Consultancy Study on Sport for All: Participation Patterns of Hong Kong People in Physical Activities Summary

Background

Different government departments (such as the Home Affairs Bureau, the Leisure and Cultural Services Department (LCSD), the Department of Health and the Education Bureau) and related organisations (such as the Sports Federation and Olympic Committee of Hong Kong, China, various national sports associations and sports organisations, local sports groups and schools) have all along committed to providing diversified community sports services for the public and encouraging active participation in sports activities across different sectors of the community to promote the culture of Sport These services have been implemented for years. It is now the opportune time to for All. put in place a systematic and objective mechanism to gauge the level of public participation in sports and the effectiveness of the relevant work in the community. In August 2006, the Community Sports Committee (CSC) endorsed the six strategies for promoting community One of the strategies was to formulate indicators to measure the effectiveness of sports. the promotion of Sport for All in the community. It was hoped that by conducting a large-scale study on the participation patterns of public physical activities, such as the extent, frequency, etc., and by objectively measuring the level of penetration of Sport for All in the society, the effectiveness of all efforts for promoting community sports will be effectively assessed, and the findings may be used as the reference for setting future objectives. In January 2007, "the Working Group on the Formulation of Indicators for Measuring the Effectiveness of Sport for All" (the Working Group) was set up under the CSC to deal with the matter.

2. In a meeting held on 8 June 2007, the CSC endorsed the proposal on the study on the Participation Patterns of Hong Kong People in Physical Activities (the study) submitted by the Working Group. In September 2007, the LCSD appointed the Department of Sports Science and Physical Education of the Chinese University of Hong Kong (the Consultant) to undertake a literature review, formulate survey proposals, supervise the implementation of the survey and prepare a comprehensive final report. On 20 February 2008, the Working Group submitted the consultancy study report on the literature review and the survey proposals to the CSC and members agreed to conduct a household survey. On April 2008, the LCSD then appointed the Consumer Search to conduct a household survey in May and September. The Consultant submitted a report to the Working Group on 27 November. The report consists of three parts: the result of the literature review, survey results and research findings, providing the focus for further studies and the way forward for the development of Sport for All.

Objectives

- 3. The objectives of this study are:
 - i) To identify the trend and development of Sport for All in selected countries/economies/cities in the past five years;

- ii) To benchmark overseas practices in measuring sports and physical activity (PA) participation;
- iii) To identify the participation patterns in those countries/economies/cities;
- iv) To identify indicators to measure the effectiveness of the promotion of Sport for All policy in Hong Kong as compared with those countries/economies/cities;
- v) To identify and analyse the patterns of PA participation of Hong Kong citizens; and
- vi) To propose the way forward for the future implementation of the Sport for All policy in Hong Kong.

Methodology

4. To achieve the above objectives, the consultancy study is divided into two phases: Phase I consists of the literature review of 10 Western and Asia-Pacific countries/economies/cities to understand the trend and development of Sport for All in those countries/economies/cities; and Phase II is a face-to-face random household survey intended to collect the patterns of sports and PA participation.

Literature Review

5. To better understand the Sport for All policies worldwide, a literature review was conducted at the initial stage of the study. Apart from Hong Kong, ten countries/economies/cities, including Canada, the European Union, the UK, the USA, Australia, China, Japan, Singapore, South Korea, and Taiwan were selected for the review. The Sport for All policies and relevant survey results of these countries/economies/cities were also reviewed.

6. Although it is clear that different countries/economies/cities adopt different philosophies for sports promotion and different definitions of Sport for All, there is a general trend that most countries, such as the USA, the UK, Singapore and China, emphasise exercise participation among the general population and recognise the importance of health improvement and maintenance through PA participation. It is also suggested that educational systems and school environments are effective channels to promote PA/sports participation for children and adolescents. Guidelines are proposed for various levels of the society, such as schools, communities, families and individuals, to promote Sport for All. A summary of these guidelines is given in Appendix A.

7. It is also observed that many countries/economies/cities under review have introduced measurable national objectives. For example, the UK aims at increasing PA participation from 30% to 70% by 2020. Such tangible objectives provide clear directions for various stakeholders of the community to take up the common mission of achieving the national objectives. Moreover, most countries/economies/cities agree that PA/sports

participation must be habitual. Most of them adopt "engaging in moderately intense PA/sports for an average of three times a week and for at least 30 minutes per day" as the basic requirement (e.g. the UK, China and Taiwan).

8. Other than adopting the basic indicators for PA participation as mentioned above, some countries/economies/cities also emphasise other aspects for promoting Sport for All. For example, Canada points out that Sport for All should include encouraging citizens to get involved in volunteer work related to sports (sports volunteers) and to participate in sports events as spectators.

Definition of Sport for All, Sports and Physical Activities

9. A number of international organisations, such as the European Sport for All Charter, the International Charter of Physical Education and Sport, the Trim and Fitness International Sport for All Association (TAFISA) and the Sport for All Commission of the International Olympic Committee, have given various definitions of Sport for All. Although there are some slight differences in the focus and terminologies in the definitions, the organisations all recognise the national responsibility to ensure that every citizen has equal right to participate in sports and PA, and the stakeholders concerned, including the government and non-government agencies, play important roles in achieving the provision of sports and PA participation.

10. To sum up, we adopt the definition of Sport for All in this study as followed: "Sport for All' refers to creating opportunities and favourable environment through the collaboration of stakeholders and government to enable everyone, regardless of gender, age, ability, socio-economic status, or ethnicity, to participate freely in physical activities and sport."

11. In this study, "Physical Activity" refers to any physical movements that consume energy. These include sports and daily physical tasks such as walking, housework, morning exercises, gardening and job-related manual work. Sport is defined as part of physical activities. Apart from physical exertion, it usually requires sports skills with established rules for the game. Basketball, volleyball, swimming, track and field, dancing, etc. are examples of sports.

Indicators Recommended to Measure Physical Activity Participation

12. Two sets of indicators were used in this study to measure PA participation of Hong Kong people. One of them is the recent set of recommendations proposed by the National Association of Sport and Physical Education (NASPE) and US Center for Disease Control (USCDC)/US Department of Health and Human Services (USDHHS) (USA indicator):

- i) For children, to engage in five days a week of at least 60 minutes (accumulated) of age-appropriate and developmental appropriate PA (recommended to be of moderate to vigorous intensity).
- ii) For adolescents, to engage in at least three days a week of PA that last at

least 20 minutes at a time that require moderate to vigorous intensity of exertion.

iii) For adults aged 20 or above, to engage in moderately intense PA for at least five times a week and for at least 30 minutes (accumulated) per day.

Another indicator (Baseline Indicator), similar to the one commonly used by other countries/economies/cities and is a simpler indicator, is used to evaluate the PA participation. For example, the UK, China and Taiwan have adopted three times a week for 30 minutes per day. Recent research has shown that an accumulation of 30 minutes can also achieve similar health benefits (Miyashita, Burns, & Stensel, 2006¹) (Murphy & Hardman, 1998²). Therefore, we propose the "Baseline Indicator" to mean engaging in moderately or vigorously intense PA for three times a week and for at least 30 minutes (accumulated) per day. This indicator is applicable to all age groups.

- Note 1: Accumulating multiple short bouts of exercise throughout the day effectively reduce postprandial plasma triacylglycerol concentrations to an extent similar to that of a single 30-min session of exercise in healthy young men.
 - 2: Short bouts of brisk walking resulted in similar improvements in fitness and were at least as effective in decreasing body fatness as long bouts of the same total duration.

Features of Sport for All Policies in Reviewed Countries/Economies/Cities

13. There are distinct features in different countries with regard to the promotion of Sport for All. Canada and Singapore value the important role of sports excellence through the provision of elite sports training and competitions. The UK and the USA are heading towards leading a trend in increasing PA for health improvement and maintenance, as well as addressing the obesity problem. Japan and China highlight the objective of improving the overall quality of life through sports and PA participation. For example, China suggests that its citizens should subscribe to sports-related magazines regularly, and to learn at least two different lifelong sports or PA. Canada, the European Union and Taiwan advocate that indirect participation in sports either by serving as volunteers in sports event or by being sports attendees is also an important element in Sport for All. All these features need to be considered when suggesting a suitable model for the promotion of Sport for All in Hong Kong.

Model for the Promotion of Sport for All

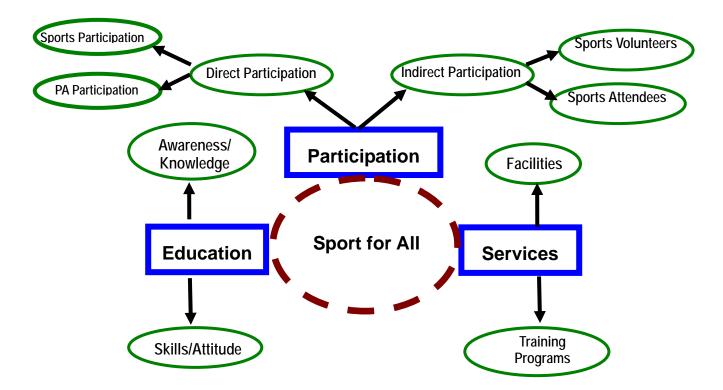
14. All policies When reviewing the Sport for of the selected countries/economies/cities, it is revealed that different countries/economies/cities promote slightly different policies reflecting their distinct features and advantages. With reference to the key features of most of these countries/economies/cities, particularly for Canada, UK, Australia, Singapore and South Korea, we come up with the following suggestions for Hong Kong. Other than **PA/sports participation**, these countries/economies/cities stress the importance of education and services.

i) Through education, public knowledge and awareness of the values of sports and PA to the overall quality of life would be enhanced. In addition,

positive attitude towards PA/sports participation, as well as specific skills that enable an individual to engage in sports and PA, would be improved through various educational channels.

- ii) The service components should include the provision of leisure facilities and organisation of leisure activities by different organisations, which encourage people's participation.
- iii) Apart from direct participation through sports and PA, the values of indirect participation through volunteerism and attendance in sports events are also recognised. However, because of the specific focus of this study, only the element of direct participation is included.

15. To promote Sport for All via "Education", "Services" and "Participation", not only the active role of the government, but also the involvement of other non-government organisations such as national sports associations and related organisations, local organisations, sponsorships and the overall infrastructure of the society are indispensable. To summarise, a structural diagram is shown below:



Survey

Methodology

16. Random sampling was used to select households for the face-to-face household survey to collect information on the participation patterns of Hong Kong people in PA. As the study was divided into three age groups (7 to 12, 13 to 19, and 20 or above), the questionnaire was specially designed to suit respondents of different age groups. In order to avoid variations in the participation patterns of PA because of seasonal preferences, the

survey was conducted in two phases. The first phase was carried out from 22 May to 10 July 2008, to collect data on PA patterns in a relatively cold period (January to March). The second phase was carried out from 2 September to 19 October 2008, to collect the data in a relatively warm period (June to August). For this survey, the Kish Grid method was used to randomly select a household member from the sampled households for interview. The response rate of the main sample was 70.18%. In order to make the data more representative, the survey data were presented as weighted data.

Sample Design

17. There were 4 037 successful interviews for the main sample and booster sample for respondents aged 7 or above and 1 054 for respondents aged 7 to 19.

Main Results

18. A total of 5 091 successful random samples were interviewed. The age breakdown is shown in Table 1.

Table 1. Age group distribution of successful respondents

Age Group	Successful Interviews (No.)		
	Total	Main	Booster
7–12	693	186	507
13–19	831	284	547
20 or above	3 567	3 567	-
Total	5 091	4 037	1 054

19. Of the total respondents, 48.7% were male (n=2 479) and 51.3% were female (n=2 612). The sampling distribution by gender matches the population distribution in Hong Kong.

Prevalence and Frequency of Sports Participation

20. As to the frequency of participation, 65.5% of Hong Kong citizens aged 7 or above participated in sports at least once in the past three months (Jan to Mar /Jun to Aug 2008). Figure 1 shows a slightly higher participation rate for male citizens (68.4%) than female citizens (62.9%). It is also shown that with the increase in age, the participation rate dropped significantly from 95.6% (aged 7 to 12) to 53.3% (aged 60 or above).

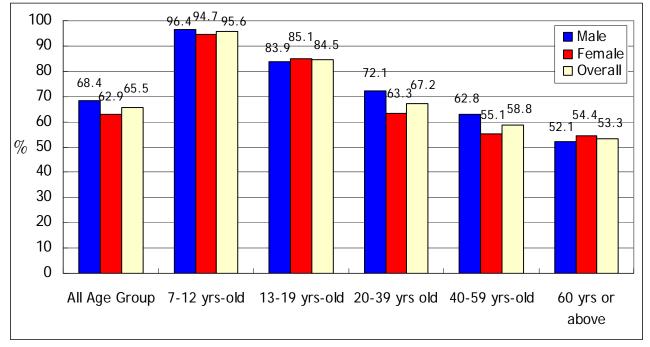
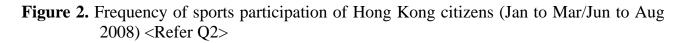
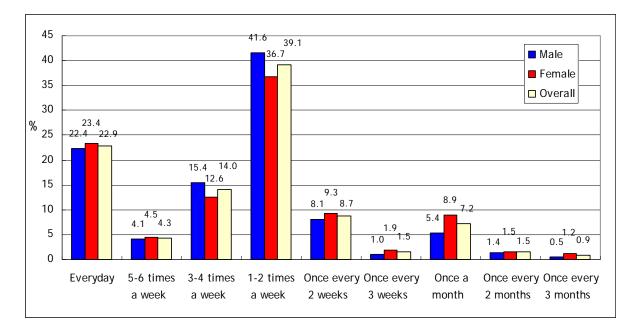


Figure 1. Sports participation of Hong Kong citizens by age (Jan to Mar/Jun to Aug 2008) <Refer Q1>

21. Among all the sports participants, 41.2% participated three times or more per week (27.0% of the population), and 80.3% at least once per week (52.6% of the population).





22. Among all the sports participants, the three most often participated sports were, by order, jogging (13.8%), swimming (13.2%) and badminton (10.1%). Different gender

and age groups have different choices. See Tables 2a and 2b for details.

Figure 3. Sports which Hong Kong citizens participated in most often (Jan to Mar/Jun to Aug 2008) <Refer Q6>

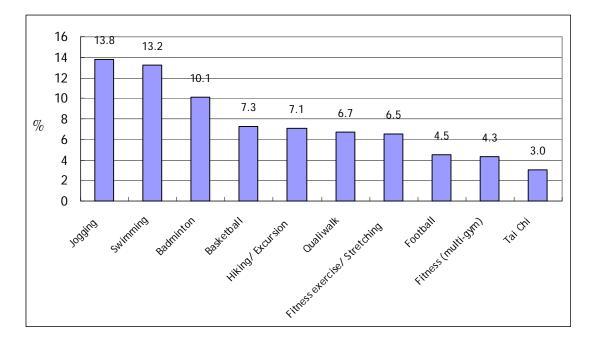


Table 2a. Sports which Hong Kong citizens participated in most often by gender <Refer Q6>

	Overall (%)	Men (%)	Women (%)
Jogging	13.8	13.8	13.8
Swimming	13.2	12.5	13.9
Badminton	10.1	7.8	12.4
Basketball	7.3	13.0	1.8
Hiking/Excursion	7.1	7.5	6.6
Qualiwalk	6.7	5.7	7.8
Fitness exercise/Stretching	6.5	4.3	8.6
Football	4.5	9.0	0.1
Fitness (multi-gym)	4.3	5.5	3.3
Tai Chi	3.0	1.6	4.4

	Overall (%)	7-12 yrs old (%)	13-19 yrs old (%)	20-39 yrs old (%)	40-59 yrs old (%)	60 yrs old or above (%)
Jogging	13.8	14.2	10.4	15.6	15.3	8.5
Swimming	13.2	19.8	13.4	15.6	11.4	6.6
Badminton	10.1	13.0	14.8	13.5	7.9	0.5
Basketball	7.3	10.7	23.2	8.6	1.7	0.9
Hiking/Excursion	7.1	0.1	0.6	5.3	12.6	9.1
Qualiwalk	6.7	1.7	0.8	4.2	9.0	16.5
Fitness exercise/ Stretching	6.5	1.4	1.9	2.0	6.7	24.6
Football	4.5	5.0	8.8	7.1	1.9	0.2
Fitness (multi-gym)	4.3	0.3	0.6	7.1	4.8	2.8
Tai Chi	3.0	-	0.1	0.1	4.1	12.2

Table 2b. Sports which Hong Kong citizens participated in most often by age groups <Refer Q6>

Sports Companions

23. Almost half of all the sports participants (46.9%) responded that friends/neighbours were their most popular companions; 40.8% exercised alone and 13.1% exercised with classmates. Please refer to Table 3 for details of companions of different age groups.

Table 3. Companions of different age group <Refer to Q7: Can provide more than one answer>

Age Group	The most popular sport companion
7-12	Parents (47.8%)
13–19	Friends/Neighbours (64.4%)
20-39	Friends/Neighbours (58.3%)
40-59	Alone (51.8%)
60 or above	Alone (62.9%)

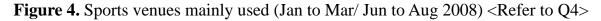
Time of Playing Sports

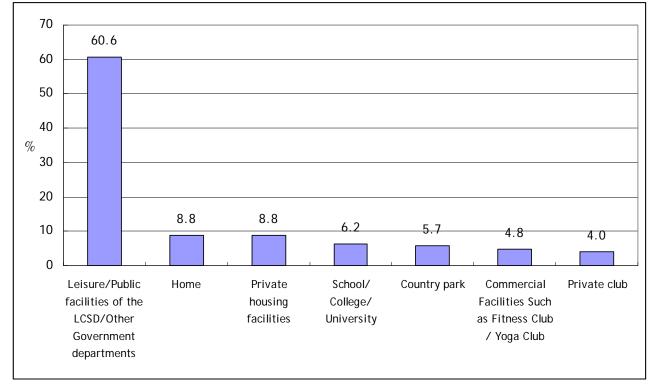
24. Among all the sports participants, 35.5% usually exercised in the morning, 27.6% in the evening and 20.2% in the afternoon. Please refer to Table 4 for details of the time choices of different age groups.

Age Group	Time of playing
	sports
7-12	Afternoon (50.6%)
13–19	Afternoon (44.6%)
20-39	Evening (50.2%)
40-59	Morning (41.5%)
60 or above	Morning (75.6%)

Table 4. Time of playing sports by different age groups <Refer to Q9>

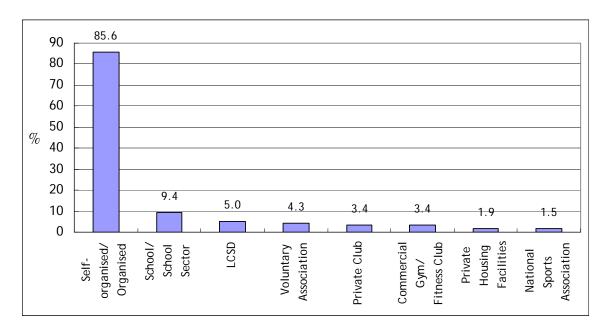
25. Most of the sports participants engaged in their sports activities in Leisure/Public Facilities of the LCSD/Other Government Departments (60.6%), followed by Home (8.8%) and Private Housing Facilities (8.8%).





26. Most sports participants organised sports activities by themselves or with friends (85.6%), followed by schools (9.4%) and LCSD (5.0%).

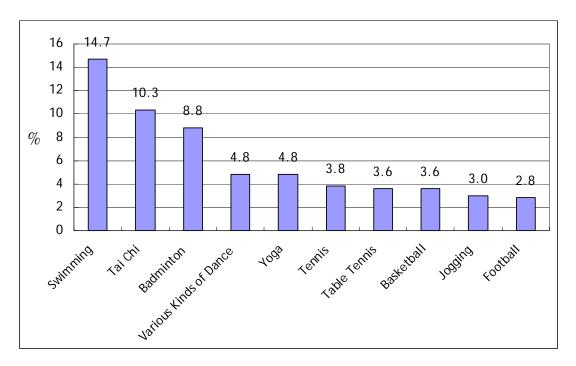
Figure 5. Organisers of the sports events (Jan to Mar/Jun to Aug 2008) <Refer to Q5: Can provide more than one answer>



Preference and Reasons for Learning a Sport

27. For Hong Kong citizens (aged 7 or above), their first three choices for preferred sports were Swimming (14.7%), Tai Chi (10.3%) and Badminton (8.8%). Children aged 7 to 12 (16.8%), adolescents aged 13 to 19 (13.3%), young adults aged 20 to 39 (16.7%) and middle-aged adults (aged 40 to 59) (15.9%) all indicated that they would select Swimming as their first choice when learning a sport, whereas older persons aged 60 or above selected Tai Chi (20.6%).

Figure 6. Sports preferred to be learned <Refer to Q10>



28. The first three factors that Hong Kong citizens considered in learning a sport were Interest (40.7%), Health/Keep Fit (21.3%) and Time Availability (11.6%). As age increased, interest became less important (decreased from 65.0% for children to 19.6% for older persons) while health became more important (increased from 5.2% for children to 43.1% for older persons). Facilities (4.8%) and Cost (2.9%) did not seem to be the major concerns.

PA Participation of Hong Kong Citizens

29. According to the Baseline Indicator (i.e. engagement in moderately or vigorously intense PA/sports three times a week with an accumulation of at least 30 minutes per day), the PA level of Hong Kong citizens can be classified as **Inactive** (completely sedentary or of low PA), somewhat active (**Some Active**) and **Active** groups. Overall speaking, when considering the Baseline Indicator (including PE lessons), 28.7% of Hong Kong citizens are regarded as Inactive, 22.8% Some Active and 48.6% Active. Table 5 has summarised the PA prevalence for the three age groups according to the recommended PA level: 76.6%, 68.1% and 44.2% of children, adolescents and adults respectively were considered Active; whereas 5.9%, 11.6% and 32.3% of children, adolescents and adults respectively were considered Inactive.

Table 5.	Prevalence of Hong Kong citizens meeting the recommended PA level of Baseline
Indicator	(%) <refer q12-17="" to=""></refer>

				commended Indicator	Meeting the recommended PA level of Baseline Indicator
Age Group		Inactiv Completely Sedentary ¹	ve Low PA ²	Some Active ³	Active ⁴
7 12	Including PE lessons	0.7	5.2	17.6	76.6
7–12	Excluding PE lessons	1.7	10.2	27.0	61.2
12 10	Including PE lessons	0.9	10.7	20.2	68.1
13–19	Excluding PE lessons	3.2	14.8	24.5	57.4
20 or above		3.5	28.8	23.5	44.2
Overall	Including PE lessons	3.1	25.6	22.8	48.6
Overall	Excluding PE lessons	3.4	26.3	23.8	46.6

Note: 1. Completely sedentary: Hong Kong citizens indicated that they did not engage in 30 min [accumulated] of low-intensity PA weekly in the past three months.

2. Low PA: Hong Kong citizens indicated that they engaged in 30 min [accumulated] of low-intensity PA but did not engage in 30 min [accumulated] of moderate or vigorous PA weekly in the past three months.

- 3. Some Active: Hong Kong citizens indicated that they engaged in 1 to 2 days of 30 min [accumulated] of moderate to vigorous activity weekly in the past three months.
- 4. Active: Hong Kong citizens indicated that they engaged in three days or more of 30 min [accumulated] of moderate to vigorous activity weekly in the past three months.

30. Overall speaking, when the indicators suggested by the USCDC/USDHHS were considered (including PE lessons), 29.4% of Hong Kong citizens were regarded as Inactive, 37.2% as Some Active and 33.3% as Active. The prevalence of engagement in PA by Active citizens changed to 34.1%, 71.3% and 29.1% for children, adolescents and adults respectively; while those of Inactive citizens (including PE lessons) changed to 20.2%, 10.3% and 32.3% for children, adolescents and adults respectively.

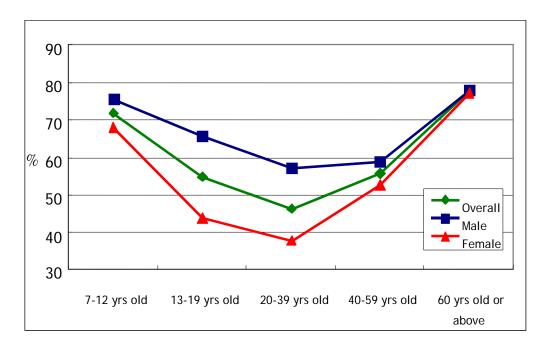
Table 6.Prevalence of Hong Kong citizens meeting the recommended PA level of the
USCDC/USDHHS (%) <Refer to Q12-17>

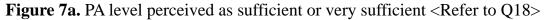
			meet the rec of USCDC/U		Meeting the recommended PA level of USCDC/USDHHS
		Inact	tive		Active ⁴
Age Group		Completely Sedentary ¹	Low PA ²	Some Active ³	(Meeting age-specific PA recommendation)
7-12	Including PE lessons	13.1	7.1	45.7	34.1
7-12	Excluding PE lessons	17.1	10.0	51.9	21.0
13-19	Including PE lessons	1.0	9.3	18.4	71.3
13-19	Excluding PE lessons	2.5	12.3	24.2	61.0
20 or above		3.5	28.8	38.6	29.1
Overall	Including PE lessons	3.9	25.5	37.2	33.3
Overall	Excluding PE lessons	4.3	26.0	38.1	31.5

- Note: 1. Completely sedentary: For ages 7 to 12, Hong Kong citizens indicated that they did not engage at least once in 60 min (accumulated) of low-intensity PA weekly in the past three months. For ages 13 to 19, Hong Kong citizens indicated that they did not engage at least once in 20 min (continuous) of low-intensity PA weekly in the past three months. For ages 20 or above, Hong Kong citizens indicated that they did not engage at least once in 30 min (accumulated) of low-intensity PA weekly in the past three months.
 - 2. Low PA: For ages 7 to 12, Hong Kong citizens indicated that they engaged in 60 min [accumulated] of low-intensity PA but did not engage in 60 min [accumulated] of moderate or vigorous PA weekly in the past three months. For ages 13 to 19, Hong Kong citizens indicated that they engaged in at least 20 min of moderate PA, but did not engage in at least 20 min of moderate or vigorous PA weekly in the past three months. For ages 20 or above, Hong Kong citizens indicated that they engaged in 30 min [accumulated] of low-intensity PA, but did not engage in 30 min [accumulated] of moderate nor vigorous PA weekly in the past three months.

- 3. Some Active: For ages 7 to 12, Hong Kong citizens indicated that they did not engage in 60 min [accumulated] of moderate or vigorous PA for five days a week in the past three months. For ages 13 to 19, Hong Kong citizens indicated that they did not engage in at least 20 min of moderate or vigorous PA. For ages 20 or above, Hong Kong citizens indicated that they did not engage in 30 min [accumulated] of moderate or vigorous PA for five days a week in the past three months.
- 4. Active: Hong Kong citizens indicated that they reached the age-specific weekly PA guidelines (i.e., 7 to 12 years old: five days of 60 min [accumulated] moderate PA and above; 13 to 19 years old: three days of 20 min moderate PA and above; 20 years old or above: five days of 30 min [accumulated] moderate PA and above.

31. More than half (57.4%) of Hong Kong citizens thought that they had "Sufficient" or "Very Sufficient" level of PA. For all age groups, Figure 7 shows that when compared with male citizens (63.5%), less female citizens (51.9%) perceived themselves as having sufficient PA level. More citizens aged 7 to 12 (72.0%) and 60 or above (77.7%) thought that they had "Sufficient" or "Very Sufficient" level of PA.





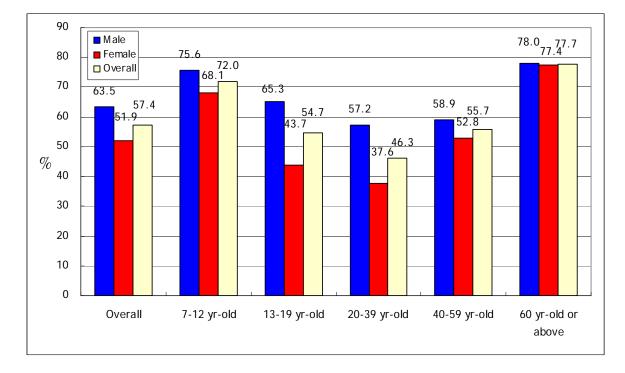
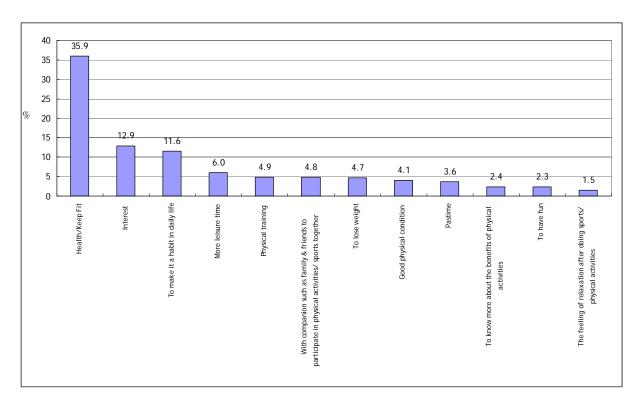


Figure 7b. PA level perceived as sufficient or very sufficient <Refer to Q18>

Primary Reasons and Barriers for PA Participation

32. The primary reasons for Hong Kong citizens to engage in PA were "health/keep fit" (35.9%), "interest" (12.9%) and "to make it a habit in daily life" (11.6%). The primary reason for those aged 7 to 12 (30.0%) and 13 to 19 (26.9%) to engage in PA was "interest". For those aged 20 to 39 (32.5%), 40 to 59 (42.8%) and 60 or above (47.5%), the primary reason was "health/keep fit".

Figure 8a. Reasons for participation in PA <Refer to Q21>



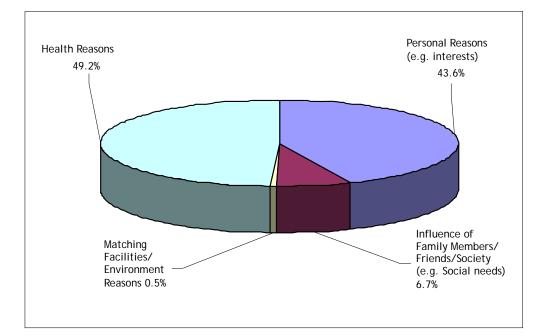
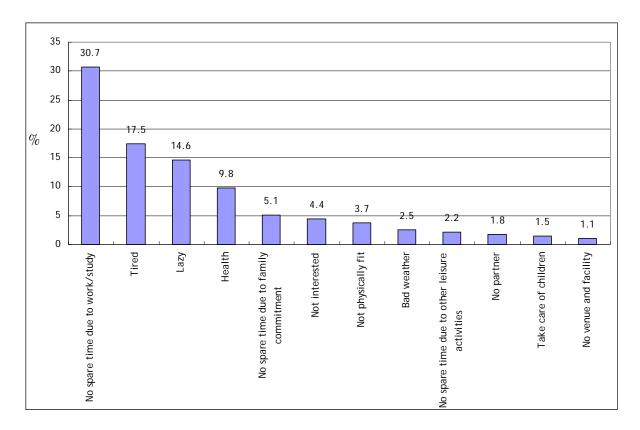


Figure 8b. Reasons for PA participation (by categories) <Refer to Q21>

33. The primary reasons for not taking an initiative in PA participation were "no spare time due to work/study" (30.7%), "tired" (17.5%) and "lazy" (14.6%). According to the data, the reasons were "no spare time due to work/study" for those aged 7 to 59, and "health reason" for those 60 or above.

Figure 9a. Primary reasons for not taking an initiative in PA participation <Refer to Q22>



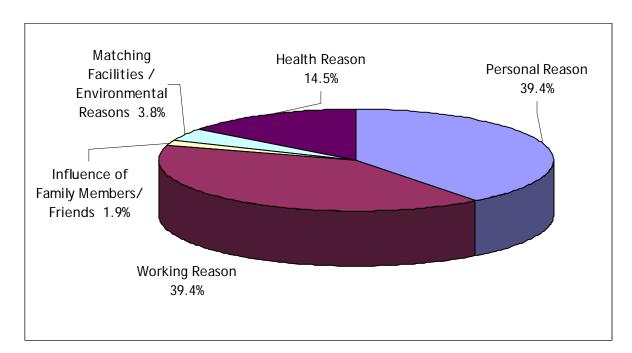
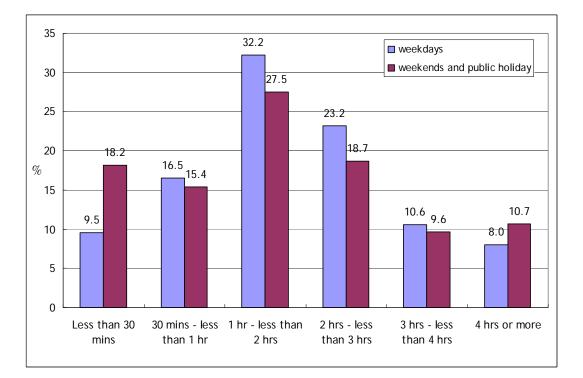


Figure 9b. Primary reasons for not taking an initiative in PA participation (by categories) <Refer to Q22>

Time Spent on Doing Homework and Revision (Weekdays, Weekends and Public Holidays)

34. Among full-time students, during weekdays, 32.2% spent one to two hours per day on homework and studying, and 41.8% spent two hours or more per day on homework and studying. During weekends and public holidays, the patterns were similar, that is 27.5% and 39.0% respectively.

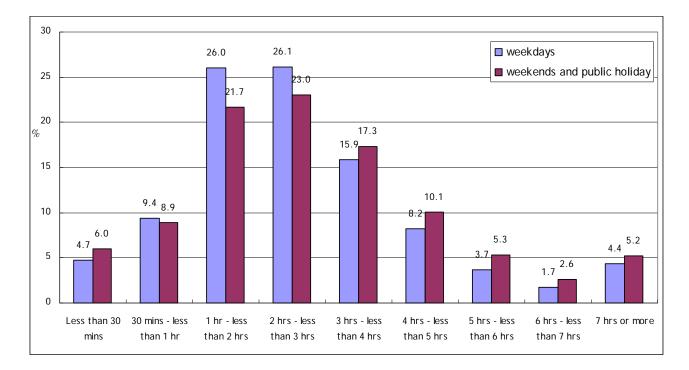
Figure 10. Time spent on doing homework and revision <Refer to Q27 and Q28>



Time Spent on Watching TV, Playing Video Games and Computer

35. For other activities, 33.8% of Hong Kong citizens spent an average of three hours or more per day watching TV or using the computer during weekdays. The prevalence of children aged 7 to 12 spending four hours or more watching TV or using the computer during weekends and public holidays was 27.9%, which was more than double of that reported for weekdays. For adolescents, the patterns were similar.

Figure 11a. Time spent on watching TV, playing video games and computer <Refer to Q29 and Q30>



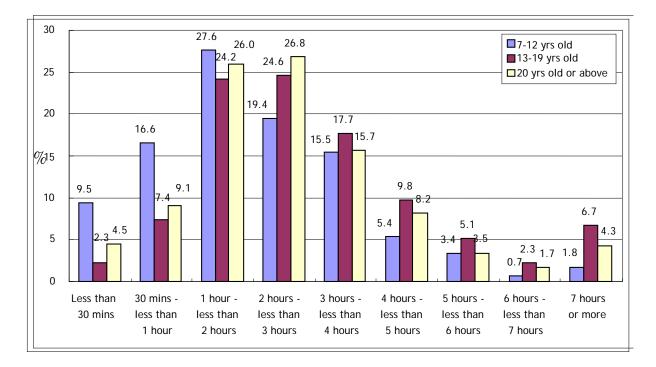
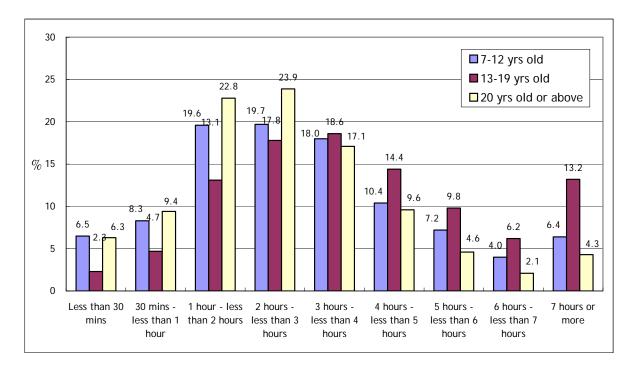


Figure 11b. Time spent on watching TV, playing video games and computer during weekdays by age groups <Refer to Q29>

Figure 11c. Time spent on watching TV, playing video games and computer during weekends and public holidays by age groups <Refer to Q30>



Time Spent on Walking

36. 79.9% of Hong Kong citizens spent at least 30 minutes in average on walking per day and around half of Hong Kong citizens (50.5%) said they walked at least one hour per day.

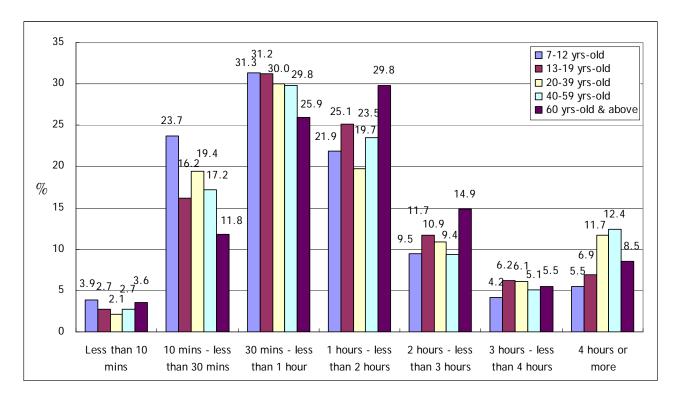
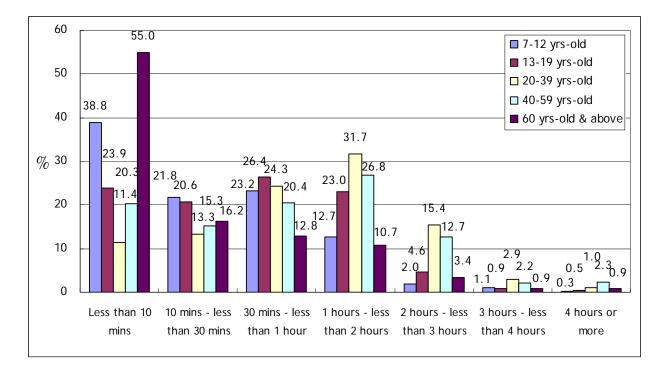


Figure 12. Time Spent on Walking <Refer to Q31>

Time Spent on Transportation

37. Regarding time spent on various means of transportation, 24.4% of Hong Kong citizens reported that they spent one to two hours per day, 61.7% spent less than one hour, and 13.9% spent more than two hours per day. Please refer to Figure 13 for details of different age groups.

Figure 13. Time Spent on Transportation <Refer to Q32>



Overall Time Spent on Sitting

38. Regarding sedentary activities, 29.9% of Hong Kong citizens spent six to nine hours per day on sitting, 42.2% spent less than six hours per day and 27.9% spent more than nine hours per day. Figure 14 shows that those aged 60 or above spent less time on sitting than younger ones.

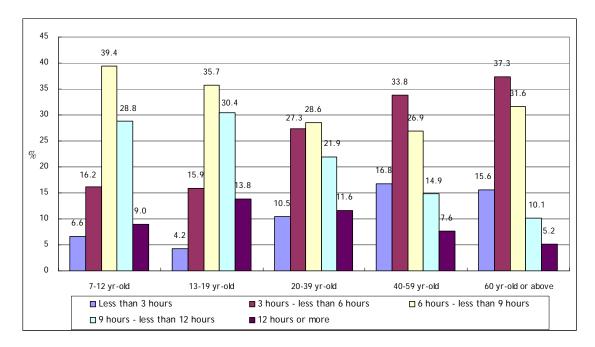
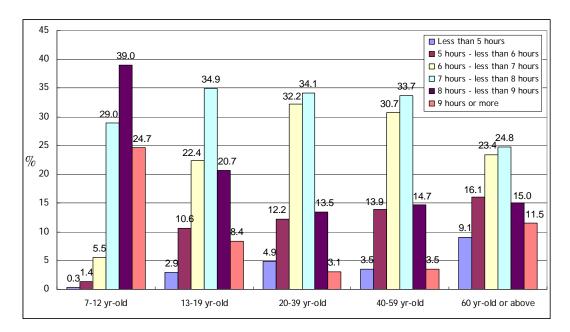


Figure 14. Time spent on sitting <Refer to Q33>

Time Spent on Sleeping

39. Only 55.3% of Hong Kong citizens slept for seven hours or more daily, whereas 27.5% slept for six to seven hours and 17.2% slept for less than six hours daily.

Figure 15. Time spent on sleeping <Refer to Q34>



Awareness of Sports-related Information

40. Figure 16 shows that male Hong Kong citizens paid more attention to sports-related information than female citizens. It shows that 25.2% of male citizens paid attention to sports-related news very often, while only 8.8% female citizens did the same.

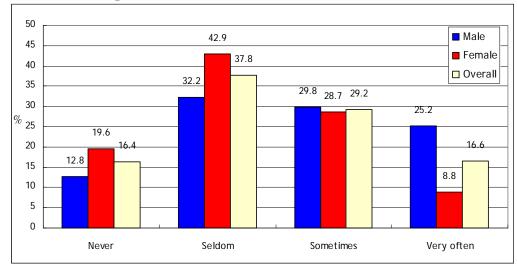
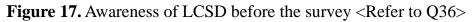
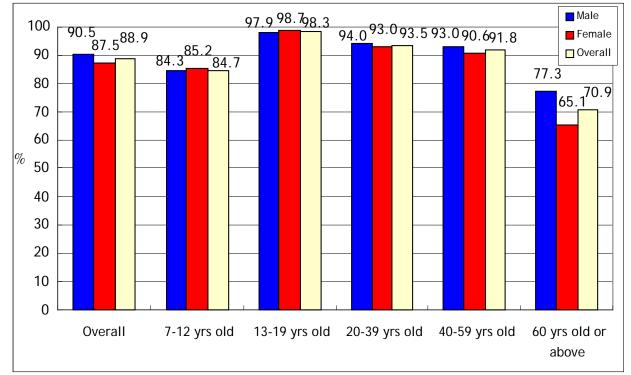


Figure 16. Attention to sports-related information or news <Refer to Q35>

Awareness of LCSD Services

41. Among Hong Kong citizens, 88.9% were aware of LCSD before the survey. Most of them knew about LCSD services through, by order, TV (59.4%), LCSD Sports Venues (31.1%), Newspaper/Magazine (28.1%) and the Internet (21.7%).

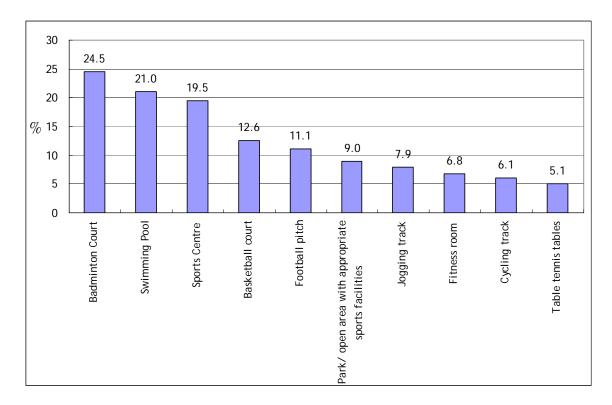




Sports Facilities

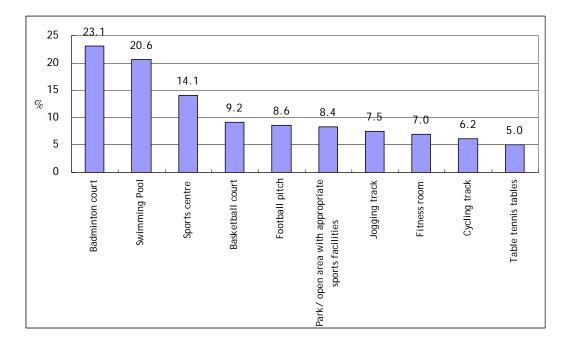
42. Less than half (48.8%) of Hong Kong citizens aged 13 or above considered the sports facilities to be sufficient and 39.1% thought that the sports facilities were not sufficient. For those sports facilities deemed to be insufficient, the first three were, by order, badminton courts (24.5%), swimming pools (21.0%) and sports centres (19.5%).

Figure 18. Sports facilities considered to be insufficient <Refer to Q24: Can provide more than one answer>



43. For Hong Kong citizens who considered the sports facilities as inadequate, the facilities they wanted to increase most were badminton courts (23.1%), swimming pools (20.6%) and sports centres (14.1%). The age group of 13 to 59 years old wanted to increase the number of the badminton courts and those aged 60 or above desired to increase the number of parks/open areas with appropriate sports facilities.

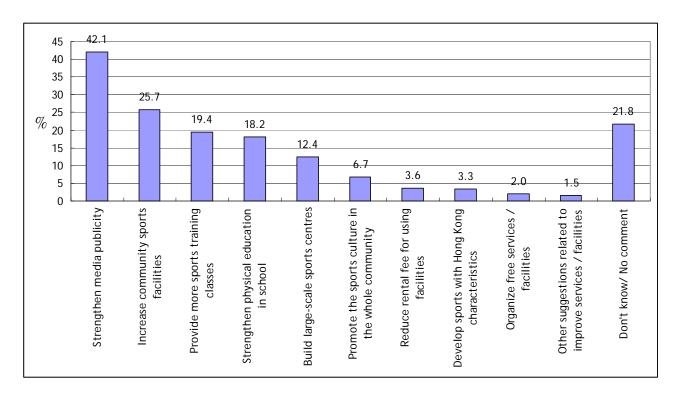
Figure 19. Sports facilities most desired to increase <Refer to Q25: Can provide more than one answer>



Suggestions to Strengthen the Promotion of Sport for All

44. Large proportion of Hong Kong citizens aged 13 or above agreed that the suggestions to "strengthen media publicity" (42.1%) and "increase community sports facilities" (25.7%) can help the promotion of Sport for All.

Figure 20. Suggestions for the promotion of Sport for All <Refer to Q39: Can provide more than one answer>



PA Participation on the Hong Kong Island, Kowloon and the New Territories

45. Female adults in the New Territories had higher PA participation than those on the HK Island and in Kowloon, whereas both male and female adults on the HK Island had higher sports participation than those in the NT and Kowloon. This was probably because the sports facilities on the HK Island were more accessible.

Figure 21. Distribution of Active female citizens by regions (measured by Baseline Indicator)

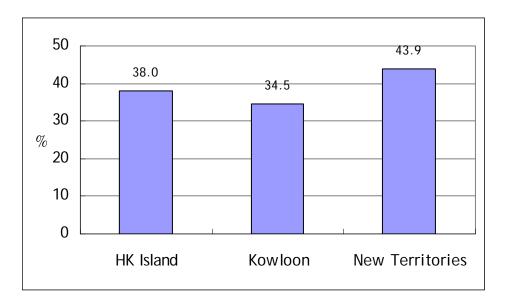
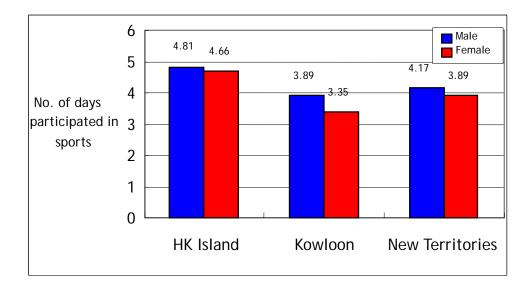


Figure 22. Number of days of sports participation in different regions



Seasonal Factors

46. The general prediction before the study was that most people would participate in PA in summer. However, it was found in this study that seasonal difference in PA/sports participation was not obvious for children, adolescents and adults alike.

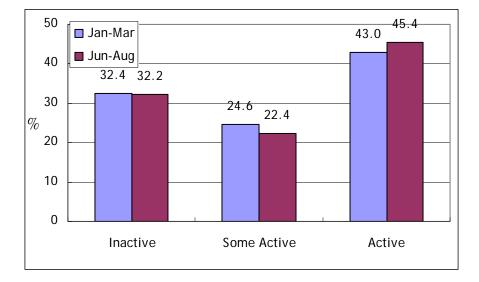
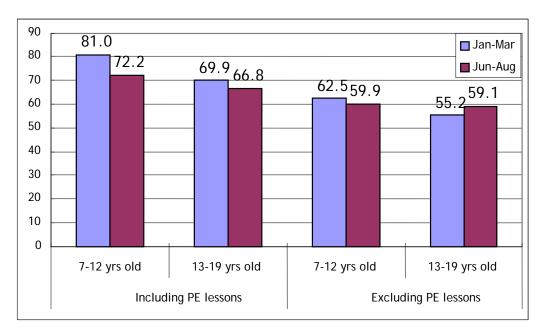


Figure 23a. PA participation of adults in different seasons (measured by Baseline Indicator)

Figure 23b. PA participation of Active children and adolescents in different seasons (measured by Baseline Indicator)



Characteristics of Active Venue Inactive Respondents

47. Active and Inactive Hong Kong citizens made different choices in respect of the exercise companions, perception of sufficiency in PA, reasons and barriers for PA participation, etc. The Inactive children and adolescents spent more time on TV/computer and less time on daily walking. The Active adults spent less time on TV/computer (men only), less time on sitting, more time on daily walking and more time on transportation (men only), and had a lower level of smoking. Moreover, Some Active adults had higher education and family income levels. Table 7 shows a simple comparison of their characteristics.

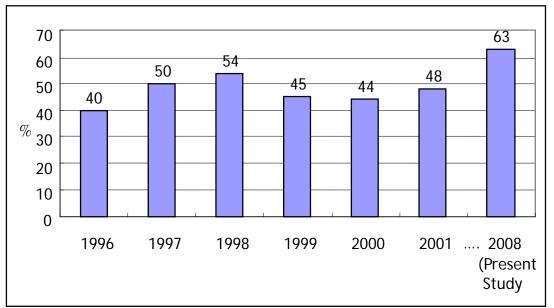
27

	Active Hong Kong Citizens	Inactive Hong Kong Citizens
Age group	Younger	Older
Gender	Male	Female
Time spent on daily walking	More	Less
Time spent on TV/computer	Less	More
Time spent on sitting	Less	More
Place of residence	NT (women)	Kowloon (women)
Exercise companions	Exercise with friends	Exercise alone
Sports preference	Jogging/Swimming	Fitness exercise/Stretching exercise

Prevalence of Sports and PA Participation in Hong Kong

48. A series of survey was conducted by the former Sports Development Board (SDB) from 1996 to 2001 on sports participation of Hong Kong citizens aged 15 or above. From the figure below, it can be seen that sports participation of Hong Kong citizens aged 15 or above in this survey was 63%, which was 9% higher than ten years ago (54% in 1998) and 15% higher than 2001.

Figure 24. A comparison of sports participation in previous and present studies



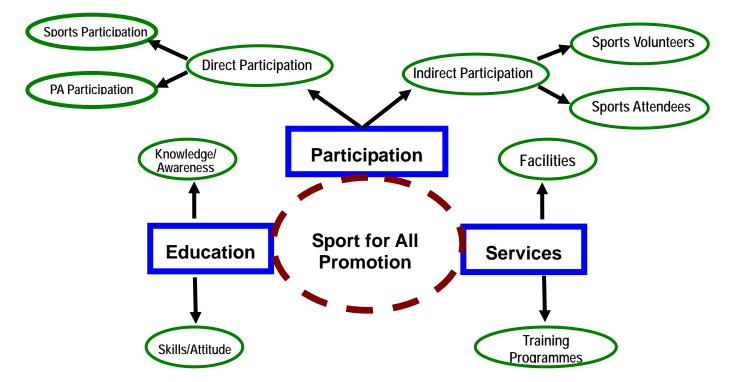
Note: The data from 1996 to 2001 were retrieved from the Sports Participation Survey (SDB). The data in the present study indicate prevalence of participation in at least one sport activity during the last three months by respondents aged 15 and above.

49. Similar results of increasing PA participation were also found in other studies. For example, according to the behavioural risk factor survey conducted by the Department of Health from 2005 to 2007, the PA level of 18 to 64 years-old Hong Kong citizens increased from 20.3% in 2005 to 22.0% in 2006, and 23.0% in 2007. These data also indicate that the PA levels of Hong Kong citizens were on the rise. The obvious increase as compared with the last decade may be associated with the ongoing efforts of various government departments and non-government agencies in sports promotion. For example, the LCSD organised a total of 22 000 community recreation and sports activities for 1 253 442 participants in 2000. It was increased to 33 900 in 2008 (an increase of 54.1%), totalling 1 945 000 participants (an increase of 55.2%). The number of LCSD-subsidised activities in 2001 was 5 901, which was increased to 10 040 in 2008 (an increase of 70.1%). In addition, the LCSD and the Department of Health has been promoting the Healthy Exercise for All Campaign since 2000, and has been actively promoting the School Sports programme with the Education Bureau since 2001. With the effect of the 2008 Beijing Olympic Games, the efforts are likely to result in an overall increase in PA participation.

Recommendations

50. The definition and model for Sport for All as well as the indicators for measuring its effectiveness are developed from the findings of the literature review. Results from such evaluation will serve as the basis for revising the future Sport for All policy in Hong Kong. The results of the survey study on the PA and sports participation patterns will serve as benchmark figures for future studies.

51. It is recommended that the Sport for All model shown below be adopted for policy planning and future evaluation:



52. The present study recommends the objective of Sport for All to be "to creating opportunities and favourable environment through the collaboration of stakeholders and

government support to enable everyone, regardless of gender, age, ability, socio-economic status or ethnicity to participate freely in physical activities and sport".

53. Sports participation produces a number of personal and social benefits. Apart from enhancing the quality of life, it also promotes good health. The indicators for evaluating the health attainment effectiveness are mainly the frequency and intensity in PA participation. The following two suggestions can serve as reference:

- (i) Indicator recommended by the US:
 - for elementary school-aged children, to *accumulate* at least 60 minutes (each bout should last for at least 10 minutes or more) of daily PA at moderate intensity or above for at least five days a week (NASPE, 2004);
 - for adolescents, to engage in three or more sessions per week of PA that *last at least* 20 minutes at a time, which require moderate to vigorous intensity of exertion (USDHHS, 2000);
 - for adults, to *accumulate at least 30 minutes* (each bout should last for at least 10 minutes or more) of moderate activities for at least five days a week (USDHHS, 1996).
- (ii) To encourage the public to make PA a habit, participation can start at the basic level. For the frequency and intensity, the recommendation widely used by other countries/economies/cities can be adopted as follows:
 - engagement in moderately or vigorously intense PA/sports three times a week for at least 30 minutes accumulated per day. This indicator is applicable to all age groups.

As the PA levels of more than half (51.4%) of Hong Kong citizens did not meet the Baseline Indicator, it is suggested that an encouraging indicator applicable to all age groups should be used (i.e. Baseline Indicator). The targets will be the Inactive and Some Active persons. They are recommended to engage in moderately or vigorously intense PA/sports three times a week for at least 30 minutes accumulated per day. It will help to encourage those who do not have sufficient PA to participate more in such activities.

54. In order to tie in with the rapid changes in technology, culture and life styles of Hong Kong, and to keep abreast of the extent of Sport for All in the society, there is a need to conduct regular territory-wide questionnaire surveys to track the changes in life styles and quality of life of Hong Kong citizens. Such evaluation serves as one of the tools for evaluating our existing policies and programmes. To achieve this, benchmark indicators, which are evidence-based and recommended by prestigious professional bodies, must be established. It is suggested that the same survey should be conducted at a five-year interval for a timely review of the effectiveness of the policy and changes that result from the policies and efforts on PA/sports promotion. In 1995, the Chinese Government announced that the national survey on physical fitness and activities would be conducted at a

a five-year interval. The prevalence in PA participation of US citizens showed subtle annual changes from 2001 to 2005 (a drop from 41% to 37% for young adults), thus a clearer picture of change can be viewed at a five-year interval. The national survey of the Australian government is also suggested to be conducted at a five-year interval. However, in order to allow evaluation over a five-year period, preparation work for the evaluation, such as questionnaire design, interviewer training, survey tendering and field work interviews, need to be implemented within the five-year period. Thus a duly designated office responsible for the PA and sports participation surveillance should be set up for the systematic and effective accomplishment of the task.

55. To promote Sport for All, it is suggested that all stakeholders, including both government and non-government agencies, be mobilised to participate in all three major elements of Sport for All, namely education, services, and direct and indirect participation in PA/sports.

56. As a result of the survey, it is suggested that more media publicity be developed to educate the public and to raise their awareness of the importance of PA/sports participation. For example, stimulating video clips which focus on the key messages of the importance of PA participation can be produced and broadcasted through TV, roadshows and radio during prime time. Eye-catching posters with simple and easy-to-remember slogans can be posted in strategic sections of the community, such as the MTR, buses, mini-buses and entrances/exits of residential estates.

57. "Too busy due to work/study" is the most common barrier for PA/sports participation. Inactivity is also associated with the increase of time spent on TV. It is suggested that incentives be given to encourage more active lifestyle engagements at home or at work. Walking and stair-climbing can be good choices. Other innovative activities are also needed, such as interactive video games requiring active physical movements, rope skipping and hulahoop at home, among other things.

58. Swimming, badminton, jogging and walking are the most popular sports activities reported by Hong Kong citizens, while swimming and Tai Chi are the most popular sports which citizens like to learn. It is therefore suggested that more promotional programmes related to swimming, badminton, jogging, walking and Tai Chi be organised frequently. When planning for the addition of sports facilities, the interests and opinions of the community should be taken into consideration.

59. Since Active and Inactive citizens possess different characteristics, different PA/sports participation strategies for encouraging should be formulated. The psychological framework of the following Transtheoretical Model (TTM) for exercise promotion can be applied (Marshall & Biddle, 2001): i) to raise the awareness of the Inactive people, to enable them to recognise the fun and importance of sports and then start participating in them; ii) to encourage those who have already participated in some sports to establish a habit of more participation and; iii) to encourage those who regularly participate in sports to continue doing so, and to improve their physical fitness and enjoy the fun of sports. It is recommended that different PA/sports strategies for the three groups listed above To encourage Inactive citizens to become more active, more opportunities be designed. and attractions can be offered, such as the organisation of "exercise with partner" scheme or "buddy scheme", offering priority enrolment for each citizen enrolling in exercise programmes with a partner, certificates/medals of achievement if a certain number of friends/buddies can be introduced into the exercise programme, additional awards for those in greater need, such as older individuals and/or female participants, etc. For the Active citizens, attention should be given to retain their active life style by providing more innovative and interesting activities. At the same time, resources and/or opportunities for periodic physical fitness evaluation and health check will be effective ways to maximise participation in exercises. Similar to the setting in the Mainland, the provision of physical fitness testing centres across the 18 districts in Hong Kong.

60. In addition, it is also recommended that combinations of different types of activities be provided for different age groups, for example, parent-child activities can be organised for parents and kids, to participate together. Team activities can be organised for young people who like to play in group. For the middle-aged and elderly, a variety of PA/sports which they can participant in or play alone should be designed for them.

61. The results revealed that citizens living on the Hong Kong Island are more active in sports participation whereas women living in the New Territories are more active in PA participation. It reflects that sports facilities in the New Territories may not be convenient for citizens' access. Hence, lifestyle activities such as walking and Tai Chi may be excellent choices for citizens living in the New Territories. Walking programmes can also be strengthened for women residing in Kowloon, with special emphasis on peer-enrolment, either with friends or spouses.

62. Long term speaking, more opportunities should be provided for different sectors of the community to have more time for participation in PA/sports. For example, for the benefit of the working people, enterprises may be encouraged to implement a five-day week to give employees more leisure time. At the same time, it is necessary to make the best use of the working environment and the workplace by considering adding appropriate facilities to promote staff participation in PA/sports. The Education Bureau should make good use of the school resources, through a variety of methods, to encourage more students to participate in PA/sports.

63. As can be seen, PA/sports participation in the model of Sport for All includes direct and indirect participation. However, the present study evaluated only direct participation. It is proposed that questions on the experience and prevalence of sports volunteers and attendees be included in future studies.

64. A task force group to follow up on the recommendations listed above is likewise proposed.

32 Appendix A

Summary of Sport for All Policies

Countries/ economies/cities	Sport for All Policies
Australia	 The area of "Sport for All" presents a large area of information including inclusive practices in sports, cultural awareness, education and the creation of equal opportunities for all Australians to participate in sports. Active Australia: Four areas Education: increase awareness on the benefits of regular PA participation Environment: create better school and workplace environment Infrastructure: increase the capacity of the community Evidence: establish national PA monitoring, evaluation and
Canada	research systems. By 2012: a dynamic and leading-edge sport environment that enables all Canadians:
	 to experience and enjoy involvement in sports to the extent of their abilities and interests, and to increase the number of those who perform consistently and successfully at the highest competitive levels. Four Aspects: Enhanced Participation; Enhanced Excellence; Enhanced Capacity; Enhanced Interaction.
United	Top priority is to reduce obesity of the nation via promoting Sport
Kingdom	 for All. to encourage as many people as possible to engage in different forms of sports; to increase the awareness and knowledge of the importance of sports.
USA	Healthy People 2010:
	 to increase the quality and years of healthy life; to eliminate the health disparities among different segments of population; 28 focus areas and 10 leading health indicators, among which PA has been determined as the nation's top priority.
European	EU White Paper on Sport for All:
Union	 A. The societal role of sport – (1) Public health and PA; (2) Fight against doping; (3) Education and training; (4) Volunteering in sports, active citizenship and non-profit sports organisations; (5) Social inclusion in and through sports; (6) Prevention of and fight against racism and violence in sports; (7) Sports in the Union's external relations; and (8) Sustainable development. B. The economic dimension of sports – (1) Economic impact of sports and (2) Public support for sports. C. The organisation of sports – (1) Free movement and nationality;

	3
	(2) Players' agents; (3) Protection of minors; (4) Corruption, money laundering and other financial crime; (5) Licensing systems; and (6) Media.
	D. Follow-up – (1) Structured dialogue with sports stakeholders; (2) Cooperation with Member States; and (3) Social dialogue.
China	Nationwide Physical Fitness Programme: 1-2-1 initiatives (全民健
	身 121 工程) For citizens: Participate in at least one physical exercise every day; learn at least two kinds of sports per year; participate in physical fitness test once a year.
	For family: Equip with at least one exercise device; engage in outdoor PA no less than twice a quarter; subscribe to at least one
	 exercise-related magazine. For community: Provide at least one exercise venue in each community; organise community-wide physical exercises twice a year; establish a group of fitness instructors in each community.
	For school: Require each student to participate in one- hour physical exercise every day; organise students to participate in outdoor billing on comming trains a meaning students to take health
	hiking or camping twice a year; organise students to take health examination once a year.
Japan	 realise a lifelong sports society in which all people can enjoy sports any time and any where, and create a sports environment in local communities;
	 2) improve Japanese international competitiveness in sports so that Japanese athletes can play an even greater role in the Olympics and other international athletic competitions; and 3) take steps to enhance physical education in schools to further promote physical education and sports activities for children in conjunction with the support of schools and local governments. The goal of the Basic Plan for the Promotion of Sports is to increase the percentage of people involving in sports at least once a week to
South Korea	at least 50% as quickly as possible.Aims at improving the quality of citizens through sports and
	 establishment of Sport for All infrastructures. The promotion of Sport for All industry involves the construction of sports facilities, the development and distribution of sports programmes, and the promotion of both voluntary sports clubs and products of the relevant sports. From 2003 to 2007, focus is placed on the construction of infrastructures, the facilitation of sports club activities in schools and the enhancement of the health condition of its citizens, especially the youths. It is targeted to increase sports participation rate from 10% in 2007 to 30% in
a •	2011.
Singapore	 The three pillars: Sports for everyone, sporting excellence and a serious sports industry: Sports Participation: to provide all levels of sports and exercise
	programmes, from entry level to elite training.

	Sports Excellence: to promote international sporting excellence.		
	Sports Industry: to build a sustainable sports industry to maintain the		
	contribution of Singapore Sports Council to the greater economy		
	and to help finance their programmes.		
Taiwan	The Six-year (2002–2007) Exercise Participants Multiplication		
	Program focuses on enabling inactive people to acquire knowledge		
	and skills in sports. It consists of health education, fitness		
	instructors and volunteers training, improvement of fitness		
	facilities and organisation of sports activities. A major objective		
	is to increase 500 000 exercise participants annually, which include		
	100 000 people participating in swimming and 50 000 people		
	engaging in bicycling regularly. By 2007, three million people		
	are expected to become exercise participants.		
Hong Kong	The objective of the "School Sports Programme" and "Healthy		
	Exercise for All Campaign" is to encourage every Hong Kong		
	citizen to engage in daily participation in PA of moderate intensity		
	for at least 30 minutes.		