

## **COMMUNITY SPORTS COMMITTEE**

### **Report from the Territory-wide Physical Fitness Survey for the Community Advisory Committee**

#### **Introduction**

This paper seeks to report to Members of the Community Sports Committee (CSC) on the progress of the preparatory work for the Territory-wide Physical Fitness Survey for the Community (the Survey) and outline the proposed research methodology as well as the arrangements of the implementation work.

#### **Background**

2. Discussion paper CSC Paper 05/19 was approved by CSC on 17 October 2019 for the establishment of the Territory-wide Physical Fitness Survey for the Community Advisory Committee (AC), which is responsible for advising on the Survey's implementation, publicity and promotional strategies, community involvement, as well as data collection and submission of report, etc. by the professional agent to be commissioned. Membership of AC includes two representatives from CSC (as the convenor and vice-convenor of AC), representatives from the Department of Health (DH), the Education Bureau (EDB), the Home Affairs Bureau (HAB) and the Leisure and Cultural Services Department (LCSD), as well as professional organisations (including the Hong Kong Centre of Sports Medicine and Sports Science, the Hong Kong Jockey Club Sports Medicine and Health Sciences Centre, and the Physical Fitness Association of Hong Kong, China (PFAHK)). LCSD, under the guidance of AC, shall be responsible for implementing the specific work of the Survey.

#### **Work progress**

3. Three AC meetings were held on 12 November 2019, 19 December 2019 and 6 April 2020 respectively. Five academic professionals were invited to attend the second and the third meetings to provide their professional views on methods of the Survey. Having consolidated the views from attendees, AC has finalised the methods of the Survey and put forward specific delivery proposals on various areas of the Survey, i.e. age groups, sampling method, sample size, details of the physical fitness tests, anticipated time for completion, commissioning of professional agents and publicity strategies.

## **Modes of delivery**

### **4. Age groups**

- i As infants aged 3 to 6 are still developing their physical skills, their physical abilities may not be fit for the physical fitness tests. In addition, the sports programmes under the existing government policy of Sport for All target mainly at students aged above 6. As such, AC Members unanimously agreed that infant group aged 3 to 6 be excluded from the target groups of the Survey.
- ii To better follow the prevailing overall trend of ageing population, the age limit will be raised from 69 in the last Survey to 79 in this Survey.
- iii After excluding infants aged 0 to 6 and raising the age limit to 79, the Survey will be categorised into 6 groups, i.e. aged 7 to 11, aged 12 to 16, aged 17 to 19, aged 20 to 39, aged 40 to 59 and aged 60 to 79. To dovetail with the lifestyles of different stages of life, the categorisation of age groups may be revised.

### **5. Sampling Method**

- i. The data collected in the Surveys on Physical Fitness of School Pupils regularly conducted by the Education Bureau (EDB) for primary and secondary students in Hong Kong will be used directly as the data of school children and adolescents (aged between 7 and 16) in this Survey, so as to avoid duplication of resources.
- ii. Given the low effective response rate of adult group in the last survey and changes in the social environment in recent years, the form of household interviews will no longer be used in this Survey. Instead, members from organisations of different types will be invited to take part in this Survey. Questionnaires and physical fitness tests will be conducted with these members.
- iii. Information of economic groups in Hong Kong provided by the Census and Statistics Department (C&SD) is used as a framework for collecting samples among working persons. HAB will also assist in liaising with industrial and commercial organisations and associations to call on their member companies and organisations to support and participate in the Survey, with a view to increasing the sampling rate of working persons. In addition, the total strength of the civil service in Hong Kong is around 180 000, accounting for about 5% of the working population. Hence, policy bureaux will be contacted through HAB to encourage bureaux/departments to take part in the Survey.

- iv. Contact non-working persons (including university students, housewives, elderly people and retirees) for taking samples and participating in the Survey by liaising with member organisations of the Hong Kong Council of Social Service (HKCSS) through tertiary institutions, the Social Welfare Department and HKCSS.

## 6. Sample Size

With reference to the successful sample size (8 178) in the last survey, a sample size of 8 500 is recommended for this Survey. According to the “Projected Mid-year Population by Age Group 2020” first published on 8 September 2017 by C&SD, the sample sizes required for various age groups in the Survey are calculated based on the population proportion in Hong Kong (method of proportional allocation), after deducting the population aged between 0 and 6 and over 80. Physical fitness tests and questionnaire are required to be conducted for 7 740 samples in this Survey after deducting 760 samples collected in the Survey on Physical Fitness of Hong Kong School Pupils provided by EDB based on the same proportion. The confidence level and the margin of error are 95% and 1.06% respectively. Please refer to [Annex 1](#) for the sample size of various age groups.

## 7. Details and Items of Physical Fitness Tests

As the physical fitness and characteristics of various age groups differ, participants of different age groups will take part in different items of the physical fitness tests. Please refer to [Annex 2](#) for details.

## 8. Anticipated Time for Completion

With reference to the above sampling mode, the quantity of data required to be collected, as well as the contents and details of the physical fitness tests, it is preliminarily estimated that the Survey can be completed in the second half of 2022. AC will study the feasibility of publishing the Survey findings in phases.

## 9. Commissioning of Professional Agents

In accordance with the decision of AC on the mode of delivery, the Secretariat will, with reference to the approach adopted in the last survey, commission professional agents to carry out the Survey through open tender. The tenders include:

- i. provision of services including drawing up a detailed execution plan for the Survey, providing consultancy services and supervision, monitoring the operation and co-ordination of various executive units in different groups participating in the physical fitness tests, designing questionnaires, collating data of school-age children and adolescents provided by the

Education Bureau, consolidating data of all age groups, analysing data, compiling a Survey report, etc.;

- ii. provision of services including conducting questionnaire, physical fitness tests and collating data, etc.

## 10. Publicity Strategies

We will roll out a series of publicity activities to facilitate target interviewees' further understanding of the implementation details of the Survey so as to call for and encourage active participation by organisations or groups. Details are as follows:

Publicity events include:

- i. organising a launching cum charter signing ceremony to declare the official commencement of the Survey and present to and brief the groups, organisations, post-secondary colleges or government departments concerned on the details and arrangements of the Survey, proposing to invite directorate officers to sign the charter with the representatives from the groups, organisations or government departments concerned on the same day as a show of support for the implementation of the Survey, and offering a demonstration session for attendees to learn about the items of the physical fitness tests and participation on-site;
- ii. designing dedicated webpages for the Survey to provide the participating organisations and the public with timely access to the latest information;
- iii. making video featuring the highlights of the launching cum charter signing ceremony for display in other publicity activities or on other media;
- iv. making publicity video clips for display at the venues of LCSD and on the dedicated webpages (including social media such as "Facebook", "YouTube" or "Instagram");
- v. placing advertorials and advertisements on newspapers;
- vi. producing publicity posters, leaflets and banners for the Survey for putting up, distribution and display by the groups, organisations and post-secondary colleges signing the charter; and
- vii. organising Physical Fitness Fun Day at shopping arcades, sports centres or parks on a regular basis to further promote the Survey to the public to enable those interested to participate in the physical fitness tests on-site.

## 11. Conclusion and Announcement of Findings of the Survey

- i. A press conference will be held and press releases issued to announce to the public the findings of the Survey and the related recommendations.
- ii. The report on the Survey and highlights leaflet setting out the study findings and related recommendations will be published.
- iii. The report on the Survey will be uploaded onto the dedicated webpages.
- iv. An advertorial on the findings of the Survey will be placed on newspapers.

## **Presentation**

12. Members are invited to note the report on the mode of delivery with regard to the Survey set out in this paper.

\*\*\*\*\*

Secretariat of the Territory-wide Physical Fitness Survey  
for the Community Advisory Committee  
April 2020

**Sample Size of the ‘Territory-wide Physical Fitness Survey for the Community’  
worked out in accordance with the ‘Projected Mid-year Population by Age in  
2020’ of the Census and Statistics Department**

2020			Total preliminary sample size by age in which the survey will be taken
Both sexes			8 500
Age	'000	Percentage %	Sample size calculated on the basis of the population ratio after excluding those aged 0-6, 80 or above, as well as the tests of the primary and secondary school students conducted by the Education Bureau
0			
1			
2			
3			
4			
5			
6			
7	58.3	0.86	410
8	68.7	1.01	
9	69.1	1.02	
10	64.9	0.96	
11	65.8	0.97	
12	64.5	0.95	350
13	56.2	0.83	
14	55.7	0.82	
15	51.1	0.75	
16	51.1	0.75	223
17	55.3	0.82	
18	56.6	0.84	
19	66.1	0.98	2 612
20	62.7	0.93	
21	63.0	0.93	
22	71.7	1.06	
23	88.7	1.31	
24	94.3	1.39	
25	101.0	1.49	
26	101.6	1.50	

2020			Total preliminary sample size by age in which the survey will be taken
Both sexes			8 500
Age	'000	Percentage %	Sample size calculated on the basis of the population ratio after excluding those aged 0-6, 80 or above, as well as the tests of the primary and secondary school students conducted by the Education Bureau
27	102.7	1.52	
28	103.3	1.52	
29	108.6	1.60	
30	114.5	1.69	
31	119.8	1.77	
32	115.2	1.70	
33	113.7	1.68	
34	118.1	1.74	
35	121.6	1.79	
36	123.6	1.82	
37	123.4	1.82	
38	118.7	1.75	
39	116.7	1.72	
40	113.9	1.68	
41	111.6	1.65	
42	106.4	1.57	
43	107.9	1.59	
44	106.6	1.57	
45	114.3	1.69	
46	115.1	1.70	
47	116.2	1.71	
48	109.5	1.62	
49	113.3	1.67	
50	112.7	1.66	
51	114.2	1.69	
52	111.4	1.64	
53	107.5	1.59	
54	115.2	1.70	
55	124.8	1.84	
56	129.5	1.91	
57	136.6	2.02	
58	120.7	1.78	
59	126.1	1.86	

2 902

2020			Total preliminary sample size by age in which the survey will be taken
Both sexes			8 500
Age	'000	Percentage %	Sample size calculated on the basis of the population ratio after excluding those aged 0-6, 80 or above, as well as the tests of the primary and secondary school students conducted by the Education Bureau  2 003
60	125.8	1.86	
61	122.7	1.81	
62	120.5	1.78	
63	115.2	1.70	
64	109.3	1.61	
65	103.3	1.52	
66	98.1	1.45	
67	89.5	1.32	
68	85.9	1.27	
69	84.5	1.25	
70-74	348.1	5.14	
75-79	194.4	2.87	
80+			
Total	6 777.0	100.00	8 500

Note: Owing to rounding, there may be a slight discrepancy between the sum of individual items and the corresponding total as shown in the table.



## ‘Territory-wide Physical Fitness Survey for the Community’

## Proposed Test Items

Test Item		7-11	12-16	17-19	20-39	40-59	60-69	70-79	
Body Composition	Age Group								
	Item								
	Height	●	●	●	●	●	●	●	
	Weight	●	●	●	●	●	●	●	
	Skinfold Measurement – Triceps	●	●						
	Skinfold Measurement – Calf	●	●						
Bioelectrical Impedance Analysis (BIA)		●	●	●	●	●	●	●	
		Fat %	Fat %	Fat %	Fat %	Fat %	Fat %	Fat %	
Cardiovascular Endurance				●	●	●	●	●	
	3-min Stepping Test						2 Minutes	2 Minutes	
	15m Progressive Aerobic Cardiovascular Endurance Run (PACER)	●	●						
	6/9-Minute Run/Walk (Aged below 9 – 6 Minutes; Aged 9 or above – 9 Minutes)	●	●						
Flexibility	Lower Back/ Lower Limb	●	●	●	●	●	●	●	
	Sit-and-reach Test						Sit on Chair	Sit on Chair	
	Upper Limb						●	●	
	Back Scratch								
Muscular Strength and Endurance	Upper Limb	Hand Grip Test	●		●	●	●	●	
		Arm Curl Test						●	●
	Torso	1-min Sit-up Test	●	●	●	●	●		
		Push-up Test		●					
		Plank			●	●	●		
	Lower Limb	Standing Long Jump	●	●					
Chair Stand				●	●	●	●	●	
Neuromuscular Function	Agility						●	●	
	8-Feet Up and Go								
	Balance			●	●	●	●	●	
	Single Leg Stance (With Eyes Closed)						With Eyes Open	With Eyes Open	
Total Number of Test Items		11	11	10	10	10	11	11	