

Exercising Habits of Senior Primary and Junior Secondary Students and Parents

- Executive Summary-

Commissioned by:	Committee on Home-school Cooperation
Conducted by:	Consumer Search
Date:	20 November 2007

BACKGROUND AND OBJECTIVE

1 SURVEY OBJECTIVE

1.1 The Committee on Home-School Co-operation (CHSC) of the Education Bureau had commissioned Consumer Search to conduct a survey on “Exercising Habits of Senior Primary and Junior Secondary Students and Parents” in May 2007.

1.2 Throughout this survey, the definition of exercise had been defined as participation in any physical activities for an aggregate time of at least 20 minutes. These activities excluded any physical education provided at school (applicable to students only).

1.3 This survey aimed to address the following five objectives:

- (a) To understand whether exercise (as defined in para.2) is being incorporated as part of students’ / parents’ life.
- (b) To gain a better understanding on the types of exercises commonly participated by senior primary and junior secondary students / parents, and the approaches of performing that particular exercise.
- (c) To explore the factors that affected the students / parents in successfully or unsuccessfully carrying out exercise in the views of their family, school and personal life.
- (d) To explore the correlation between exercise and students’ weight¹ and height.
- (e) To explore the correlation of students’ exercising habit against factors including academic achievement, family relationship, self-confidence, interpersonal relationship, psychological health and physical health status.

1.4 The survey was conducted via telephone interviews during the

¹ Body Mass Index (BMI) of the students in this Survey was calculated from the weight and height of the corresponding students. The BMI index based on the Child Health Record of the Department of Health, the Government of the HKSAR was adopted as a reference frame for the classification of students of Primary 5 to Secondary 3 by groups of underweight, standard and overweight. Students with BMI index fell below the 10th-centile was classified as underweight and students with BMI index fell above the 90th-centile was classified as overweight. Among all the interviewed students, 54 of them (10.8%) were classified as underweight and 55 of them (11.0%) were classified as overweight.

period 28th May to 9th June, 2007. The study covered all households carrying a fixed telephone line having children studying in Primary 5 to Secondary 3.

- 1.5 This study successfully interviewed 500 parents and children of the same households attaining an overall response rate of 50.0%. The maximum sampling error was $\pm 4.4\%$ at 95% confidence level.

2 BACKGROUND OF RESPONDENTS

- 2.1 A sample of 100 students was taken respectively in each grade from Primary 5 to Secondary 3 totalling to 500 respondents. Among these students, 58 percent were male and 42 percent were female. 70 percent of the interviewed parents or guardians were female, and 30 percent were male.
- 2.2 Most of the interviewed fathers or male guardians were working and about half of the interviewed mothers or female guardians were members of the workforce. For those working parents or guardians, they consisted mainly of blue / white-collar workers and the rest were professionals or administrative officers.
- 2.3 Sixty eight percent of the interviewed parents or guardians were aged 40 - 49. This was followed by persons aged 35 - 39 (17% in total), 34 or below (4% in total) and those aged 50 or above (10% in total).
- 2.4 In terms of educational attainment, over 70 percent of the interviewed parents or guardians had secondary or above education and 22 percent attained primary or below education. For the respondent who attained secondary or above education, 18 percent of them had post-secondary or higher education.
- 2.5 Monthly household income of the interviewed families was generally in the range of \$15,000 or below (45%), and the rest were evenly distributed among the groups of \$15,000 to \$24,999 (26%) and \$25,000 or above (28%).
- 2.6 In terms of housing type, 40 percent of respondents lived in self-owned properties, 30 percent lived under public housing, 17 percent lived in homes under 'Home Ownership Scheme' and the rest lived under rented private properties or other miscellaneous types of housing.

3 SURVEY FINDINGS

EXERCISING HABIT OF STUDENTS AND PARENTS

Exercising Quantity

- 3.1 The result indicated that the average time spent per exercise among the 500 interviewed students was 61 minutes. Students who were classified as “physically active²” spent an average of 88 minutes per exercise which was by far higher than the rest of the “physically non-active” students who spent an average of 27 minutes per exercise. The average time spent per exercise for junior secondary students (Secondary 1 - Secondary 3) was higher than senior primary students’ (Primary 5 - Primary 6).
- 3.2 The average time spent per exercise among the 500 interviewed parents or guardians was 27 minutes. These respondents were classified as “physically active” who spent an average of 66 minutes per exercise which was significantly higher than the other “physically non-active” respondents with an average time spent of 15 minutes.
- 3.3 83 percent of students and 49 percent of parents or guardians were able to maintain an average spent per exercise of 20 minutes or more. However, 37 percent of parents did not spent any time on exercise (i.e. an average time spent on exercise was zero minute).
- 3.4 In terms of frequency of carrying out exercises for an average of 20 minutes or more, the average was three times a week. “Physically active” students had an average of 3.5 times a week which was higher than the average of the “physically non-active” students (1.8 times a week). Overall, the average of male students (3.2 times) was higher than that of female students (2.5 times). The students were further asked to give a self evaluation in terms of their academic achievement, relationship with family and friends, and psychological and physical health status. The result indicated that students with higher evaluation on academic achievement also carried out exercise more on a weekly basis

² Under the guideline provided by the Leisure and Cultural Services Department, the classification of “physically active” and “physically non-active” was defined using the suggested level of minimum time spent per exercise of 30 minutes (including 10-minute warm-ups) for at least three times a week. All students with an average higher than the suggested level were classified as “physically active” and those with an average lower than the suggested level as “physically non-active”.

compared to students who gave themselves a lower evaluation.

- 3.5 92 students required to visit the doctor or take medication in the past 30 days because of illness. Among these students, seven percent did not participate in any exercise (i.e. their average time spent on exercise per week was zero). In comparison, only one percent of those students (324 in total) who did not require to visit the doctor or take medication in the past 30 days because of illness, did not participate in any exercise.
- 3.6 For those parents or guardians who spent an average time of 20 minutes or more per exercise, they also carried out exercise three times per week on average. Frequency average of "physical active" parents (4.5 times per week) was significantly higher than that of "physically non-active" parents (1.6 times per week). For those parents or guardians who did not participate in any exercise in an average week, their children were more likely to record zero participation as well.

Type of Exercises

- 3.7 Close to 40 percent of interviewed students participated in exercises such as basketball or jogging at least once per week. The other popular activities included badminton, swimming, soccer, table tennis and rope skipping. Among the group of "physically active" students, more of them participated in team activities such as basketball or soccer. In comparison, "physically non-active" students were more likely to participate in individual activity such as rope skipping.
- 3.8 The result of the survey also revealed that the participation in types of exercise appeared to differentiate by gender. Male students were more likely to participate in exercises such as basketball, soccer and table tennis, while female students were more likely to participate in exercises such as badminton, rope skipping, volleyball and dancing. Apart from gender, junior secondary students had significantly higher participation rate in basketball, whereas senior primary students had higher participation rate in badminton and rope skipping.
- 3.9 In terms of parents or guardians, 40 percent of these respondents would participate in jogging at least once a week. The other exercises with higher participation rate included badminton, hiking, swimming and cycling. More of the "physically active"

parents participated in exercises such as dancing, Tai Chi or Qi Gong. Analysed by gender, male parents or guardians preferred running, swimming or soccer and female parents or guardians preferred dancing or yoga.

Usage of Exercising Venues

- 3.10 Seventy-nine percent of the interviewed students used public facilities³ to carry out exercise, and 34 percent used school facilities. “Physically active” students were more likely to use school or private facilities and “physically non-active” students were more likely to carry out exercise at home. In terms of class, junior secondary students had a higher tendency of using school facility than senior primary students, and senior primary students were more likely to carry out exercise at home than the total. Looking at gender, male students had significantly higher usage of school facilities against female students who were more likely to carry out exercise at home.
- 3.11 Eighty percent of the interviewed parents used public facilities to carry out exercise, and 19 percent used private facilities. For those parents who used public facilities, more of them were males, lived under public housing or those with monthly household income of \$10,000 to \$25,000. Among the parents who used private facilities, more of them were females, lived in self-owned properties or had monthly household income of \$25,000 or above.

Time Slot of Exercise

- 3.12 For those students with an average time spent per exercise of 20 minutes or more, 46 percent would carry out exercise on both school days and public holidays, 28 percent on the school days only, and 26 percent on public holidays only. It was obvious that more “physically active”, junior secondary or male students preferred to carry out exercise after school. In terms of parents or guardians, 54 percent chose to carry out exercise only on working days, 29 percent of them chose working days and public holidays, and 19 percent on public holidays only. Analyzed by gender for parents or guardians, more males chose public holidays to arrange for exercising activities, while females preferred to choose working days.

³ Totalling of percentage on usage of exercising venues could be over 100% as respondents could choose more than one venue as their response.

- 3.13 “Physically active” or female parents or guardians were more likely to carry out exercise in the morning of working days. Non-working parents or guardians were more likely to carry out exercise in the morning or afternoon of non-public holidays. Parents or guardians who had attained post-secondary or higher education or with monthly household income of \$25,000 or above were more likely to choose the evening of working days.

Exercising Companion

- 3.14 Fifty-one percent of all students preferred schoolmates as their exercising companion, 39 percent preferred neighbours or friends, and 28 percent mentioned parents or guardians. “Physically active” students tended to choose schoolmates, coaches or team-mates as their exercising companion, while “physically non-active” or underweight students chose brothers or sisters.
- 3.15 In comparison, senior primary students were more likely to choose parents / guardians or brothers and sisters as their exercising companion, while junior secondary students were more likely to choose classmates. In terms of gender, male students preferred classmates and female students preferred parents / guardians or brothers and sisters. Children of “physically active” parents were more likely to carry out exercise with parents.
- 3.16 Forty-five percent of the interviewed parents or guardians preferred to carry out exercise alone, followed by friends or colleagues. Only 30 percent of the interviewed parents mentioned their children. “Physically active” parents were more likely to choose colleagues and friends as their exercising companion, while “physically non-active” parents were more likely to choose their children.

VIEWS OF STUDENTS AND PARENTS ON EXERCISING

Motive for Participation and Reason for Non-participation in Exercises

- 3.17 Overall, the main reason for students to participate in exercise at least once a week was out of their own interest. This was followed by reason of physical healthiness. “Physically active” students were more likely to participate in exercise out of their own interest. More senior primary students valued their physical health and were highly influenced by parents or guardians. On

the contrary, those underweight students were more likely to be influenced by their peer group. Among the group of 86 students who had visited a doctor or taken medication in the past 30 days because of illness, 13 percent of these students mentioned they would continue participating in exercising if it was a sporting competition / reward program.

- 3.18 In contrast, the interviewed parents or guardians placed more emphases on physical health than their own interest. 17 percent of the parents or guardians participated in exercise at least once a week because they wanted to lose weight. This was particularly true among female respondents, those aged 39 or below, or those who were non-working. The reason of enhancing relationship with friends / family was mentioned more by parents of age 39 or below. Parents with children in senior primary school were more likely to be influenced by their children to participate more in exercise.
- 3.19 For those students who could not participate in exercise for at least once a week, 68 percent considered heavy schoolwork as their major obstacle, and 28 percent claimed they did not had interest in exercising. For those parents who could not participate in exercise for at least once a week, 76 percent mentioned their career and heavy workload at work being their main obstacles.

Impact of Exercise

- 3.20 More of the interviewed students who had participated in exercise at least once a week tended to agree exercise carried a positive impact on their physical health, social life, self-confidence and emotion. Only 37 percent of students believed that exercise would carry a positive correlation with academic achievement. More of the “physically active” students gave positive feedback on the aspects of physical health and social life.
- 3.21 Among the 47 overweight students⁴, more than half of them considered that frequent exercise would not bring positive impact on self-confidence. On the contrary, more of the students who held high evaluation on their academic achievement, relationship with peer group and psychological status mentioned exercise did

⁴ Body Mass Index (BMI) of the students in this Survey was calculated from the weight and height of the corresponding students. Among all the interviewed students, 55 of them were classified as overweight. Of which, 47 had participated in exercise for more than once a week.

bring in positive impact on them.

- 3.22 More of the interviewed parents or guardians who had participated in exercise at least once a week also agreed that frequent exercise could bring positive impact on their physical health, emotion, self-confidence or career. Less of this group of respondents mentioned exercise brought positive impact on their social life. "Physically active" parents or guardians tended to have more positive responses on impact of exercise to different aspects of life, particularly for physical health and social life.

Difficulties Encountered When Carrying Out Exercise

- 3.23 Among all the interviewed students, 85 percent did not encounter any difficulties carrying out frequent exercises. On the contrary, more of the students who had a lower evaluation on their physical health status and family relationship or being overweight held the opposite opinion. Three out of four interviewed parents or guardians (75% to total) did not encounter any difficulties carrying out frequent exercises.
- 3.24 Half of the interviewed students who did encounter difficulties mentioned exercise made them feel tired and exhausting. Thirty-seven percent of these students worried that frequent exercise would leave them insufficient time to study. For those parents or guardians who did encounter difficulties, 52 percent mentioned exercise made them feel tired and exhausting. 39 percent of them worried frequent exercise could affect their work performance. More parents or guardians of senior primary students worried that frequent exercising would affect their family life.

Evaluation on Exercising Quantity and Driving Factors for Carrying Out Exercise

- 3.25 Fifty-two percent of the interviewed parents or guardians claimed they carried out insufficient exercises, particularly among the "physically non-active" parents or guardians. In terms of their children, 40 percent claimed their children carried out insufficient exercises, particularly among students being classified as "physically non-active".
- 3.26 For the interviewed students, encouragement and participation of peer group were their major driving factors in carrying out

exercises, followed by determination. More of the senior primary students or students with a lower evaluation on their peer group relationship considered encouragement and participation from their parents or guardians would bring positive impact on their desire to carry out exercise.

- 3.27 52 percent of the interviewed parents or guardians considered determination was an effective driver for them to carry out exercise. Encouragement and participation of family and friends was also mentioned by 25 percent of the parents. The other driving factors included set up of more community sporting facilities and more leisure time. More of the parents or guardians of senior primary students considered setting up of more community sporting facilities was an effective driving factor for them to carry out exercise.

4 CONCLUSION AND RECOMMENDATION

- 4.1 The survey result indicated that more than 80 percent of students were able to reach the level of exercising quantity as suggested by the Leisure and Cultural Services Department, but less than half of the parents or guardians met the requirement. Overall speaking, exercising quantity of students was generally higher than parents or guardians. Male students and parents or guardians also recorded a higher exercising quantity than female students and parents or guardians. Coincidentally, for parents who did not spend any time on exercise, their children were also more likely to spend no time on exercise as well.
- 4.2 Most of the interviewed students and parents or guardians agreed that frequent exercise would bring a positive impact on their physical health, self-confidence and emotion. Unfortunately at the same time, more than half of the interviewed parents or guardians considered that their children carried out insufficient exercise. Among those students who carried out insufficient exercise, heavy school work and lack of interest were the major reasons.
- 4.3 “Physically active” students were more likely to carry out exercise with their school mates. “Physically active” parents or guardians were more likely to carry out exercise with colleagues or friends and less with their children. On the contrary, more of the “physically non-active” parents chose to carry out exercise with their children.

- 4.4 More of the senior primary students considered that encouragement and participation from their parents or guardians would encourage them to carry out exercise. In addition to that, this group of students was also more likely to choose parents or guardians as their exercising companions. On the other hand, more of the parents or guardians of senior primary students were affected by their children to carry out exercise at least once a week. As a result of these observations, parents or guardians should spend more time with their children on exercising before they graduate to secondary school. This might build up a good habit of exercising for their children.
- 4.5 Eighty percent of parents or guardians and students frequently use public facilities to carry out exercise. As such, the relevant government departments should raise their awareness on the sufficiency of the current facilities provided to match the requirement of the community.
- 4.6 In conclusion, exercise should be carried out on a continuous basis. Parents should encourage their children to conduct exercise on a regular basis at their early age; with reference to the advantage as stated in paragraph 4.4 of this section, parents should act as a role model and carry out exercise with their children together. This could help build up a good habit of exercising for their children and improve on family relationship at the same time. For those parents who already carry out exercise with their children, they should maintain or raise the frequency of these activities to ensure that the whole family is able to carry out sufficient exercise. Parents should choose the type of exercise to conduct with their children based on the interest of their children. This could help maximize the benefit of exercising by bringing enjoyment to the family as well as helping the students build up a good habit of exercising.