.*
- Hong Kong Society for the Deaf (1985). *Deaf people's needs for technical aids*. Hong Kong: Hong Kong Society for the Deaf.
- Individual's with Disability Education Act (n.d.). *IDEA definition on disabilities*. Retrieved March 1, 2003, from <http://ericec.org/digests/e560.html>
- Krebs, P. L., & Block, M. E. (1992). Transition of students with disabilities into community recreation: The role of the adapted physical educator. *Adapted Physical Activity Quarterly*, 9(4), 305-315.
- Lee, C. (1993). Attitudes, knowledge, and stages of change: A survey of exercise patterns in older Australia women. *Health Psychology*, 12(6), 476-480.
- Miller, J., L., & Cordova, J. (2002). Changing attitudes toward people with disabilities. *Palaestra*, 18(3), 16-21.
- Myers, R. S., & Roth, D. L. (1997). Perceived benefits of and barriers to exercises and stage of exercise adoption in young adults. *Health Psychology*, 16(3), 277-283.
- Plante, T. G. (1999). Could the perception of fitness account for many of the mental and physical health benefits of exercise? *Advance: Mind-Body Medicine*, 15, 291-301. Retrieved February 19, 2003, from www.fetzer.org/archives/fall99_82a.pdf
- Rehabilitation Division (1999). *Hong Kong Rehabilitation Programme Plan (1998-99 to 2002-03): Towards a new rehabilitation era*. Hong Kong: Rehabilitation Division, Health and Welfare Bureau.
- Seldier, T. L., Turner, E. T., & Horine, L. (1993). Promoting active lifestyle through facilities and equipment: A look at children, seniors, and people with disabilities. *Journal of Physical Education, Recreation and Dance*, 64, 39-42.
- Smith, R. W., Austin, D. R., & Kennedy D. W. (2001). *Inclusive and special recreation: Opportunities for persons with disabilities*. NY: McGraw-Hill.
- Stewart, D., Ammons, D., & Ellis, M. K. (2001). Future directions of the deaflympics. *Palaestra*, 17(3), 45-49.
- The Hong Kong Federation of Youth Groups (1996). *Young people and discrimination*. Hong Kong: The Hong Kong Federation of Youth Groups.
- Valentine, J. (2001). Disabled discourse: hearing accounts of deafness constructed through Japanese television and film. *Disability & Society*, 16(5), 707-721.



PARENTAL INFLUENCE TOWARDS COMMITMENT TO SPORTS TRAINING AMONG ATHLETES WITH PHYSICAL DISABILITIES OF THE INAUGURAL FESPIC GAMES

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INTRODUCTION

Sport for persons with physical disabilities is a relatively recent addition to the modern day sport scene, it has increased substantially over the past 50 years. In today's world, sport for physically disabled is much more than rehabilitation and therapy, but recreation in nature. Guttmann (1976) believed that sport can be considered as an invaluable vehicle to help enhance the physical and psychological wellbeing of persons with physical disabilities. DePauw (1992) mentioned that because of the increasing sport opportunities for people with disabilities, there is an increase in research on disabled sport and the research designs and topics have become more varied and sophisticated.

Fung (1992a) commented that commitment has received much attention among researchers (Johnson, 1982; Kelly, 1983), but they had merely focused on the able-bodied participants. In order

to have better understanding and underlying of athletes' psychological state in disabled sector, factors influencing athletes' commitment would be determined in this study. Emphasis on the importance of social factors especially parents was found in the past researches (Davison, Downs, & Birch, 2006; Haywood & Getchell, 2001; Pargman, 1997; Sallis, Prochaska, & Taylor, 2000) regarding the sport commitment. Therefore, the parental influence towards commitment to sport training among the participants of the Inaugural FESPIC Games would be investigated. The results could serve as references for coaches and parents to determine the volume of sports training and understand of their supports in order to maximize the commitment level of athletes.

The FESPIC Games and the FESPIC Youth Games

FESPIC (formerly spelled out as Far East and South Pacific

Games for the disabled) Federation is the sports organization for the persons with disability in Asia and South Pacific countries and territories. Its objectives are to promote general interest welfare for the disabled in the region through participation in sports events and other activities, to deepen mutual understanding and friendship of the disabled and to promote rehabilitation for the disabled in the region through sports activities. As the biggest event of the Federation, FESPIC Games started its history in Oita, Japan in 1975 with 973 participants from 18 countries and territories in the region. The size of each games were expanded continuously (FESPIC Federation, 2003).

The FESPIC Youth Games were modeled on the FESPIC Games, but are for younger athletes aged 12 to 19. The first tournament was held in Hong Kong, China, in December of 2003 which named "The Inaugural FESPIC Youth Games" Bell (2003) stated that the

goal of the games was to encourage more disabled youths to participate in sports competition in order to raise the standard in the Far East and South Pacific region. According to the official announcement, the Hong Kong Sports Development Board [HKSDB] (2003) and the Inaugural FESPIC Youth Games Organizing Committee (2003) stated that the objectives of the Games were to encourage participation in sports of disabled youths, nurtured potential stars of the future, and foster friendship and communication among FESPIC countries and territories.

In the Games, badminton, boccia, athletics, swimming and table tennis were included, with the latter three events also offered for athletes with intellectual disabilities. Participants were divided into two age groups including aged 16 to 19 and aged 12 to 15. There were totally 307 athletes and 185 officials from China, Hong Kong, Indonesia, India, Japan, Korea, Macau, Malaysia, Nepal, Philippines, Singapore, Sri Lanka, Tonga, Thailand, Taipei and Vietnam participated in the 3 days FESPIC Youth Games (The Inaugural

FESPIC Youth Organizing Committee, 2004; HKSDB, 2003, People's Daily Online, December 17, 2003).

The Importance and Determinants of Sport Commitment

"Sport Commitment is defined as a psychological construct representing the desire and resolve to continue sport participation" (Scanlan et al., 1993a, p.6). Representing athletes' psychological states of attachment to their participation, it reflects a motivational force for continued involvement, and as a result, reflects the significant impact on persistence (Johnson, 1982; Kelley, 1983; Fung, 1992a). It could be a reference for coaches to have a better arrangement for training hours.

As sport commitment was vital to athletes' involvement and participation in sports, the determinants of it should be identified and discussed. A Sport Commitment Model (Scanlan et al., 1993a) proposed that commitment was determined by five main components; which are sport enjoyment, involvement opportunities, personal

investments, social constraints, and involvement opportunities. Kelley (1982) found that these determinants might be interrelated through their causal processes in a certain extent. On the other hand, the determinants could also be measured and evaluated independently related to commitment.

Sport enjoyment

Many researches (Scanlan, Stein, & Ravizza, 1989; Wankel, & Seftom, 1989; Hashim, Grove, & Whipp, 2008) indicated that sport enjoyment was an important variable to motivate youth and elite in sport domain in relations with team atmosphere, developing skills and having fun. On the other hand, they were significant reasons for dropping out when they were lacking of. Therefore, it was predicted that greater sport enjoyment would be related to greater sport commitment (Carpenter, Scanlan, Simons, & Lobel, 1993).

Involvement alternatives

Involvement alternatives reflected whether the athletes more or less desirable for the alternative activities in relation to participating in their current sports or sport



program (Scanlan et al., 1993a). Past research found that "Other things to do" was the most important reasons discontinued participation was the conflicts of interest (Coakley & White, 1992; Prochaska, Rodgers, & Sallis, 2002). As a result, it was predicted that having more attractive alternatives would be related to lower sport commitment (Carpenter et al., 1993).

Personal investments

Because of the importance in the youth-sport setting, time, money and effort were considered as basic investments. Fung (1992a) found that more hours spent on training, higher scoring in the commitment to training among wheelchair marathon athletes. Though the amounts of these investments might vary greatly based on the demands of different programs, there was still a prediction that greater personal investment would promote greater sport commitment (Carpenter et al., 1993; Jeon & Ridinger, 2009; Scanlan et al., 1993b). Further, Anderssen and Wold (1992) and HKSDDB (2001) stated that the activity level was not significant influenced by gender, but their study showed that boys had more time participating in physical activity than girls.

Social constraints

Social constraints were defined as "social expectations or norms which create feelings of obligation to remain in the activity" (Scanlan et al., 1993a, p.7). The determinant included the influence of socializing agents such as peers, parents, coaches and significant others. (Allen, 2003; Davison et al., 2006; Haywood & Getchell, 2001; Prochaska et al., 2002). It was predicted that the more pressure to continue, the greater the level of commitment (Scanlan et al., 1993a; Carpenter et al., 1993).



Involvement opportunities

The final component focused on the anticipation of experiences or events resulting further involvement. The Competence Motivation Theory (Harter, 1978) asserts that successful mastery attempts are sources of inherent pleasure and feelings of efficacy, and that these attempts increase or maintain the motivation to acquire further and higher competencies. Alexandris, Zahariadis, Tsorbatzoudis, Grouious, and Thessaloniki (2002) revealed that involvement opportunities were the most powerful predictors of fitness participations. Thus, it was predicted that the more valued opportunities anticipated, the greater the level of commitment (Carpenter et al., 1993; Jeon & Ridinger, 2009).

Parental Influence on Youth Participation in sport

Parents may be instrumental in determining children's sport involvement. "The family is the first and perhaps the most important social environment in a young person's life" (Eitzen & Sage, 1997, p.61). Besides, Smith (1986) indicated that physically disabled children were more parent-bound

than able-bodied children of comparable ages. Thus, understanding the youth sports participation entails the investigation of the salient parental influences.

Association between parental support, encouragement, role-modeling and socio-economic background of athletes' families with positive qualities including self-esteem, motivation, good work ethic, positive attitude, responsibility, ability to cope with stress, competitiveness, accomplishment, teamwork, discipline, commitment, and sportsmanship would be developed through youth participation in sport (Brustad, 1996; Hassandra, Goudas, & Chroni, 2003; Hirschhorn & Loughead, 2000; Sartor & Youniss, 2002; Prochaska et al., 2002).

Despite father and mother might play differential roles in sport socialization, researches (Brustad, 1996; Trost et al., 2002) found that father served as a major influence in the sport participation of both males and females. Besides, Anderssen and Wold (1992) indicated that the influence of children's sport participation by same-sex parents seemed to be

stronger than opposite-sex parents. Further, Coleman and Hendry (1990) stated that "The function of parents as role models during adolescence is a surprisingly significant one. It is undoubtedly, a popular assumption that, all things being equal, parents have a most important part to play during childhood than during adolescence" (p.85). The parental influence would be decreased with the increased age.

In brief, parent serves as an important role on children's sports lives with lots of supporting literatures. But the finding of Baxter-Jones & Maffulli (2003) conflicted that parental influence did not play a significant role in the move from recreational to intensive training would be investigated in further study.

STATEMENT OF PROBLEM

The purpose of this study was to determine factors affecting the commitment to sports training among athletes of the Inaugural FESPIC Youth Games. Specifically, the relationship between the parental influence and commitment score would be studied.

METHOD

Participants

The subjects of this study were athletes of age 12 to 19 who participated in the Inaugural FESPIC Youth Games. Only the Chinese-speaking countries and regions were chosen including China, Hong Kong, Macau and Taipei. There were totally 67 athletes were the potential pool of target sample. 57 (85%) of them returned the questionnaires including 36 males (63%) and 21 females (37%). In this study, types of respondents were divided into four categories: 1. Male and Female, 2.) Aged 12-15 and aged 16-19, 3.) Nationality and 4.) Sports event participated. Group comparisons on the commitment to sports training and perception of parents' attitudes to sport participation and skills of the subjects would be made.

Instrument and Procedures

The instrument used for this study was a combined and modified version of two sets of questionnaires. They were the questionnaire on Commitment to training (CT) (Fung, 1992a) and the Parental-initiated Motivational Climate (PMC) Questionnaire

(White, Duda & Hart, 1992). The questionnaire used in this survey was divided into three main parts. The first part was made up of 5 questions in which the demographic information like gender, age, nationality, sports event participated in the Games, and the time spent on sports training were asked. The second part contained 12 items related to their commitment to sports training. For example, the respondents were required to indicate the extent whether they agree or disagree that they looked forward to sports training. The final part was made of 2 core sections to examine subjects' perceptions of their mothers' and fathers' support to their sport participation or sports skills. A 5-point scale in Likert format anchored with 1 by strongly disagree and 5 by strongly agree in both the second and final part.

In order to ensure that the questionnaire was suitable for the study, a pilot study was conducted in order to ensure the questions were clearly stated and understandable. As there were some differences between the backgrounds of subjects of this study and subjects of pilot study, a questionnaire for pilot study was



regarding the demographic section. Twenty-four schools team members from Fanling Kau Yan College who aged 12-19 were selected to be the target subjects of the pilot study.

Cronbach alpha reliabilities were used to check the reliability of the modified questionnaire. An alpha value of 0.06 was established a priori as the lowest level of internal reliability acceptable. The Cronbach alpha reliability of CT questionnaire and PMC questionnaire were 0.644 and 0.915 respectively. As such, the modified questionnaire was reliable and accepted.

The modified questionnaires were distributed to the subjects during the period of the Inaugural FESPIC Youth Games. All finished questionnaires were collected immediately.

Statistical Analysis

Data of this study was analyzed by means of the Statistical Package for Social Science, version 12.0 (SPSS 12.0). Statistical procedures such as descriptive statistics, the independent group t-test and Pearson correlation were used for data collection and analysis. Level of significance of all statistical testing performed was set at the 0.05.

RESULTS

Demographic Data and Background Information of Respondents

Among 57 successful respondents, 36 (63%) were males and 21 (37%) were females. For the age groups, 28 (49%) were aged between 12 to 15 and 29 (51%) were aged between 16 to 19.

The unevenly distributed of represented regions was inevitable due to the differences in numbers of participants from respective

regions. Among the respondents, most of them were from China (49%) and Hong Kong (40%) and the remaining were from Macau (5.5%) and Taipei (5.5%). In addition, the percentage distribution of the sports event in the Games including athletics, badminton, boccia, swimming and table tennis were 22.8% (n=13), 8.8% (n= 5), 26.3% (n=15), 22.8% (n=13) and 19.3% (n=11) respectively. Besides, the mean hours spent on training weekly one month and two to three months before the games were 8.30 and 8.35 respectively.

Descriptive Statistics

Rankings of the mean scores on the items of commitment to sports training

The means of 12-items about commitment to sports training ranged from 1.98 to 4.09 (Table 1). All the means were larger than 3 except RCQ2 (Mean= 1.98), which was "I wish there were more enjoyable ways to stay fit other than training". Moreover, the first three ranks were "Sports training is vitally important to me", "I look forward to sports training" and "Life is much richer as a result of sports training".

Table 1
Rank order of 12 items related to Commitment to Sports Training among all respondents

	Commitment to Sports Training	Mean Scores	Rank Order
CQ.5	Sports training is vitally important to me	4.09	1
CQ.1	I look forward to sports training	4.02	2
CQ.6	Life is much richer as a results of sports training	3.95	3
RCQ.8	I dislike the thought of having sports training	3.93	4
RCQ.11	To miss a session of sports training sheer relief	3.82	5
RCQ.4	I do not enjoy sports training	3.81	6
CQ.12	Sports training is the most important event of my day	3.70	7
CQ.7	Sports training is pleasant	3.70	8
RCQ.3	Sports training is a burden	3.70	9
CQ.9	I would arrange or change my schedule to have sports training	3.37	10
RCQ.10	I have to force myself to participate in sports training	3.21	11
RCQ.2	I wish there were more enjoyable ways to stay fit other than training	1.98	12
Total		43.28	--

Rankings of the mean scores on the elements of perceived parental support

Table 2a and Table 2b showed that the mean score on the elements of both perceived mother support and perceived father support decreased eventually from Q1 (Mean= 4.26, 4.39) to Q5 (Mean= 3.28, 3.35). Moreover, the mean score of perceived mother support (Mean= 18.7) was slightly lower than perceived father support (Mean= 18.84).

Table 2a
Rank order of 5 elements related to Perceived Mother Support among all respondents

	Perceived Mother Support	Mean Scores	Rank Order
	I feelthat my mother...		
MQ.1	is satisfied when I improve after hard effort	4.26	1
MQ.2	is satisfied when I learn something new	4.04	2
MQ.3	pays attention to whether I am improving my skills	3.61	3
MQ.4	views making mistake as part of learning	3.51	4
MQ.5	values my learning one thing before teaching me another	3.28	5
Total		18.70	--



Gender and Age Group Differences in Total Commitment Score, Perception of Parental Support and the Time Spent on Training

Independent t-test was used to examine if there are significant differences in total commitment score, perception of parental support and the time spent on training. As the data collected from the options under variables "region represented" and "event participated" were too extreme, it was meaningless to produce any analysis with the inclusion of these two variables.

The results showed that there is no significant mean gender and age group difference in the total score of commitment to sports training, whilst the total commitment score of females (Mean= 44.24) was higher than males (Mean= 42.72) (see Table 3).

Regarding the perception of parental support, no gender or age group difference was found (Table 4a and 4b). However, the scoring of both perceived mother and father support of younger group (Mean= 18.89, 18.93) were slightly higher than the older age group (Mean= 18.52, 18.76). Further, higher scoring in opposite-sex parental support was also found in this study.

In Table 5, significant mean gender difference in the training time spent per week two to three months before the games ($t=-2.05$, $p=.046$), while females (Mean= 10.52) had greater mean training time than males (Mean= 7.08). Conversely, there was no significant mean difference between two age groups in the time spent on training.

Table 2b
Rank order of 5 elements related to Perceived Father Support among all respondents

Perceived Father Support		Mean Scores	Rank Order
I feel that my father...			
FQ.1	is satisfied when I improve after hard effort	4.39	1
FQ.2	is satisfied when I learn something new	3.95	2
FQ.3	pays attention to whether I am improving my skills	3.75	3
FQ.4	views making mistake as part of learning	3.40	4
FQ.5	values my learning one thing before teaching me another	3.35	5
Total		18.84	--

Table 3
Independent-sample T-test for the Total Commitment Score between Gender and Age Group

	n	Mean	SD	Mean diff.	t	p
TotalCQ						
Male	36	42.72	7.52	-1.52	-.811	.421
Female	21	44.24	5.35			
12-15	28	43.86	5.75	1.13	.63	.534
16-19	29	42.72	7.73			
* $p<0.05$						

Table 4a
Independent-sample T-test for the Perceived Mother Support (PMS) between Gender and Age Group

	n	Mean	SD	Mean Diff.	t	p
PMS						
Male	36	18.81	2.42	.28	.35	.728
Female	21	18.52	3.67			
12-15	28	18.89	2.66	.38	.48	.631
16-19	29	18.52	3.18			
* $p<0.05$						

Table 4b
Independent-sample T-test for the Perceived Father Support (PFS) between Gender and Age Group

	n	Mean	SD	Mean Diff.	t	p
PMS						
Male	36	18.78	2.80	-.17	-.24	.814
Female	21	18.95	2.50			
12-15	28	18.93	2.32	.17	.24	.813
16-19	29	18.76	3.01			
* $p<0.05$						

Table 5
Independent-sample T-test for the time spent on training between Gender and Age Group

	n	Mean	SD	Mean diff.	t	P
Time spent on training/ week						
1 month before						
Male	36	7.08	5.68	-3.30	-1.95	.056
Female	21	10.38	6.90			
12-15	28	9.82	5.77	2.99	1.83	.073
16-19	29	6.83	6.55			
2-3 months before						
Male	36	7.08	5.70	-3.44	-2.05	.046*
Female	21	10.52	6.80			
12-15	28	9.86	5.76	2.96	1.81	.076
16-19	29	6.9	6.55			
* $p<0.05$						

Mean correlation between total commitment score and other aspects

In this study, the relationships of time spent on training, perceived mother support and perceived father support on commitment to sports training were examined by mean correlation analysis respectively. The results showed that both the time spent on training one month before the games ($r = .314, p = .017$) or the time spent on training two to three months before the games ($r = .339, p = .010$) was positive correlated with the commitment to training had. It implied that the more time spent on sports training, the higher the commitment to sports training (see Table 6a).

Finally, Table 6b showed that there was no correlation between the commitment to sports training and the perceived mother support, but positive correlation was showed with the perceived father support ($r = .408, p = .002$). The higher perceived father support, the higher the commitment to sports training.

Table 6a
Correlation between the Time spent on Training and Total Commitment Score

Total Commitment Score	Pearson Correlation	P
Time spent on training		
1 month before the games	.314	.017*
2-3 months before the games	.339	.010**
**Correlation is significant at the .01 level (2-tailed)		
*Correlation is significant at the .05 level (2-tailed)		

Table 6b
Correlation between the Perceived Parental Support and Total Commitment Score

Total commitment score	Pearson Correlation	P
Perceived mother support	.238	.075
Perceived father support	.408	.002**
**Correlation is significant at the .01 level (2-tailed)		

DISCUSSION

The aim of this study was to investigate the commitment to sports training, the perceived mother and father support among the athletes of the Inaugural FESPIC Youth Games. As elite sports for physically disabled has already grown significantly and its participation becomes more aware of the benefits of sport, it is necessary for coaches and parents to know the reason for athletes' continued and discontinued sports involvement.

The obtained mean of total commitment scored 43.28 from the present study was similar with Fung's study (1992a) (Mean= 44.66), which also investigated the athletes with physical disabilities.

Regarding the perceived parental support, there was no difference in the mean scores among the five items of perceived parental support but they decreased eventually. It was consistent with the study of the parent-initiated motivational climate (White et al., 1992). Moreover, the result of higher mean score in perceived father support than mother's implied fathers tended to be more supportive in their children's sport participation, which was also consistent with past researches (Brustad, 1996; Trost et al., 2002).

Table 4a and 4b showed that either gender or age groups had no significant mean difference in the perceived parental support. However, it was

interesting that the results showed the perceived opposite-sex parental support was larger than perceived same-sex parental support. The results were inconsistent with the finding that the influence of same-sex parents was stronger than opposite-sex parents on sports participation (Anderssen & Wold, 1992). The questions about same-sex parental influence and opposite-sex parental influence were suggested to be investigated in further studies. Further, the mean score of perceived parental support of younger age group was higher than the older age group. The finding was consistent with previous research (Coleman & Hendry, 1990; Fredericks & Eccles, 2004), which stated that there was an assumption that parents had a more important part to play during childhood than adolescence when all things being equal.

In this study, an unexpected finding was found that mean differences were showed that females had more training time in this period than males. It was because some researches (Anderssen & Word, 1992) found that physical activities participation of males time was more than females even the activity level was not significant influenced by gender. But the finding in this study could be explained by following reasons: 1) the time in this study meant training time but not the physical activities time; 2) the findings that females' physical level was lower than males might not be applied for elite sports; and 3) the occurrences might be dependent on the variable studied. Thus, gender differences were found in the training time in this study.

Although there was no significant mean gender and age group difference in the total

commitment score, it was found that females had higher commitment level than the males due to the more training time spent (Carpenter et al., 1993; Fung, 1992a; Scanlan et al., 1993a). As hypothesized, greater personal investment would promote greater sport commitment (Carpenter et al., 1993; Jeon & Ridinger, 2009), significant correlation ($p < .05$) was found between training hours and commitment level. The positive relationship indicated that more the training hours, higher scoring in the commitment to sports training which was consistent with previous studies (Fung, 1992b; Jeon & Ridinger, 2009).

Many literatures (Eitzen & Sage, 1997; Hassandra, Goudas, & Chroni, 2003; Hirschhorn & Loughhead, 2000) recognized parents as an instrument in determining youth sport involvement, only significant correlation ($p < .05$) was showed between the perceived father support and the commitment level in this study. It could be explained that father and mother might play differential roles in sport socialization, the extent of influence by mother and father might also be different. Father served as a major role and had more influence on the sports participation of both males and females (Brustad, 1996; Greendorfer & Lewko, 1978; Trost et al., 2002).

On the contrary, parental support for sport participation did not have positive outcome at all. Hirschhorn and Loughhead (2000) indicated that excessive support from parents might cause overbearing and stress which were negative for children. This "support" gives a concept for their children that they have to continue their training, but nobody know that whether their children really want to keep it on or not participation (Hirschhorn &

Loughhead, 2000; Sheehy, 2006; Udry, Gould, Bridges & Tuffey, 1997). As such, although the positive correlation was found in this study, it could not represent that the parental support would result in positive effects for their children. Hence, more items could be added in the perceived parental support in further studies in order to have more complete analysis.

RECOMMENDATIONS FOR FURTHER STUDIES

In this study, there is still room for improvement and some recommendations are made in order to enhance the development and implementation of related issue.

1. This study only targeted at Chinese athletes aged from 12 to 19 in Inaugural FESPIC Youth Games and thus further studies could be done on the other age groups, races and sport events.
2. With respect to the current researches, studies are under way to achieve a deeper and more comprehensive understanding of these variables through in-depth interviews with elite performers, as well as expanding the range and complexity of questionnaire items to access this topic.
3. Although it was found that higher the perceived father support results in higher commitment level, it does not mean the perceived father support is positive for their children sports training at all. The negative effects should be examined in further studies.
4. Apart from parental supports, other supports of socializing agents such as government, peers, school, coach and organization should also be examined in order to have a more comprehensive



understanding of factors affecting the commitment level of athletes or people with physical disabilities in sport participation.

LIMITATIONS OF THE STUDY

The study was limited to the following aspects:

1. The findings of this study would be limited to the validity and reliability of the questionnaire.
2. The subjects for this investigation were selected from the 2003 Inaugural FESPIC Youth Games; the results of this study cannot be accurately generalized beyond this area.
3. The subjects were of different level of disabilities.
4. As the scope of the subjects was limited to those physically disabled and Chinese-speaking, the research could not represent all athletes in the games.
5. The subjects were volunteers and might respond differently than non-volunteer subjects.
6. There would be no control over whether the subjects were honest in completing the questionnaires.
7. The subjects filled the questionnaire once only. **RMA**



References

- Alexandris, K., Zahariadis, P., Tzorbatzoudis, C., Grouios, G., & Thessaloniki. (2002). Testing the Sport Commitment Model in the context of exercise and fitness participation. *Journal of Sport Behavior*, 25, 217-230.
- Allen, J. B. (2003). Social motivation in youth sport. *Journal of Sport & Exercise Psychology*, 25, 551-561.
- Anderssen, N. & Wold, B. (1992). Parental and peer influences on leisure-time physical activity in young adolescents. *Research Quarterly for Exercise and Sport*, 63(4), 341-348.
- Baxter-Jones, A. D. G., & Maffulli, N., (2003). Parental influence on sport participation in elite young athletes. *Journal of Sports Medicine and Physical Fitness*, 43(2), 250-255.
- Bell, D. (2003). *International Games Archive*. Retrieved January 20, 2004, from <http://www.internationalgames.net/news/1203/037.htm>
- Brustad, R. J. (1996). Attraction to physical activity in urban school children: Parental socialization and gender differences. *Research Quarterly for Exercise and Sport*, 67, 316-323.
- Carpenter, P. J., Scanlan, T. K., Simons, J. P., & Lobel, M. (1993). A Test of Sport Commitment Model Using Structural Equation Modeling. *Journal of Sport and Exercise Psychology*, 15, 119-133.
- Coakley, J., & White, A. (1992). Making decision: Gender and sport participation among British adolescents. *Sociology of Sport Journal*, 9, 20-35.
- Coleman, J. S., & Hendry, L. (1990). *The nature of adolescence*. London: Routledge.
- Davison, K. K., Downs, D. S., & Birch, L. L. (2006). Pathways Linking Perceived Athletic Competence and Parental Support at Age 9 Years to Girls' Physical Activity at Age 11 Years. *Research Quarterly for Exercise and Sport*, 73(1), 23-31.
- DePauw, K. P. (1990). Current international trends in research in adapted physical activity. In T. Williams, L. Almond, & A. Sparkes (Eds), *Sport and Physical Activity: Moving towards excellence* (pp. 221-292). London: E & FN Span.
- Eitzen, S. D., & Sage, G. H. (1997). *Sociology of North American sport*. Dubuque, IA: Times Mirror Higher Education Group.
- FESPIC Federation (2003). *FESPIC Federation*. Retrieved January 17, 2004, from <http://www.taiyoonio.or.jp/fespic/>
- Fredericks, J. A., Eccles, J. S. (2004). Parental influences on youth involvement in sports. In M. R. Weiss (Ed), *Development sport and exercise psychology: A lifespan perspective* (pp. 145-164). Morgantown, WV: Fitness Information Technology.
- Fung, L. (1992a). Commitment to training among wheelchair marathon athletes. *International Journal of Sport Psychology*, 23(2), 138-146.
- Fung, L. (1992b). Participation motives in competitive sports: A cross-cultural comparison. *Adapted Physical Activity*, 9, 114-122.
- Greendorfer, S. L., & Lewko, J. H. (1978). Role of family members in sport socialization of children. *Research Quarterly for Exercise and Sport*, 42(2), 146-152.
- Guttmann, L. (1976). *Textbook of sport for disabled*. Oxford, England: Alden Press.
- Harter, S. (1978). Effectance motivation reconsidered: Toward a developmental model. *Human Development*, 21, 34-64.
- Hassandra, M., Goudas, M., & Chroni, S. (2003). Examining factors associated with intrinsic motivation in physical activity: A qualitative approach. *Journal of Sport & Exercise*, 211-223.
- Hashim, H., Grove, J. R., & Whipp, P. (2008). Validating the youth sport enjoyment construct in high school physical education. *Research Quarterly for Exercise and Sport*, 79(2), 183-194.
- Haywood, K. M., & Getchell, N. (2001). *Life span motor development*. (3rd ed.). Champaign, IL: Human Kinetics.
- Hirschhorn, D. K., & Loughead, T. O. (2000). Parental impact on youth participation in sport: The physical educator's role. *Journal of Physical Education, Recreation & Dance*, 71(9), 26-29.
- Hong Kong Sports Development Board (2001). Research reports: Sport participation survey 2001. Retrieved March 5, 2004, from http://www.hksdb.org.hk/hksdb/front/e_pub1_nr2.html
- Hong Kong Sports Development Board (2003). Hong Kong to Host Inaugural FESPIC Youth Games. *Sport Scene*, 19, 11.
- Jeon, J. H., & Ridinger, L. L. (2009). An Examination of Sport Commitment of Windsurfers. *Journal of Sport Behavior*, 32(3), 325-338.
- Johnson, M. P. (1982). Social and cognitive features of the dissolution of commitment to relationships. In S. Duck (Ed.), *Personal relationships: Vol. 4. Dissolving personal relationships* (pp. 51-73). London, Academic Press.
- Kelly, H. H. (1983). Love and community. In H. H. Kelly, E. Bercheid, A. Christensen, J. H. Harvey, T. L. Huston, G. Levinger, E. McClintock, L. A. Peplau & D. R. Petersen (Eds.), *Close Relationships* (pp. 265-314). New York: W. H. Freeman and Company.
- Pargman, D. (1997). *Understanding sport behavior*. Upper Saddle River, NJ: Prentice Hall.
- People's Daily Online (2003, December 17). *Inaugural FESPIC Youth Games to be Held in HK Next Week*. Retrieved from January 1, 2004, from http://english.peopledaily.com.cn/200312/17/eng20031217_130580.shtml#
- Prochaska, J. J., Rodgers, M. W., & Sallis, J. F. (2002). Association of parent and peer support with adolescents physical activity. *Research Quarterly for Exercise and Sport*, 73, 206-210.
- Sallis, J. F., Prochaska, J. J., & Taylor, W. C. (2000). A review of correlates of physical activity of children and adolescents. *Medicine and Science in Sports and Exercise*, 32, 963-975.
- Sartor, C. E., & Youniss, J. (2002). The relationship between positive parental involvement and identity achievement during adolescence. *Adolescence*, 37, 221-234.
- Scanlan, T.K., Simons, J.P., Carpenter, P.J., Schmidt, G. W., & Keeler, B. (1993a). An introduction to the Sport Commitment Model. *Journal of Sport and Exercise Psychology*, 15, 1-15.
- Scanlan, T.K., Simons, J.P., Carpenter, P.J., Schmidt, G. W., & Keeler, B. (1993b). The Sport Commitment Model: Measurement Development for the Youth- Sport Domain. *Journal of Sport and Exercise Psychology*, 15, 16-38.
- Scanlan, T. K., Stein, G. L., & Ravizza, K. (1989). An in-depth study of former elite figure skater: II. Sources of enjoyment. *Journal of Sport & Exercise Psychology*, 11, 65-83.
- Sheehy, D. A. (2006). Parents' perceptions of their child's 5th grade physical education program. *Physical Educator*, 63, 30-37.
- Smith, R. W. (1986). Physically disabled children and parental time use. *Journal of Leisure research*, 18(4), 248-258.
- The Inaugural FESPIC Youth Games Organising Committee (2004). *The Inaugural FESPIC Youth Games*. Retrieved January 14, 2004, from <http://www.fespicyouthgames.org/>
- Trost, S., Pate, R., Sallis, J., Freedson, P., Taylor, W., Dowda, M. et al. (2002). Age and gender differences in objectivity measured physical activity in youth. *Medicine & Science in Sport & Exercise*, 34, 350-355.
- Udry, E., Gould, D., Bridges, D. & Tuffey, S. (1997). People helping people? Examining the social ties of athletes coping with burnout and injury stress. *Journal of Sport & Exercise Psychology*, 19, 368-395.
- Wankel, L. M., & Sefton, J. M. (1989). A season-long investigation of fun in youth sports. *Journal of Sport & Exercise Psychology*, 11, 355-36.
- White, S. A., Duda, J. L., & Hart, S. (1992). An exploratory examination of the parental-initiated motivational climate questionnaire. *Perceptual and Motor Skills*, 75, 875-880.



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Introduction

An organizations' culture gives rise to meaning for each and every individual within the context of its operations, programs and services it offers and also the general image it projects to its stakeholders. This is true for all stakeholders of any recreation, park and leisure service organization including its employees, participants, collaborators and other partners which are impacted by its efforts. Schein (1985; 2004, p. 17) is thought of as the most influential proponent of the study of organizational cultures in contemporary management thinking. He has inferred that the idea of the study of culture can be applied to any social unit especially all types of organizations including recreation, parks and leisure services. As Edginton, Hudson, Lankford and Larsen (2008) have written, "... When we think of an organization's culture, we think of its basic assumptions, in other words, the way it views itself and relates to its environment" (p. 68).

What is meant by an organizations' culture? An organizations' culture is often reflected in its "... symbols, ideologies, languages, beliefs, rituals and myths" (Pettigrew, 1979, p. 572). Supporting this notion, Miller (2009) suggests that an organizations' culture is "... a complicated patchwork of values, symbols and behaviors" (p. 79). The culture of an organization helps to define "... expected behaviors and relationship between and among employees and those served by the recreation, parks, and leisure service organization" (Edginton, et al 2008, p. 68). The culture of one organization may be readily identifiable whereas another is more difficult to understand, often fragmented and lacking definition. As David Packard one of the two founders of Hewitt-Packard Co. has noted, "... a great corporate culture is a fabric of rules, experiences, myths and legions, relationships and rituals as complex as any real family — and just as difficult to describe to any outsider" (Malone, 2007, p. 124). However, as Deal and Kennedy

(2000) teach us, "culture is the glue that holds an organization together" (p.22). These authors note that there five key components including values and beliefs, rituals and ceremonies, stories (cultural oral history), heroic figures and the cultural (communications) network (pp. 4-9). Edginton (1987) has written "... it affects practically everything — from who gets promoted and what decisions are made, to how employees dress and what sports they play" (p. 7).

Eisenberg and Riley (2001) have suggested that "... the speed at which organizational culture emerged as a significant lens for communication scholars and other academics to examine or otherwise engage with organizations and institutions was astounding" (p. 291). The study of the concept of organizational culture as a social construct has been under-represented in the professional literature of the recreation, parks and leisure services field. Edginton (1987) introduced the idea of the need to examine an organization's culture in the recreation, parks and

leisure services field. He referred to an organization's culture as "... a style or method of operation ...[that]...will directly shape the relationships occurring within the organization and will impact directly upon the individuals, groups and other constituencies that it serves." He also noted that "... the culture of a ...[recreation, park and]... leisure service organization may be the most powerful factor influencing its success or failure" (p.7). Colyer, Soutar and Ryder (2000) studied the organizational cultures of local government recreation authorities in Australia. Using a framework that included four models of ideal types of organizational cultures, they examined various elements and reported on how the respondents viewed the relationship between perceptions of organizational effectiveness and culture. More recently, Edginton, Hudson, Lankford & Larsen (2008), have noted that "... some recreation, parks and leisure service organizations have very strong and easily identifiable cultures. Others are more fragmented and difficult to understand" (p. 68).

This study proposes a framework for the study of an organization's culture. A synthesis of the related literature reveals multiple elements that can be used to analyze the culture of an organization. In turn, these elements have been applied to an innovative youth organization known as *Camp Adventure™ Child and Youth Services*. The application of the framework will demonstrate how the elements of an organizational culture can be identified in order to provide a sense of structure and meaning within which it operates. As such, examining and understanding the culture of an organization can, in fact, serve the needs of the

organization, promote consistency and provide a platform to communicate to employees, participants and other stakeholders its intentions.

What is Organizational Culture?

What is an organization's culture? How is the concept of organizational culture defined in the management and recreation, parks and leisure services literature? Although the framing for the study of organizational culture can be traced to the Hawthorne studies of the 1930's, it wasn't until the 1970's that research focused on the concept of "organizational culture." Pettigrew (1979) conducted a seminal research study focused on organizational culture aimed at investigating ...

... How purpose, commitment and order are generated in an organization through both feelings and actions of its founder and through the amalgam of beliefs, ideology, language, ritual and myth we collapse into the label of organizational culture (p 572)

Schein (2004, p 17) has suggested that the culture of an organization can be defined as "... a pattern of shared basic assumptions that was learned by a group as it solved its problems of external adaptation and internal integration, that has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems." Can the manager, in fact, be the creator and manager of meaning through the



use of such symbols, languages, beliefs, visions, ideologies and myths? Harrison and Stokes (1992, p. 1) suggest that a "... organizational culture is the pattern of beliefs, values, rituals, myths and sentiments shared by members of an organization." Thus, the basic assumptions within a recreation, park and leisure service organization that exist may, in fact, be shaped, taught and, in effect, managed. As a result, understanding the culture of an organization becomes a very important strategy in the success or failure of recreation, park and leisure service managers.

As previously indicated, there are few references defining organizational culture in the recreation, park and leisure services literature. Edginton (1987) refers to the culture of a recreation, park and leisure service organization as the sum total of the behavior of its employees. He notes that a recreation, park and leisure service organization "... that has not taken the opportunity to identify and define the elements that contribute to its culture runs the risk of not being able to directly



influence and manage these variables" (p. 7). As Colyer, Soutar, and Ryder (2000) write an organization culture is "enduring and difficult to change" (p. 73). These authors also note that in a "... time of short term contracts, rapid and constant change, managers of park and recreation services need to be aware of the importance of organizational culture and its latent impact" (p. 73). Ibrahim and Cordes (2003) note that "... by understanding the components of leisure service agencies' culture, the recreation professional can best adjust to the agency" (p 23). They suggest that an organizations' culture consist of two components; the first includes shared values, norms, myths, symbols and taboos and the second are the observable ways in which individuals of the organization express themselves formally or informally (p 22).

Hurd, Barcelona and Meldrum (2008) write that an organizational culture can be thought of as "... shared norms, values, beliefs and expectations that bind employees together and distinguish the agency from others" (p 102). Edginton, Hudson, Lankford and Larsen (2008) suggest that "... when we think of an organizations' culture, we think of its basic assumptions; in other words, the way it views itself and relates to the environment" (p. 68). They go on to note that "... a recreation, parks and leisure services organizations' culture can be planned or it can occur by happenstance". However, these authors suggest that "... because the culture of any recreation, parks and leisure service organization can be managed, it can be planned, taught and transmitted to its employees" (p. 69). Confirming this view, Schein (1985, p. 9) suggests that as basic assumptions are invented, discovered or developed, they can

be taught to others as the correct way to perceive, think and feel as members of the organization.

Frameworks for Studying Organizational Culture

A number of frameworks have been proposed for diagnosing and/or explaining the culture of an organization. As Miller (2008, p 81-84) has suggested, there are two views that can be embraced when describing an organizations' culture. The first is known as the prescriptive view of organizational culture and "... looks at culture as something an organization has." As noted, Deal and Kennedy (1982) suggests that there are five key components: values and beliefs, rituals and ceremonies, stories (cultural oral history), heroic figures and the cultural (communications) network (pp. 4-9). Peters and Waterman (1982) suggests that there are themes such as an organizations bias for action that contribute to an organizations' culture. The prescriptive approach suggests that the culture of an organization can be identified, managed and taught to employees as a way of improving productivity.

The second approach is known as the descriptive view of organizational culture and "... considers culture as something an organization is." This approach attempts to view an organizations' culture "... as the emerging and sometimes fragmented values, practices, narratives, and artifacts that make a particular organization 'what it is.' Louis (1980), Putnam (1983), Martin (1992), and Martin & Frost (1996) suggest that an organizations' culture is complicated, emergent and not unitary. When viewing the complexity of organizational cultures, there are a wide variety of markers that may be used to study the topic include rites (Beyer and Trice, 1987), ceremonies (Dandridge (1986), values and belief systems (Quinn and McGrath, 1985), metaphors (Smith and Eisenberg, 1987), stories (Boje, 1991), and communication rules (Schall, 1983; Morley and Shockley-Zalabak, 1991; and Shockley-Zalabak & Morley, 1994).

Schein (2004, 1992) suggests a framework that can be used to sort out various elements of an organizations' culture. He suggests that there





are three distinct elements: artifacts, espoused values and basic assumptions. Building on Schein framework, and upon other elements found in the literature, the authors have identified five (5) basic elements that can be applied contextually in this case study to assist in identifying, defining and transmitting the culture of the organization analyzed. The framework includes the following: 1) relevant/social constructs; 2) social knowledge; 3) practices; 4) vocabulary; and 5) metaphors. Table 1 provides an explanation of each of these elements. *Relevant/social constructs* that can be thought of as the values, belief and intentions of the organization and are often reflected in a variety of structures, formats, strategies and rights and rituals. *Social knowledge* is helps answer the question, "what does the organization do and how does it do it?" This concept helps frame how individuals interact with participants including expectations for exchanges. *Practices* are the day-to-day operations as reflected in techniques, methods, processes, activities, incentives and/or rewards. *Vocabulary* refers to the unique language or nomenclature found within an organizations' culture. *Metaphors* are representations that provide meaning to the work of the organization, often offered through stories or some type of exposition.

In order to decipher the organizational culture of *Camp Adventure™ Child and Youth Services*, the authors, through observation, have analyzed these elements. However, to provide the reader with an understanding of the context within which *Camp Adventure™ Child and Youth Services* operates, first a general description of the organization will be offered. Following will be more detailed

Table 1
Framing the Elements of Organizational Culture

Element	Definition
Relevant / social constructs	Relevant/social constructs reflect the values, beliefs, intentions that are used to convey meaning within the organization. They are also reflected in the rituals and rights of the organization and can be observed in the unique types of structures, formats and strategy used as vehicles to move forward basic concepts. Rituals within an organizational context can occur for induction and support the individual as they move through various stages or passages within the organization. These are often reflected in ceremonial acts within the organization. Often, meaning is conveyed in a unique context or way in which information and/or desired social/emotional commitment is solicited from individuals. (Deal and Kennedy, 1982; Beyer and Trice, 1987; Pananowsky and O'Donnell-Trujillo, 1982; Dandridge, 1986)
Social knowledge	This term refers to what the organization is engaged in and how these tasks are carried out. In other words, social knowledge answers the question "what we do and how do we do it." There are unique and specific ways, for example, that govern the way activities are offered, led and taught. Knowledge of these unique procedures and methods result in the creation of unique patterns of interactions between the leader and the participant. Such facts or principles are framed in terms of actions when relating to others. In human service organizations that place a great deal of emphasis on quality interactions between the service provider and the participant, knowledge of the expectations for such interactions coupled with how desired ends or benefits are actually produced are within this realm. (Miller, 2008, 1999; Pananowsky and O'Donnell-Trujillo, 1982)
Practices	Practices can be thought of as the day-to-day occurrences engaged in by the various stakeholders within an organization. Practices are prescribed by routine procedures performed regularly in the carrying-out of daily responsibilities by those at all levels of an organization. Practices are detailed methods of procedure faithfully, regularly and properly followed. The strict adherence to conventional forms and practices illustrates the values and traditions of an organization. (Deal and Kennedy, 1982; Beyer and Trice, 1987; Pananowsky and O'Donnell-Trujillo, 1982; Dandridge, 1986)
Vocabulary	The words, phrases, signs and symbols that are distinct and unique to the organization are an important part of its culture. Such language is often used and known exclusively by member of the organization. It is a form of inter-dialogue., often only known to the members of an organization. It is the organizations' jargon and language that is found in use in its day-to-day practices. It is the nomenclature of the organization that often carries deep and symbolic meaning to its members when utilized. (Pananowsky and O'Donnell-Trujillo, 1982; Schall, 1983; Morley & Shockley Zalabak, 1991, 1994; Ashkanasy, Wilderom and Peterson, 2000)
Metaphors	A metaphor is a representation often used to reflect and/or give meaning to one's experience. In the context of an organization's culture, metaphors represent symbolically, and often literally, how individuals view and make sense of their experience within an organization. Metaphors are employed within organizations to transmit values, meanings, understandings, practices and other important cultural elements. Metaphors are very powerful ways of communicating the vision and benefits of the work of an organization in ways that provide great meaning to individuals, often producing a strong social/emotional commitment that binds organizational members to its mission. (Pananowsky and O'Donnell-Trujillo, 1982; Smith and Eisenberg, 1987; Boje, 1991; Pananowsky and O'Donnell-Trujillo, 1982; Ashkanasy, Wilderom and Peterson, 2000; Miller, 2008, 1999; Deal and Kennedy, 1982)

information regarding the ways in which the five elements of organizational culture are addressed within the *Camp Adventure™ Child and Youth Services* program.

Camp Adventure™ Child and Youth Services: A Program of Excellence

A nationally award winning model demonstration program, *Camp Adventure™ Child and Youth Services* was founded in 1985. The program incorporates the principles of service learning into the educational experiences of individuals. Promoting high-quality, high-impact program and services for children and youth, *Camp Adventure™ Child and Youth Services* encourages global awareness and cultural sensitivity as well as diversity and inclusion. The program is dedicated to integrating theory with practice. As such, the program serves as a leadership development program for college and university students. Over 15,400 college and university students have participated in *Camp Adventure™ Child and Youth Services* during the life of the program.

Camp Adventure™ Child and Youth Services is offered at 150 sites in Asia, Europe, and South America and serves 750,000 children and youth annually based on daily participation rates. The program has been successfully implemented in 28 countries/US territories including Argentina, Bahrain, Belgium, Bermuda, Cuba, Denmark, Germany, Greece, Hong Kong, Iceland, Japan, Korea, Kuwait, Macau, Mexico, the Netherlands, Panama, Portugal, The Peoples' Republic of China, Russia, Singapore, Spain, Taiwan, Turkey, the United Kingdom, and the United States including Guam



and Puerto Rico.

A key feature of the *Camp Adventure™ Child and Youth Services* program is the staff development programs known as *Camp Adventure™ College* offered at 14 colleges and universities throughout the United States. Partnerships have been intentionally sought as a way of promoting diversity and inclusion. The *Camp Adventure™ College* program provides an extensive staff development program emphasizing acquisition of theory, applied and/or engineered skills and program values.

Camp Adventure™ Child and Youth Services is responsible for generating its own support and not in any way supported by state resources. The program is responsible for full cost recovery of its expenses. As such, *Camp Adventure™ Child and Youth Services*, from an operational perspective, cannot be accurately described as a government-like organization. Nor would it be appropriate to define it as a nonprofit organization in that it does not depend on charitable

contributions, donations or gifts. It is like a nonprofit in that it has a strong socially responsible mission focused on uplifting children and youth as well as developing leadership skills within its professional staff of college and university age individuals. It would be more accurate to describe *Camp Adventure™ Child and Youth Services* as a social business (Yunus, 2007, p. 21). Such entrepreneurial organizations are established "... not to achieve unlimited personal gain but to pursue specific social goals ... [they] ... are cause driven rather than profit driven with the potential to act as a change agent for the world" (p. 21-22).

Camp Adventure™ Child and Youth Services has followed a model of professional education in the development of its staff resources. Edginton, DeGraaf, Dieser and Edginton (2005) have written that professional knowledge consists of three components "... information drawn from scientific disciplines, appropriate values and applied or engineered skills"(p. 425). A professionalized body of



Table 2
Camp Adventure™ Child and Youth Services
Staff Development Matrix

Philosophical, Historical & Organizational Cultural Components	Leadership & Program Development Skills & Competencies	Child/Youth Development Theoretical Knowledge
<ul style="list-style-type: none"> • What is Camp Adventure • Vision Statement • Vision & Relationship to Quality and Excellence • Vision & Relationship to TQP • Mission Statement • Values & Traditions • Motto • History • The Camp Adventure Youth Services Way • The Essence of Camp Adventure • Camp Adventure: A Sense of Purpose • A Winning Viewpoint • Camp Adventure Image Guidelines 	<ul style="list-style-type: none"> • Leading Songs the Camp Adventure Way • Leading Games the Camp Adventure Way • Generic Day Camp Program Design • 10 X 10 Leadership Competencies • Special Interest Areas TQP • Creating the Vision, Environment and Connection • Use of Checklists • Contractor, Partner, Perspective • Conflict Resolution • Evaluation Strategies • Risk Management • Behavior Management • Blitz & Closing 	<ul style="list-style-type: none"> • NSACA Standards • Safe Module • Guidance Module • Healthy Module • Program Environment Module • Professionalism • 4-H Curriculum Guidelines • Special Needs Children • Safety on the Playground • Facility Hazards • Program Hazards

knowledge reflecting theory, values and skills has been applied conceptually to the organization and implementation of Camp Adventure™ Child and Youth Services staff development programs. Table 2 presents a matrix that describes each of these components. Theoretical knowledge focuses primarily on acquiring knowledge on child and youth development. Philosophical, historical and organizational cultural components are the value elements of the development experience. The leadership and program development skills and competencies provide application by teaching skills required for functioning as a leader and programmer.

Organizational Culture and Camp Adventure™ Child and Youth Services

Camp Adventure™ Child and

Youth Services program sought to create stronger, deeper commitment on the part of individuals participating in the organization. It is desirable to assist individuals participating in the program to have a greater understanding and sense of the work of the organization. By identifying, defining and transmitting the culture of the organization, Camp Adventure™ Child and Youth Services is able to provide individuals with a greater sense of structure and meaning within which they operate. From an organizational perspective, Camp Adventure™ Child and Youth Services seeks to create a sense of awareness of its organizational culture. The goal of Camp Adventure™ Child and Youth Services is to get the right players on the field on the right time (Welch and Welch, 2005) and to provide meaningful, relevant, high impact, high quality services for children and youth worldwide. At the same

time, Camp Adventure™ Child and Youth Services is deeply committed to the growth and development of its staff as the program is also framed as a service learning educational opportunity for college and university students.

The culture of an organization is rooted in its history, traditions and practices. Such elements can be a very powerful tool in creating a sense of culture within an organization. To be successful, this sense of culture needs to be evident throughout the organization from its initial efforts at recruiting to and through program delivery. The goal of developing and/or maintaining an organizational culture is to create consistency as defined by the organization. Assisting the staff of Camp Adventure™ Child and Youth Services to understand and embrace the culture of the organization to carried out through a process of socialization. As individuals are exposed to and learn about the organizations' culture, they are encouraged to adopt a set of shared beliefs and values. Socialization leads to consistency and occurs when the individual has been mainstreamed into the organization so that he or she is able to operate successfully within the context of the organization as defined by the organization.

As Miller (2009, p. 135) has offered and Camp Adventure™ Child and Youth Services have adapted, there are three stages to the process of socialization: 1) anticipation; 2) encounter; and 3) transformation (See Table 3).

The process of socialization helps individuals adapt to organizational life and learn and reflect its culture. Anticipation refers to building excitement so that individuals look forward to their involvement in the

organization, and in this case, their participation in *Camp Adventure™ Child and Youth Services*. The encounter is aimed at creating for the individual an unexpected moment that peaks, heightens or deepens an individual's interest in participating and/or affirming their commitment to the values of the organization. Finally, transformation occurs when the individual has made the "transition from outsider to insider" (p. 136). All of the primary formats or structures for recruitment, staff development and program implementation have embedded within these three elements.

In order to assist staff members of *Camp Adventure™ Child and Youth Services* in understanding the culture of the organization, this framework was distilled from the literature to capture its essence. The framework was combined with the *Camp Adventure™ Child and Youth Services* Staff Development Matrix as an overlay for positioning components of professional knowledge required for successful program development and implementation. This was done to, first, to identify and then organize various fragmented cultural elements into a coherent framework that would enable such concepts to be transmitted to others, including staff, participants and other important stakeholders. This provided a platform to teach and reinforce, as well as to advance the organizational culture of *Camp Adventure™ Child and Youth Services*. As noted, Table 1 identifies five basic elements drawn from the research and professional literature regarding organizational culture. In select elements, specific terminology from the research literature has been utilized, whereas in others, a unique application identifying concepts

Table 3
Process of Socialization to Organizational Culture

Processes	Definition
Anticipation	The process of anticipation creates a set of expectations in the mind of an individual. When anticipating, individuals may generate feelings of excitement, hope, eagerness and/or keenness for their involvement. Creating a sense of anticipation provides an opportunity for individuals to look forward to their involvement in an event. It involves setting the stage for one's actual involvement intellectually and emotionally.
Encounter	An encounter can be thought of as a moment of engagement. Such moments are often unexpected, providing heightened awareness, insight and opportunities to be faced with or exposed to essential elements that help define one's experience in the context of an organization's culture. Systematically designed and planned encounters can serve to bring into focus critical or essential elements to which one must be socialized in order to be successful as defined by the organization.
Transformation	Transformation is change. In the context of an organization, to be transformed implies that one will change, alter or even convert oneself in a marked fashion; that an individual will change their nature, function, form, appearance or condition. The role of socializing individuals to an organization's culture involves transforming their behaviors in such a way as to promote commitment and action in a consistent fashion to its vision, mission, beliefs, values and practices.

has been provided to help effectively identify and transmit key organizational cultural elements.

In selecting elements to define and describe the culture of the *Camp Adventure™ Child and Youth Services* program, it was necessary to create a framework that gave meaning to the organization and its work. For example, the use of artifacts has been discounted, especially ones reflecting environmental condition, as a major element because of the lack of control over such environments. The services provided by *Camp Adventure™ Child and Youth Services* can be best defined as ones in which leadership, program and quality assurance elements are outsourced to contract partners. They, in turn, provide the physical setting where programs are implemented. This element is of no control to *Camp Adventure™ Child and Youth Services* organization

other than defining appearance standards for staff. In that sense, the uniform worn by staff members and the look and image were important elements with the *Camp Adventure™ Child and Youth Services* culture but did not warrant a separate category within the framework for the organization to define and transmit its culture. The image became an abstract concept that was reflected in other categories.

In order to describe and understand the organizational culture of *Camp Adventure™ Child and Youth Services*, elements of the organization were placed in the framework. As a result, the organization has been able to identify, define and transmit these important constructs as a part of its recruitment, pre-service and in-service staff development and in the day-to-day implementation of programs and services. This analysis has provided us with an



opportunity to dramatically enhance efforts by creating cultural understanding within *Camp Adventure™ Child and Youth Services* among all staff. Table 4 provides an analysis of cultural elements aligned with the five components of the framework —relevant/social constructs, social knowledge, practices, vocabulary and metaphors.

Relevant/Social Constructs.

Relevant/social constructs are the ways in which the organization has identified its values, beliefs and intentions. Formally, these are reflected within *Camp Adventure™ Child and Youth Services* in two ways. First is through its vision, mission, values and tradition, the *Camp Adventure Way*, history and the organization's management philosophy. Such constructs are very, very important in transmitting the culture of the organization. At *Camp Adventure™ Child and Youth Services*, the vision of creating magic moments for children and youth that last a lifetime where magic is defined as exceeding expectations is coupled with its management philosophy of

Total Quality Program Planning (TQP). TQP is about exceeding expectations by incrementally improving the program daily. All staff from the highest levels of administration to the bottom line of the organization, its front line staff delivering services, understand and passionately embrace the organization's vision. At all events, the vision is proclaimed and recited. At all staff development activities, the mission of the organization is read aloud by all at the conclusion of each session. These recitations help staff understand and make a commitment to the primary focus of the organization. *Camp Adventure™ Child and Youth Services* values and traditions speak more specifically to the commitment of the organization to providing caring and meaningful relationships with children and youth; providing high quality, high impact services; valuing the power of play; promoting and protecting the family (other staff); guaranteeing by protecting the name of the organization the quality of its efforts; engaging contract partners in a positive fashion; and believing in the vision

of the organization and taking pride in pursuing such ends. The history of the organization is offered so that individuals can understand the organization's impact, evolution and their responsibility in insuring its future. All of these relevant/social constructs have been deliberately created in order to capture and convey the values, beliefs and intentions of *Camp Adventure™ Child and Youth Services*.

The second way that relevant/social constructs are addressed is through the creation of organizational structures or mechanisms that through their implementation convey meaning. Three basic mechanisms serve to represent such structures — Leadership Assessment Center, *Camp Adventure College* and the Camp Adventure Dessertfest. The Leadership Assessment Center (LAC) which is a unique way of interviewing and selecting individuals for the program. An LAC includes not only a dynamic presentation by staff reflecting the expectations of the organization but also provides a unique group structured pattern interview, opportunities to demonstrate the ability of one to lead and present to others as well as team building activity aimed at assisting individuals in understanding the value of the need to support one another in the endeavor. *Camp Adventure College* is the staff development program of the organization is a highly engaging learning process. When individuals participate in the staff development program, they know they will be engaged in a dynamic, upbeat fashion where learning is not only valued but also meaningful, relevant and fun. The learning environment is presented in a fashion where theory, values and skills are offered in a process of

Table 4
Organizational Culture Elements Applied to
Camp Adventure™ Child and Youth Services

Element	Applications
Relevant/ Social Constructs	Vision, Mission, Values and Traditions, <i>Camp Adventure Way</i> , history, Total Quality Program Planning, Leadership Assessment Center, <i>Camp Adventure College</i> and the Camp Adventure Dessertfest
Social Knowledge	<i>Camp Adventure™</i> Benefits and Outcomes; Skill Proficiency in 10 Areas; Knowledge and Standards Drawn from Associations and Other Youth Organizations
Practices	Day-to-day Methods and Procedures in Program Design and Leading Activities; Total Quality Program Planning
Vocabulary	The Blitz, LAC, TQP, Tunnel of Fun, Placement, Lock-down, <i>Camp Adventure College</i> , the Wrapper and 10X10 Skill Competence
Metaphors	The Story of Elbert; The Story of Timmy; Sharing of Magic Moments



transformation that focuses on leadership development. The *Camp Adventure* Dessertfest is a special program offered as a program of induction that interprets the development of students to family, friends and others in a highly engaging and buoyant fashion. This concept is also carried forward and implemented in the summer for program participants. These structures, in the way they are organized and implemented, convey meaning in term of effective planning and organization, attention to detail, exceeding expectations, and other relevant important constructs.

Social Knowledge. Social knowledge can be thought of as that information which helps individuals understand "what we do and how we do it." Social knowledge is task oriented. In *Camp Adventure™ Child and Youth Services*, the organization constructs informal development-focused opportunities for children and youth that create positive social interaction and relationships, safe environments, opportunities for meaningful involvement and creative expression, promotion of self worth and giving to others, support for physical activity, and a sense of independence, autonomy and control. To create such benefits or outcomes, every individual participating in *Camp Adventure™ Child and Youth Services* must gain, for example, a set of specific professional skills and be able to demonstrate proficiency in these areas. In addition to understanding how to organize a theme focused program, individuals must be able to lead songs, high active games, low active games, initiatives/building a sense of community, interest areas, attention getters, transitions, skits and dramatic plays, creative arts, behavior

management, and contract partner concerns/complaints.

In a broader context, students must also gain knowledge regarding school age care practices and youth development. *Camp Adventure™ Child and Youth Services* draws this social knowledge from existing knowledge bases and standards from such organizations such as National AfterSchool Association, National Association for the Education of Young Children, Zero to Three, Boys & Girls Clubs of America, 4-H, and American Red Cross in the United States. Social knowledge drawn from the aforementioned organizations provides additional information both theoretical and skill focused that constitute the broader body of professional knowledge that must be gained by staff. The application of external knowledge bases and standards has a direct influence on the shaping of the organizational culture of *Camp Adventure™ Child and Youth Services*. In particular, as these organizations and associations often represent a broader context for the provision of child and youth services, such knowledge has a direct influence on the shaping of specific culture, yet in the broader context of the movement. Like other youth organizations, *Camp Adventure™ Child and Youth Services* is a part of a broader movement that is focused on promoting, in general, character development, life skills, community engagement and service learning, vocational and career development, health promotion, citizenship and/or academic enrichment/remediation. *Camp Adventure™ Child and Youth Services*, like other youth organizations, e.g. Boys & Girls Club, 4-H, Girls Inc, Girl Scouts of USA, Boy Scouts of America, Campfire and YMCA/YWCA have

a unique organizational culture, yet reflect the broader aims of the child and youth care movement in the broader social knowledge that is found within their organizations.

Practices. Practices reflect the day-to-day methods and procedures used in providing services within the *Camp Adventure™ Child and Youth Services* program. For example, there is a very distinct way of leading a song or game within the program. This step-by-step process or practice is taught, understood and practiced on a consistent basis throughout the organization in delivering programs for children and youth. Further, a basic program design has been established to guide the day-to-day execution of programs. The formatting for the programming is detailed out and prescribed so that the template may be followed with consistency. It is an expectation that the format be employed, although it may be adapted to local conditions and circumstances when warranted. Like Disney theme parks, there is a script to follow; in fact, deviations from the script are also prearranged so that consistency is insured. The goal of the program is one of creating choice and spontaneity within structure, as well as building a sense of community.

Further, practices aimed at creating a vision, transforming the environment and making a connection (Edginton & Edginton, 1994) are routinely emphasized in order to insure that staff understand the benefits and outcomes sought, the importance of creating an environment that is engaging through the use of posters, lighting and arrangement of play spaces, and most important, the need to create quality interaction with each and every

child and youth. Such practices are not taken for granted and must be identified and conveyed to staff as important elements of the program. In addition, building and maintaining relationships with staff are routinely identified and taught as part of the culture of *Camp Adventure™ Child and Youth Services*. Having implemented the program for 25 years during the summer months, the organization's leadership knows exactly when staff approaches burnout and has included strategies to enable individuals to move through the experience and maintain their momentum. Supervisory staff is schooled in ways to enrich the experience as staff approach these critical times where additional encouragement to insure outstanding performance is required. The overarching management practices of *Camp Adventure™ Child and Youth Services* are reflected in the concept as previously noted known as TQP. Drawn from management practices, Total Quality Management and Total Quality Leadership, management practices of the organization are reflected in its emphasis on benchmarking, statistical analysis, data driven decision-making and evaluation by all stakeholders.

Vocabulary. *Camp Adventure™ Child and Youth Services* has developed a unique jargon and language that give rise to meaning within the organization. The use of terms such as "The Blitz," "LAC", "TQP", "Tunnel of Fun", "Placement", "Lock-down" "Camp Adventure College" "the Wrapper" and "10X10 Skill Competence" all refer to specific functions within the *Camp Adventure™ Child and Youth Services* program and each carry special meaning for members of the organization. This nomenclature or inner dialogues

enable members of the organization to communicate and convey special knowledge and meaning. Further, one has to experience a "Blitz" in order to grasp and understand this concept and its power as a way of representing the energy and dynamism of the organization. The "Tunnel of Fun" provides a transformational encounter as a part of the interview process that, in fact, communicates to potential new members of the organization that they are valued and appreciated. The term "LAC" refers to *Camp Adventure™ Child and Youth Services* Leadership Assessment Centers. "TQP" is the acronym for *Camp Adventure™ Child and Youth Services* management program as previously discussed Total Quality Program Planning. "Placement" and "Lock-down" are terms that guarantee organizational members an assignment as a given location and country. The "Wrapper" is the term used to define the transformational environment for developing leaders as content related theory, skills and values are presented. Again, these terms provide meaning to organizational members and without knowledge of the context in which they are offered they would be meaningless to individuals outside the organization. The term 10X10 Competence refers to a set of minimum skills that are required by all *Camp Adventure™ Child and Youth Services* staff.

Metaphors. Metaphors help provide meaning to one's experience in *Camp Adventure™ Child and Youth Services*. They are often stories of encounters that staff has with children and youth that reflect the transformational power of the experience. Powerful metaphors are used within the organization as ways of communicating vision and benefits



of *Camp Adventure™ Child and Youth Services* to not only the participants of the program, but also staff. Metaphors create an emotional tie to the efforts of the organization. Major metaphors offered across *Camp Adventure™ Child and Youth Services* include stories about children named Elbert and Timmy. Elbert was a child who had been abused and reluctant to participate in the program. His story symbolizes the efforts of *Camp Adventure™ Child and Youth Services* to reach out and touch a child by engaging them in a caring and supportive fashion. Timmy's father was a soldier who was paralyzed in Operation Desert Storm and as a child who often acted out and whose behavior was not understood, became a symbol for those children who often are challenged in expressing their deepest pain. Timmy just wanted all of us to know that his father, who was unable to continue to play catch with him as a result of his injury, could lean on him. All *Camp Adventure™ Child and Youth Services* staff has an Elbert or Timmy in their lives as a result of their experience. Such relationships offered as metaphors of the experience are powerful ways of communicating to others the value and importance of the program in



the lives of children and youth and the transformational nature such relationships have on the staff. Throughout *Camp Adventure College*, staff is encouraged to provide their testimonial, their metaphor for their *Camp Adventure™ Child and Youth Services* experience. These are known as "magic moments." Such testimonies are very moving, reflecting the deep impact of the program and helping others understand and be socialized to developing such meaningful and intense caring relationships.

Discussion and Implications for Professional Practice

The application of the framework for analyzing the culture of an organization to *Camp Adventure™ Child and Youth Services* has enabled the organization to better understand and describe itself with the aim of socializing its staff to promote consistency within the organization. What has been learned is that the culture of an organization "... represents a mosaic of beliefs of how things ought to be done in an organization" (Miller, 2009, p. 91). As a result of this analysis, *Camp Adventure™ Child and Youth Services* has been able to effectively identify its core values, beliefs and intentions as well as other knowledge, practices, vocabulary and metaphors that give meaning to the organization's efforts. By identifying core elements, and, in turn, teaching these to staff, greater clarity has resulted and produced a level of commitment that is not usually found in other organizations.

Of great concern in the management of *Camp Adventure™ Child and Youth Services* has been the challenge of scaling up staff development efforts. By assisting

individuals by describing the culture of the organization, there has been a simplification and codification of "... a complicated set of assumptions, values, behaviors and artifacts" (p. 94). The goal was one of creating consistency as defined by the organization and then socializing individuals to adopt a shared set of beliefs and values. The process of socializing individuals to the organizational culture of *Camp Adventure™ Child and Youth Services* leads to consistency. Socialization occurs when the individuals has been mainstreamed into the organization when he/she is able to operate successfully in the organization as defined by the organization.

The process of socializing individuals to the organizational culture of *Camp Adventure™ Child and Youth Services* has been effective in identifying what success and unsuccessful results look like as individuals are prepared for the experience. For example, as students participate in an LAC, they reflect a level of excitement about the program and seek out veterans and management team members to gain more information on ways in which they can succeed within the organization. During *Camp Adventure College*, they exude excitement about the forthcoming opportunity, complete all their necessary paper work, pay fees, and acquire and demonstrate knowledge, values and skills required. During the implementation phase of the program, they develop an emotional bond with others including children and youth, seek others to share their experience and what to "pass on to others" what they have learned or gained from the experience. On the other hand, unsuccessful socialization is reflected in individuals offering

comments in an overly critical manner, viewing staff development activities as an inconvenience, and not seeking out others with experience to discuss relevant matters. In this context, students are often agitated; they avoid completion of required tasks, and/or view expectations and practices as something to be avoided. They often focus on the negative aspects of participation, advocate for non participation and warn others about the organization.

Why is understanding the organizational culture of *Camp Adventure™ Child and Youth Services* so important? It is only from an understanding of an organizations' self that it can position itself in an effective fashion to move from, as Collins (2001) has suggested, from "Good to Great." One way of moving from good to great is through the analysis of the culture of an organization and its subsequent teaching of it as a way of solving "problems of external adaptation and internal integration ... to be taught ... as a correct way to perceive, think and feel in relation to those problems (Schein 1992, p 12). By staff understanding clearly the focus of the work of *Camp Adventure™ Child and Youth Services*, the organization has been able to provide a high quality, high impact throughout the world with great consistency. *Camp Adventure™ Child and Youth Services* has been able to clearly define itself internally and, perhaps more importantly, re-define itself as external expectations have changed.

There are many implications for professional practice that can be drawn from this case study. First, the case study has demonstrated that the culture of an organization can be identified and defined. Without question, understanding one's organizational culture is a

useful management tool in advancing the work of the organization. Second, an organizations' culture cannot be taken for granted and, like other values, beliefs and intentions must be taught and re-taught as well as reinforced in numerous ways. The culture of an organization must permeate very deeply the work of the organization and be reflected in the thinking and actions of its employees as well as its formal statements and structures. Third, staff is genuinely excited about learning about a well-crafted organizations' culture. Individuals seek meaning in their lives in the context of their work experiences. A well examined, defined and taught organizational culture can provide such meaning. Last, the

examination of an organizations' culture is an ongoing process. Organizational cultures are emerging and in constant development (Schein 1992). Just when one has a handle on what one believes is the culture of an organization, it is subject to both internal and external challenges, requiring one to rethink, if not the basic assumptions of the culture, the way in which it is transmitted and practiced within an organization.

Concluding Comments

This framework provides a way of understanding the elements of an organizations' culture. Organizational cultures are complex, often ambiguous and

often difficult to analyze and effectively communicate to others. As Carly Fiorina (2007), former executive at Hewlett-Packard has suggested, it is important to establish a common set of rules and languages with very precise roles and responsibilities. This is the foundation of an organizations' culture yet not the complete picture of what is necessary in understanding this dynamic. It has only been in recent years that attention has been focused to the topic of organization culture. However, it is evident that even though an organizations' culture is challenging to define and transmit, it is also a requisite for organizational success. **RMA**

References

- Ashkanasy, N. M., Wilderom, C. P., & Peterson, M. F. (2000). *Handbook of organizational culture & climate*. Thousand Oaks: Sage Publications.
- Beyer, J., & Trice H. (1987). How an organization's rites reveal its culture. *Organizational Dynamics*, 15, 4-35.
- Boje, D. (1991). The storytelling organization: A study of story performance in an office-supply firm. *Administrative Science Quarterly*, 36, 106-126.
- Collins, J. (2001). *Good to great*. New York: HarperCollins.
- Colyer, S., Soutar, G., & Ryder, P. (2000). Organizational culture profiles in local government authority recreation services: Some Australian evidence. *Journal of Park and Recreation Administration*, 18 (2), 73-78.
- Dandridge, T. (1986). Ceremony as an integration of work and play. *Organization Studies*, 7, 159-170.
- Deal, T. E., & Kennedy, A. A. (1982, 2000). *Corporate cultures: The rites and rituals of corporate life*. New York: Basic.
- Edginton, S. R., & Edginton, C. R. (1994). *Youth programs: Promoting quality services*. Champaign, IL: Sagamore.
- Edginton, C. R., Hudson, S. D., Lankford, S. V., & Larsen, D. (2006). *Managing recreation, Parks and Leisure Services: An Introduction (3rd ed.)*. Champaign, IL: Sagamore.
- Edginton, C. R. (1987). Creating an organizational culture. *Management Strategy*, 11(1), 7-8.
- Edginton, C. R., DeGraaf, D. G., Dieser, R. B., & Edginton, S. R. (2005). *Leisure and life satisfaction foundation perspectives (4th Ed.)*. New York: McGraw-Hill.
- Eisenberg, E., & Riley, P. (2001). *Organizational culture*. In Jablin, F.M., & Putman, L.L. (eds.), *The new handbook of organizational communication* (pp. 291-322). Thousand Oaks, CA: Sage Publications.
- Fiorina, C. (2006). *Tough choices*. New York: Penguin Group.
- Harrison, R., & Stokes, H. (1992). *Diagnosing organizational culture: Instrument and trainer's package*. San Diego, CA: Pfeiffer & Co.
- Hurd, A. R., Barcelona, R. J., & Meldrum, J.T. (2008). *Leisure services management*. Champaign, IL: Human Kinetics.
- Ibrahim, H., & Cordes, K. (2003). *Parks, recreation and leisure service management*. Dubuque, IA: Eddie Bower.
- Louis, M.R. (1980). Surprise and sense making: What newcomers experience when entering unfamiliar organizational settings. *Administrative Science Quarterly*, 23, 225-251.
- Malone, M. S. (2007). *Bill & Dave: How Hewlett and Packard built the world's greatest company*. New York: Penguin.
- Martin, J. (1992). *Cultures in organizations: Three perspectives*. New York: Oxford University Press.
- Martin, J. (1992). *Cultures in organizations: Three perspectives*. New York: Oxford University Press.
- Martin, J., & Frost, P. (1996). The organizational culture war games: A struggle for intellectual dominance. In S.R. Clegg, C. Hardy, & W.R. Nord (Eds.), *The handbook of organizational studies* (pp. 599-621). Newbury Park, CA: Sage.
- Miller, K. (2006). *Organizational communication: Approaches and processes (5th ed.)*. Boston: Wadsworth Cengage Learning.
- Morley, D. D., & Shockley-Zalabak, P. (1991). Setting the rules: An examination of organizational founders' values. *Management Communication Quarterly*, 4, 422-449.
- Pacanowsky, M., & O'Donnell-Trujillo, N. (1982). Communication and organizational cultures. *Western Journal of Communication*, 46, 115-130.
- Peters, T. J., & Waterman, R. H. (1982). *In search of excellence: Lessons from America's Best-Run companies*. New York: Harper & Row.
- Pettigrew, A. M. (1979). On studying organizational cultures. *Administrative Science Quarterly*, 24, 570-581.
- Putnam, L. L. (1983). The interpretive perspective: An alternative to functionalism. In L. L. Putnam & M. E. Pacanowsky (Eds.), *Communication and organizations: An interpretive approach* (pp. 31-54). Beverly Hills, CA: Sage.
- Quinn, R. E., & McGrath, M. R. (1985). The transformation of organizational cultures: A competing values perspective. In P.J. Frost, L.F. Moore, M.R. Louis, C.C. Lundberg & J. Martin (Eds.), *Organizational culture* (pp. 315-334). Beverly Hills, CA: Sage.
- Quinn, R. E. & Spreitzer, G. M. (1991). The psychometrics of the competing values culture instrument and an analysis of the impact of organizational culture on quality of life. *Research in Organizational Change and Development*, 5, 115-142.
- Schall, M. (1983). A communication-rules approach to organizational culture. *Administrative Science Quarterly*, 28, 557-581.
- Schein, E. (1985). *Organizational culture and leadership*. San Francisco: Jossey-Bass.
- Schein, E. (1992) *Organizational culture and leadership*, 2nd Ed. San Francisco: Jossey-Bass.
- Schein, E. (2004). *Organizational culture and leadership*, 3rd Ed. New York: Wiley Publishers.
- Shockley-Zalabak, P., & Morley, D. D. (1994). Creating a culture: A longitudinal examination of the influence of management and employee values on communication rule stability and emergence. *Human Communication Research*, 20, 334-355.
- Smith, R. C., & Eisenberg, E. M. (1987). Conflict at Disneyland: A root metaphor analysis. *Communication Monographs*, 54, 367-380.
- Yunus, M. (2007). *Creating a world without poverty: Social business and the future of capitalism*. New York: Public Affairs.



Motivational Styles and Physical Activity of Hong Kong Youth

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Introduction

Physical activity is associated with physical and psychological health outcomes (United States Department of Health and Human Service, 2000). Empirical evidence demonstrates that Hong Kong youngsters are insufficiently active for health purposes and that activity level declines as they age (Adab & Macfarlane, 1998; McManus, 2006). Hong Kong schools in general offer two physical education (PE) classes a week and children only spend four minutes in the training zone during PE class (Adab & Macfarlane, 1998). Hui and Morrow (2001) conducted a citywide physical activity survey of Hong Kong secondary students and found that 18.3 % of youths were sedentary, 50.2 % were somewhat active, and 31.5% were active enough to achieve health benefits. Compared to the health-related physical fitness of children in the Mainland China, Hong Kong children were found to have poor performance,

suggesting their low fitness level (Hong, Chan, & Li, 1998). Tuckor-Locke et al. (2003) conducted the China Health and Nutrition Survey (CHNS) to school-aged children between 6 to 18 years old in China and reported that 72% of them engaged in in-school moderate-to-vigorous physical activity for a median of 90-110 min/week and their participation in out-of-school moderate-to-vigorous physical activity was minimal.

In view of the world wide health concerns and low activity levels of youngsters, there is a need for an improved understanding of youths' motivation for physical activity participation and this line of research has become popular over the last three decades (Duda, 1996, 2001). Participation in physical activity is important for growth and development of youths because it helps reduce the risks for chronic diseases (Louie, & Yuen, 2002) and is advantageous to the development of their physical and psychological well being (Biddle, Fox, & Boutcher, 2000).

Recent research attention has been focused on identifying factors affecting physical activity of children and youth and psychological or motivational variables are one of the strong factors (Sallis, Prochaska, & Taylor, 1999). Taking the theoretical framework described by Apter (1989), reversal theory has proved to be useful to examine individuals' participatory behaviour such as physical activity participation (Sit, Kerr, & Wong, 2007; Sit & Lindner, 2005, 2006). Reversal theory (Apter, 1989, 2001) is a general psychological theory of personality, motivation, and emotion. This theory posits that individual's behavior is strongly influenced by the configuration of current metamotivational states. These states reflect basic human psychological motives or needs and experiences, which are termed "motivational styles". They are *telic-paratelic* (serious-playful), *arousal-avoidance-arousal-seeking* (desire for relaxation—excitement), *negativistic-conformist* (rebellious-compliant), *mastery-sympathy* (competitive-cooperative), and *autic-alloic* (egotistic-altruistic) dimensions (Apter, 2001). Previous studies demonstrate a close relationship between motivational styles and sport participatory behavior of individuals. For example, individuals with serious-oriented and enjoyment seeking styles have a preference for and engagement in safe/endurance and risk/explosive sports, respectively (Chirivella & Martinez, 1994; Kerr, 1989; Svebak & Kerr, 1989). High sport participation frequency is associated with serious-oriented, self-centered and competence styles (Lindner & Kerr, 1999, 2000, 2001). The aforementioned studies only focus on athletes or young adults. No research to date has been conducted to examine motivational styles as a correlate of physical activity in youths in and out of the Hong Kong school environment by using the concept of motivational styles postulated in reversal theory.

The main purpose of the present study was to examine youngsters' motivational styles in relation to their physical activity participation. The following research questions guided the study:

1. What are the physical activity levels of Hong Kong youth in and out of the school environment?
2. Are there any significant differences in physical activity between genders, school level, and each pair of motivational styles?
3. Can physical activity be predicted from motivational styles?





METHOD

Participants

A total of 711 secondary students of grades 7 to 12 aged 11-19 years (mean age = 14.57, $SD = 1.79$) participated in this study. There were 397 males and 314 females; 516 students in junior school level (grades 7 to 9) and 195 in senior school level (grades 10 to 12). Approval for the study was granted by the Human Research Ethics Committee for Non-Clinical Faculties of the University of Hong Kong. All participants volunteered to join the study.

Instruments

Participants were asked to complete two sets of instruments. Firstly, participants' physical activity inside and outside school hours were assessed using the China Health and Nutrition Survey (CHNS). The original Mainland Chinese version of the CHNS has been used extensively in nine provinces of Mainland China since 1989 (Nelson, Gordon-Larsen, Adair, & Popkin, 2005; Tudor-Locke et al., 2003) and was originally designed to examine how the social and economic transformation of Chinese society affected health and nutritional status of its population. The CHNS consists of different types of physical activity such as marital arts; gymnastics, dancing, acrobatics; track and field, swimming; soccer, basketball, volleyball; badminton, tennis; and others (ping pong, Tai Chi, etc). Physical activity in and out of school was included in this study. Reported activities were assigned metabolic equivalent (MET) values using the Compendium of Physical Activity (Ainsworth et al., 2000).

Secondly, participants' motivational styles were assessed using an adapted version of the Motivational Style Profile (MSP; Apter, Mallows, & Williams, 1998). Participants were asked to complete a 30-item of the adapted version of the MSP to assess their five pairs of motivational styles (i.e. *telic-paratelic*, *arousal-avoidance-arousal-seeking*, *negativistic-conformist*, *mastery-sympathy*, and *anti-alloic*). Item response were recorded on a 4-point Likert scale ranging from 1 (never) to 4 "always". Previous studies demonstrate acceptable test-retest reliability for subscales ranging from .53 to .92 and satisfactory concurrent validity in the MSP (Apter et al., 1998), and acceptable internal consistency of the subscales in children's sample (Sit, Lindner, Apter, Michel, & Mallows, under review).



In the present study, the original Mainland Chinese-version of the CHNS was adapted to Cantonese-speaking children population of Hong Kong. A panel of experts in physical activity modified some of the items (such as residential district, schooling system) suitable for a local context, and the simple Chinese characters were replaced by the traditional Chinese characters. Before actual administration of the main study, the Cantonese version of the CHNS was checked for reliability by test-retest procedure in a group of children and youth samples ($N = 193$) within a 2-week period. Results demonstrated satisfactory test-retest reliability ($R > .78$).

Data analysis

Data were analyzed using the statistical package SPSS 15.0. Descriptive statistics were computed for all measures and were checked for outliers (above the 99th percentile of distribution) for total reported time in moderate-to-vigorous physical activities (sum of in-school and outside school). Due to the positive skewed physical activity data, descriptive statistics were presented as the proportion reporting any defined physical activity and the median and interquartile range (IQR) of distribution of time (min/week) for those reporting any of the defined activity (Welk, Corbin, & Dale, 2000). Kruskal-Wallis tests were performed to compare the differences in measures of physical activity between genders, school levels, and each pair of motivational styles. Chi-square tests were used to compare the frequencies. Multiple regression was used to examine if activity can be predicted from motivational styles. Significance for all statistical analyses was set at .05 alpha level.



RESULTS

Background characteristics for participants

Participants were classified into a particular motivational style group using the procedure suggested in literature (Sit & Lindner, 2006, Sit et al., 2007). Table I shows the frequency and percentage of motivational styles split by genders and by school levels. Results of the chi-square analyses indicated that more males were significantly classified into the arousal-seeking, negativistic, autic, and mastery groups than females; and more junior students into the autic group (all $p < .05$).

Table I. Background characteristics for participants ($N = 711$)

Variables	Total <i>N</i> (%)	Gender		School level	
		Male <i>n</i> (%)	Female <i>n</i> (%)	Junior <i>n</i> (%)	Senior <i>n</i> (%)
Telic	243 (100)	136 (56.0)	107 (44.0)	170 (70.0)	73 (30.0)
Paratelic	249 (100)	142 (57.0)	107 (43.0)	181 (72.7)	68 (27.3)
Arousal Avoidance	285 (100)	154 (54.0)	131 (46.0)	201 (70.5)	84 (29.5)
Arousal Seeking	203 (100)	128 (63.1)*	75 (36.9)	158 (77.8)	45 (22.2)
Negativistic	152 (100)	93 (61.2)*	59 (38.8)	111 (73.0)	41 (27.0)
Conformist	333 (100)	171 (51.4)	162 (48.6)	235 (70.6)	98 (29.4)
Autic	121 (100)	75 (62.0)*	46 (38.0)	98 (81.0)*	23 (19.0)
Alloic	237 (100)	121 (51.1)	116 (48.9)	159 (67.1)	78 (32.9)
Mastery	67 (100)	50 (74.6)*	17 (25.4)	51 (76.1)	16 (23.9)
Sympathy	253 (100)	118 (46.6)	135 (53.4)	177 (70.0)	76 (30.0)

* $p < .05$



Moderate-to-vigorous physical activity in and out of the school environment by gender and school levels

Table II presents the proportion of participants who engaged in any moderate-to-vigorous physical activity and the time (min/week) expended for genders and school levels. Participants in general engaged in longer durations of moderate-to-vigorous physical activity outside than inside school hours (median 180 vs. median 90), but more participants engaged in physical activity in school than out of school ($n = 368$ vs. $n = 260$). More junior students reported engaging ($p < .0001$) and spending more time ($p < .01$) in physical activity in-school compared to senior students. There was no significant difference reporting time spent inside and outside school between genders and between school levels.

Moderate-to-vigorous physical activity in and out of the school environment by each pair of motivational styles

Table III presents the proportion of participants who engaged in any moderate-to-vigorous physical activity and the time (min/week) expended for each pair of motivational styles. No significant motivational style differences were found during school. However, there was a larger proportion of the arousal-seeking group who engaged in physical activity ($p < .01$) for longer durations ($p < .05$) outside school than the arousal-avoidant group. Mastery group reported engaging in physical activity for longer durations outside school compared to the sympathy group.

Table II. Moderate-to-vigorous physical activity in and out of the school environment by genders and school levels

Variable	During school moderate-to-vigorous activity (min/week)		Before and after school moderate-to-vigorous activity (min/week)	
	No. (%) reporting ≥ 1 min	Median (IQR)*	No. (%) reporting ≥ 1 min	Median (IQR)*
Total ($N=711$)	368 (51.8)	90 (110)	260 (36.6)	180 (190)
Gender				
Male ($n=397$)	221 (55.7)	90 (120)	228 (57.4)	220 (240)
Female ($n=314$)	147 (46.8)	90 (90)	142 (45.2)	150 (150)
School level				
Junior ($n=516$)	280 (54.3)***	107.25 (120)**	279 (54.0)	210 (210)
Senior ($n=195$)	88 (45.1)	60 (56.25)	91 (46.7)	180 (180)

*** $p < .0001$, ** $p < .01$
 IQR = Interquartile range
 *Computed for any those reporting any of the defined activity (= 1 min)

Table III. Moderate-to-vigorous physical activity in and out of the school environment by each pair of motivational styles

Variable	During school moderate-to-vigorous activity (min/week)		Before and after school moderate-to-vigorous activity (min/week)	
	No. (%) reporting ≥ 1 min	Median (IQR)*	No. (%) reporting ≥ 1 min	Median (IQR)*
Tellic ($n=243$)	118 (48.6)	90 (120)	129 (53.10)	180 (257.5)
Paratelic ($n=249$)	138 (55.4)	90 (90)	131 (52.6)	180 (150)
Arousal Avoidance ($n=285$)	153 (53.7)	85 (105)	146 (51.2)	180 (180)
Arousal Seeking ($n=203$)	107 (52.71)	90 (120)	120 (59.1)**	227.5 (240)*
Negativistic ($n=152$)	63 (41.5)	80 (120)	74 (48.7)	210 (187.5)
Conformist ($n=333$)	184 (55.26)	90 (120)	173 (52.0)	180 (210)
Autic ($n=121$)	59 (48.8)	60 (60)	61 (50.4)	180 (195)
Alloic ($n=237$)	134 (56.5)	90 (120)	134 (56.5)	180 (156.25)
Mastery ($n=67$)	37 (55.2)	60 (70)	35 (52.2)	240 (240)*
Sympathy ($n=253$)	131 (51.8)	90 (120)	127 (50.2)	180 (180)

** $p < .01$, * $p < .05$
 IQR = Interquartile range
 *Computed for any those reporting any of the defined activity (= 1 min)

Predictability of physical activity level from motivational styles

Results of the multiple regression demonstrated that arousal-seeking style was a significant predictor of moderate-to-vigorous physical activities ($\beta = .208$, $p < .0001$) outside school.



DISCUSSION

The study examined the relationship between motivational styles and participation in physical activities of secondary school students both in and out of the school environment. The study demonstrated that the number of secondary students engaging in moderate-to-vigorous physical activities was greater inside school than outside school; yet, the time spent inside school was much shorter, consistent with previous studies (e.g., Gordon-Larsen, McMurry, & Popkin, 2000; Tudor-Locke et al, 2003). The reason is that physical education is a compulsory curriculum in the Hong Kong education system. Most schools in Hong Kong offer two physical education classes per week and they provide a chance for students to engage in regular physical activity during school hours. However, students are under great pressure to perform well academically and therefore are unwilling to take up some sports outside school hours. On the other hand, students who spent time in physical activity outside school find it more enjoyable due to their freedom of choices on the type of activity and the time duration.

The present study also indicated that more junior students engaged and spent more time in physical activity in-school compared to senior students. This is due to the reason that Hong Kong senior students have to start to prepare for their certificate examination and therefore physical activity participation is treated as unimportant. This is evident in the reduction of number of PE lessons in senior school level from two classes to one class per week (Hong Kong Sports Development Board, 1993).

is evident in the reduction of number of PE lessons in senior school level from two classes to one class per week (Hong Kong Sports Development Board, 1993).

The concept of motivational style is based on the conceptual arguments of reversal theory (Apter, 2001). A greater proportion of males were found to be classified into arousal-seeking, negativistic, autic, and mastery styles than the females, consistent with previous studies (Braathen & Svebak, 1992; Lindner & Kerr, 1999; Sit & Lindner, 2006). A study by Braathen and Svebak (1992) reported that boys scored significantly higher in reactive negativism than girls. Boys were also found to rate the autic- and mastery-typed motives for their physical activity participation than girls (Lindner & Kerr, 1999; Sit & Lindner, 2006). This indicates that boys tend to desire for personal gains and outcomes, and are more self-centered and defiant than girls. It was also interesting to note that more junior students were in the autic group, suggesting their egoistic style.



More students in arousal-seeking style reported engaging and spending longer durations in physical activity outside school compared to those in arousal-avoidant style. The arousal-seeking style was also a strong predictor of physical activity. This finding was consistent with a study by Kerr, Au, and Lindner (2005), which reported that inactive students were more arousal-avoiding than active students. Students in mastery styles were found to spend more time participating in physical activity outside school, suggesting their desire to master sport skills.

An application of the theoretical framework to examining physical activity in youths enables physical educators and practitioners to design suitable programs to promote their physical activity. To encourage youngsters' activity participation in school, the physical educators can organize more adventurous programs and introduce a wider range of activity choices such as softball and contact sports, which may help increase youngsters' arousal level and interest. The educators can also rotate the activities

more frequently and make the PE lessons more fun by modifying some rules that provide students with more challenging and pleasant experience.

To conclude, the findings of the present study provide empirical evidence that motivational styles such as arousal-seeking style correspond to one's participatory behavior, which is consistent with theoretical predictions. Being aware of students' motivational styles allows practitioners to guide them towards appropriate forms of physical activity that suit their psychological needs or motives, which is a form of effective interventions. This work lays a foundation for future cross cultural research comparison with China and United States.

Limitations of the present study include the limited representation of samples. It only examined youngsters' moderate-to-vigorous physical activity in and out of the school environment, but not other physical activity such as household chores, child care, and active commuting to schools. Eradicating the above limitations could be the focus on future research. **RMA**

References

- Apter, M. J. (1989). *Reversal theory: Motivation, emotion and personality*. London: Routledge
- Adab, P., & Macfarlane, D. J. (1998). Exercise and health new imperatives for public health policy in Hong Kong. *Hong Kong Medical Journal*, 4, 389-393.
- Ainsworth, B. E., Haskell, W. L., Whitt, M. C., Irwin, M. L. Swartz, A. M., Strath, S. J., et al. (2000). Compendium of physical activities: an update of activity codes and MET intensities. *Medicine and Science in Sports and Exercise*, 32, S498-S504.
- Apter, M. J. (Ed.) (2001). *Motivational styles in everyday life: A guide to reversal theory*. Washington: American psychological Association.
- Apter, M. J., Mallows, R., & Williams, S. (1998). The development of the motivational style profile. *Personality and Individual Differences*, 24, 7-18.
- Braathen, E. T., & Szebak, S. (1992). Motivational differences among talented teenage athletes: The significance of gender, type of sport and level of excellence. *Scandinavian Journal of Medicine and Science in Sports*, 2, 153-159.
- Biddle, S. J. H., Fox, K. R., & Boutcher, S. H. (Eds.). (2000). *Physical activity and psychological well-being*. London: Routledge.
- Chirivella, E. C., & Martinez, L. M. (1994). The sensation of risk and motivational tendencies in sports: An empirical study. *Personality and Individual Differences*, 16, 777-786.
- Duda, J. L. (1996). Maximizing motivation in sport and physical education among children and adolescents: The case for greater task involvement. *Quest*, 48, 290-302.
- Duda, J. L. (2001). Achievement goal research in sport: Pushing the boundaries and clarifying some misunderstandings. In G. C. Roberts (Ed.), *Advances in motivation in sport and exercise* (pp. 129-182). Champaign, IL: Human Kinetics.
- Gordon-Larsen P, McMuarry R G, & Popkin B. (2000). Determinants of adolescent physical activity and inactivity patterns. *Pediatrics*, 105, e83.
- Hong Kong Sports Development Board. (1993). *Sport in school: The future challenge: A seminar for school principal*. Hong Kong: Hong Kong Sports Development Board.
- Hong, Y., Chan, K. M., & Li, J. X. (1998). Health-related physical fitness of school children in Hong Kong and Mainland China. *Journal of Comparative Physical Education and Sport*, 20, 2-10.
- Hui, S. C., & Morrow, J. R. Jr. (2001). Level of participation and knowledge of physical activity in Hong Kong Chinese adults and their association with age. *Journal of Physical Activity and Aging*, 9, 372-385.
- Kerr, J. H. (1989). Anxiety, arousal, and sport performance: An application of reversal theory. In D. Hackfort & C. D. Spielberger (Eds.), *Anxiety in sports: An International perspective* (pp. 137-151). New York: Hemisphere.
- Kerr, J. H., Au, C. K. F., & Lindner, K. J. (2005). High school student inactivity in sport and exercise: Arousal avoidance, pessimism, and other factors. *Pediatric Exercise Science*, 17, 249-265.
- McManus, A. (2006). Health-related physical activity habits of Hong Kong youth. In D. Johns and K. J. Lindner (Eds.), *Environmental Influences on Physical Activity and Health Outcomes of Hong Kong Youth* (pp.89-103). Hong Kong: ChineseUniversity of Hong Kong Press.
- Lindner, K. J., & Kerr, J. H. (1999). Sport participation and metamotivational orientation. In J. H. Kerr (Ed.), *Experiencing sport: Reversal theory* (pp. 189-208). Chichester, UK: Wiley.
- Lindner, K. J., & Kerr, J. H. (2000). Motivational orientations in sport participants and non-participants. *Psychology of Sport and Exercises*, 1, 7-25.
- Lindner, K. J., & Kerr, J. H. (2001). Predictability of sport participation motivation from metamotivational dominances and orientations. *Personality and Individual Differences*, 30, 759-773.
- Louie, L., & Yuen, H. W. (2002). Physical activity level among Hong Kong secondary school students during physical education lessons and extra-curricular activity: A descriptive study. *Journal of Physical Education & Recreation (Hong Kong)*, 8(2), 38-42.
- Nelson, M. C., Gordon-Larsen, P., Adair, L. S., & Popkin, B. M. (2005). *American Journal of Preventive Medicine*, 28, 259-266.
- Sallis, J. F., Prochaska, J. J., & Taylor, W. C. (1999). A review of correlates of physical activity of children and adolescents. *Medicine and Science in Sports and Exercise*, 32, 963-975.
- Sit, C. H. P., & Lindner, K. J. (2005). Motivational orientations in youth sport participation: Using achievement goal theory and reversal theory. *Personality and Individual Differences*, 38, 605-618.
- Sit, C. H. P., & Lindner, K. J. (2006). Situational state balances and participation motivation in youth sport: A reversal theory perspective. *British Journal of Educational Psychology*, 76, 369-384.
- Sit, C. H. P., Kerr, J. H., & Wong, I. T. F. (2007). Physical activity participation in middle-aged women: Motive for and barriers to physical activity participation in middle-aged Chinese women. *Psychology of Sport and Exercise* [May 4; Epub ahead of print].
- Sit, C. H. P., Lindner, K. J., Apter, M. J., Michel, G., & Mallows, R. (under review). The development of the Motivational Style Profile for Children (MSP-C).
- Svebak, S., & Kerr, J. H. (1989). The role of impulsivity in preference for sports. *Personality and Individual Differences*, 10, 51-58.
- Tudor-Locke, C., Ainsworth, B. E., Adair, L. S., Du, S., & Popkin, B. M. (2003). Physical activity and inactivity in Chinese school-aged youth: the China Health and Nutrition Survey. *International Journal of Obesity*, 27, 1093-1099.
- United States Department of Health and Human Service. (2000). *Healthy People 2010*. Retrieved June 20, 2009 from <http://www.healthypeople.gov/default.htm>
- Welk, G.J., Corbin, C.B., & Dale, D. (2000). Measurement Issue in the assessment of physical activity in children. *Research Quarterly for Exercise and Sport*, 71, 59-73.