

A Focus Group Approach: Exploring the Feasibility of a Mandatory, No-Credit Programme of Daily Structured Physical Activity in Secondary Schools in Trinidad and Tobago

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Abstract This study explores a possible solution for the growing problem of obesity in teenage school children. It examines the feasibility of introducing, as a solution to the obesity problem, a mandatory, no-credit programme of daily structured physical activity (P.A.) into the secondary school curriculum at all levels. Qualitative methods were used to gain insights into the desirability and support for such a programme and the logistics of implementing it. In the first phase of the research a Focus Group discussion was held with six secondary school Physical Education (P.E.) teachers to examine their opinions on these aspects – desirability, support, and logistics for such a programme. This group also articulated their expectations for what support from P.E. teachers, the most likely school personnel to be responsible for such a course, they anticipated would be given to this type of daily structured physical activity programme in secondary schools. Two semi-structured interviews were conducted, one with a retired P.E Sports Officer, an Advocate who had been instrumental previously in helping to introduce the current ‘for-credit’ subject of *Physical Education and Sport* into the secondary school curriculum, and the other with two current curriculum officers in the Ministry of Education. Thematic Analysis was employed to extract and confirm themes and sub-themes from both the Focus Group and the semi-structured interviews. In this paper, for the Focus group, a consensus matrix is used to summarize the salient information, the level of agreement among the participants for a particular sentiment expressed by any one speaker in the group. Ten thematic areas, which broke down further into 17 sub-themes, were extracted from the Focus group discussion. Among these were the current general state of P.E./P.A. in schools, differences in structured versus unstructured P.A., the implications of launching a compulsory P.A. program, the roles of P.E., P.E. teachers, the government, and parents in fighting obesity in secondary school children, the success of old solutions, and possible new solutions. The Advocate provided important information on the challenges and barriers which existed at the time of the prior introduction of the formal examinable subject on Physical Education, including the belief that this subject had not lived up to expectations. The curriculum officers, on the other hand, provided technical details and advice on the necessary steps for implementation of the type of programme which is the basis of this study. All participants agreed that the formal, examination –assessed subject, *Physical Education and Sport*, introduced into Trinidad and Tobago’s secondary schools in 2003, had not enhanced the amount of student engagement in physical activity, even for those reading that subject. The participants were almost unanimous in their views that there was reason to be concerned about childhood and adolescent obesity in schools and that more physical activity was needed.

Keywords: daily structured physical activity, *Physical Education and Sport*, Focus Group, semi-structured interviews, thematic analysis, consensus matrix

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1. Introduction

This study explores the feasibility of a mandatory, no-credit programme of daily structured physical activity

into the secondary school curriculum at all levels. A focus group was conducted with Physical Education teachers from different districts, as well as one semi-structured interview with a former sport officer and another interview with two curriculum officers from the Ministry of Education. The Ministry of Education in Trinidad and

Tobago has always been focused on examinable school subjects. Students are trained and prepared for written examinations, especially traditional pen and paper tests. While obesity is increasing among school age children, there is very little in the secondary school curriculum designed to encourage healthy practices and/or to decrease the tendency toward a sedentary lifestyle. This is true even after the introduction into that curriculum of an optional examinable subject, *Physical Education and Sport*. Implementation of the programme under study is meant to fill this need, to engage school children in physical activity and to promote its myriad life-long benefits, particularly if started at an early age.

Some logistical challenges were recognized at the start of the study. The most obvious challenge to us is the pathway to getting any subject introduced into a packed school curriculum. Further, teachers and students tend to want to focus their attention on 'for credit' subjects. For this programme to be successful, not just the Ministry of Education's barriers to implementation would have to be negotiated but also there would need to be buy-in for the programme from all school personnel. Their recognition of the value and benefits of the programme would probably make this buy-in more likely.

1.1. Research Questions

These focus on two main areas, namely finding the conditions for optimum support from school personnel for deployment of the programme and negotiating the Ministry of Education's barriers to its formal mandated implementation in all secondary schools:

1. To assess, via stakeholder consultations, the perceived 'optimum' elements of a mandatory no-credit programme of structured, daily physical activity, which could elicit significant buy-in from those most affected.
2. To identify the barriers to implementation of the programme.

1.2. Significance of the Study

The intent of this study is to capture the information needed to fulfill the objectives as outlined above: This includes the estimation of what benefits of physical activity students perceive and of students' and teachers' willingness to participate, if the programme were introduced by the Ministry of Education. The pertinent information and suggestions gathered from the group discussion can be used to design a suitable programme of daily structured physical activity to fit into the secondary school curriculum. Evidence-based design should result in the programme format most likely to produce optimum buy-in from the stakeholders.

1.3. Background Literature

In 1999, the Caribbean Food Nutrition Institute (CFNI) reported that obesity levels had tripled in the previous ten years in Trinidad and Tobago. These worrying statistics were made available by the Health Status Report Card in 2011. Trinidad and Tobago's National Risk Factor Survey Research was conducted locally by the Ministry of Health

in 2011. This survey (STEPS) reported that more than half of the population (55.5%) of individuals, 15 years and over, was overweight or obese. Twenty-five percent of school children (5-18 years) were overweight or obese. Over 40% of the population did not get enough physical exercise weekly [1].

The Ministry of Health reported as far back as 2011 that the cost of health care in Trinidad and Tobago was high, with the burden of the productivity losses to society really carried by the individuals who are healthy. According to the former Minister of Health, in 2011 Trinidad and Tobago had the highest overall percentage (60%) of deaths due to Chronic Non-Communicable Diseases (CNCDs) within the Caribbean region. Heart disease was the number one cause of death in Trinidad and Tobago (25%). The prevalence of Diabetes among adults was about 12% and 50% of persons; 24 years to 64 years, already had three or more risk factors of CNCDs. The report indicated that the high prevalence of CNCDs in our adults and children was related to unhealthy practices [2]. Approximately six years later the present Minister of Health echoed that this phenomenon is even more heartbreaking because most cases of chronic non-communicable diseases are avoidable, resulting because of poor lifestyle choices [3].

1.3.1. Physical Activity and Academic Performance

Daily participation in P.A. during school hours has been linked to higher levels of academic performance [4]. Start [5], as cited in Trost [6], suggested that students of higher academic standing were significantly more likely than students of lower academic ability to participate in school and extracurricular sports. These studies evaluated the effects on academic performance of allocating additional instruction time for P.E. The results from the three studies – the very early one by Start [5] and the two later ones by Coe et al. [4] and by Trost [6] - all demonstrated that time for daily P.A. does not need to be sacrificed to achieve better academic performance.

1.3.2. Physical Activity and Obesity

Physical activity is also an important contributing factor in the prevention of overweight and obesity in young children according to Janz et al. [7] and Moore et al. [8]. Sallis et al. [9] argued that schools are the most cost-effective public health resource in which to address inactivity and that physical education teachers are uniquely positioned to provide and promote the students' daily physical activity. Still, some authors believe that we are not capitalizing on the opportunity that Physical Education (P.E.) can provide in reducing sedentary behaviour and contributing to population health [10]. Hardman & Marshall [11] surveyed physical education programmes in schools around the world. They showed that there are common features in the P.E. policies of several schools surveyed.

1.3.3. Physical Education in Trinidad and Tobago Schools

In Trinidad and Tobago, the Ministry of Education's allocation for the teaching of Physical Education in secondary schools is for the subject to be taught twice per

week or per cycle. During this time allotted for P.E., which is normally thirty-five to forty minutes, both practical and theory must be taught [12]. On average, students get approximately 280 minutes of activities per month once there are no distractions or holidays. Some of the luckier ones can be active by engaging in sport. Sport in Trinidad and Tobago, although limited in some respects, has been a major area for the expression of human talent and an excellent avenue for the development of young people [13].

1.3.4. International School-based Programmes in Physical Education and Sport

An early policy paper in China concerning P.E. in educational institutions stipulated that students should have no less than one hour of physical activity in addition to an hour of in-class instruction class in P.E. every day. Also, they should do morning activities and setting-up exercises during class breaks, as well as arrange certain periods of time for extra-curricular physical activities [14]. Later versions of this Policy paper further promoted P.E. in schools to improve student's physical health. It urged schools to ensure that there were P.E. classes, to improve the effect of sports classes, and to enhance after-class exercises. The policy called for joint efforts from schools, families, communities and society. All activities are supposed to be strictly for the benefit of children's health and not for credit.

The United States does not permit school districts or schools to encourage students to substitute other activities for their required Physical Activity credit. Physical Activity is compulsory, on average, for middle, junior and high school students. Although accommodations are made for those with medical, cultural, or religious considerations [15], schools and school districts are given directives to prohibit students from being exempted. Exemptions and waivers are believed to deprive students of instruction time, critical for developing motor, movement, and behavioral skills, essential for the lifelong maintenance of a physically active lifestyle, while sending the wrong message to students that P.A. is not as important as other academic content areas and activities. Physical Education is designated as a core academic subject. Physical Activity is provided daily or for the equivalent of two hundred and twenty-five minutes per week, for the entire school year. At least fifty percent of P.E. class time must be spent in moderate to vigorous Physical Activity according to the National Association for Sport and Physical Education [16]. P.A. is allocated time during the school hours each day which gives the students the opportunity to participate.

European countries recognize the importance of P.E. in schools. The subject is a part of all central curriculum frameworks and is compulsory in primary and lower secondary education throughout Europe. These countries have also stressed the significance of regular Physical Activity and of sports as beneficial ways of using free time. Their education systems have national strategies to promote the development of regular P.A., with some activities mandatory while for others, schools themselves are free to choose their activities. In some European countries, mandatory activities and school autonomy coexist. This furthers a cross-curricular approach to

Physical Education and promotes the inclusion of regular physical activity in other subjects [17]. Greece and Finland support the thinking that participation is more useful than competition, based on the premise that it is important to motivate pupils, while also ensuring that they should appreciate the pure enjoyment and satisfaction of involvement in sport. These events are also thought to help curb school violence and bullying.

Several countries are trying to include more Physical Activity in a daily school routine, practiced throughout the day, during breaks in lessons, or even on the way to school [17]. Like Greece and Finland, these countries believe that P.A. must first be enjoyed and be daily before students truly develop an appreciation for it and, by extension, for sports. Portugal and Finland tried to raise the profile of Physical Activity directly by increasing the minimum time allocated to Physical Education, while Greece and Hungary planned to expand the provision of organized Physical Activity at school [17]. Trinidad and Tobago may do well to emulate these initiatives as a way of addressing any rise in the prevalence of controllable lifestyle diseases.

There are many examples of good practice in schools around the world but there remain causes for serious concern, possibly because less is known about the implementation of those policies, which may exist only on paper. There are positive initiatives which should lead to increasing levels of physical activity engagement among young people, resulting in less obesity and less prevalence of sedentary lifestyle diseases. Yet, worldwide, obesity remains a concern. Daily P.A. must be taken seriously. These policies must be implemented and supervised by the relevant authorities.

2. Methodology

Two data and information gathering streams were used in this study. A Focus Group was facilitated with Physical Education secondary school teachers and two different semi-structured interviews were conducted, one with curriculum officers in the Ministry of Education and the other with an individual who had acted as an advocate for the introduction of the examinable course, *Physical Education and Sport*, into the secondary school curriculum.

2.1. Focus Group with Physical Education Teachers

Using purposive sampling, secondary school Physical Education teachers were contacted via email and telephone calls, in which the study was described. They were invited to participate in a Focus group. Participants who indicated their willingness were contacted at least once more and, in some cases, twice again before the due date in order to confirm their presence at the session.

Structured guiding questions were prepared in advance of the Focus Group. These questions formed the actual major themes so that the analysis step was really extraction of secondary themes within these areas. All participation was voluntary, and the participants were guaranteed anonymity. The group session was conducted in a school auditorium during the morning period, with

full privacy in a comfortable environment maintained throughout. It was facilitated by one of the authors (Nicole Parris), aided by an individual who took notes and another who acted as the videographer for the session, but neither of these two participated in the discussion in any way whatsoever.

At the beginning of the session, demographic data was collected and the seating arrangement noted. The discussion, which followed, opened with a general introduction, using first names only, of all participants, who were given a reminder of the reason for the session. Participants were urged to speak freely but were told they could refuse, if they wished, to answer any questions or to enter any discussion with which they were not comfortable. They were also told that they could end their participation at any time. The participants were asked if they had any objections to allowing an audio-visual recording of the session. None voiced any objection. The session lasted about an hour and forty-five minutes. No participant found any discussion uncomfortable and none prematurely terminated his/her participation.

2.2. Extraction and Presentation of Focus Group Information

All pertinent information from the Focus group was captured by a table of demographic information about the participants; a seating scheme showing the position of each participant during the discussion; a schematic of discussion themes extracted; the sentiments mentioned under each extracted theme; and a modified consensus matrix [18]. This matrix is used to summarize the themes and sub-themes which elicited consensus among the participants, along with the participants' specific verbatim statements which conveyed those sub-themes and sentiments. The specific details of how the matrix is constructed, along with definitions of the codes used in it, can be more clearly presented in and are left to the Results section, where the pertinent matrix for the Focus group session is illustrated.

2.3. Semi-Structured Interviews with Education Stakeholders

All interviewees were guaranteed anonymity, even though none seemed to want it. Interviews were audio recorded. The interview with the advocate took place in this individual's air-conditioned office in the morning. The interview lasted a little over 90 minutes and all questions seemed to be answered openly and honestly, without hesitation, although at times this individual asked to speak off-record and the recording was stopped and restarted when permitted.

The curriculum officers had been sent the list of questions about three days before their combined interview. Their interview was conducted in the afternoon at the Learning Resource Centre of the Ministry of Education. It lasted 50 minutes. Their answers were very comprehensive, and they had obviously read the questions and prepared the appropriate responses. Nothing discussed was off the record. They seemed in sync with each other so that although one or the other would start to respond, the other corroborated and/or expanded on what was said.

2.4. Thematic Analysis

The main themes extracted from the discussion include those which followed straight from the structure of the guiding questions and others which arose during the discussion. Within each main theme, are several sub-themes which represent the different views and nuances expressed by the participants on the same sub-topic. This is true, regardless of whether those views were expressed by participants in the Focus group or interviewees. The consensus matrix is only applicable to the group discussion but, for all the methods, highlights of themes are given, either in the consensus matrix or in an ordinary table before a fuller discussion is given of the information obtained during the session – group or interview

3. Results

3.1. Summary of Focus Group information

In trying to find deeper meaning in the statements and even the body language of the participants observed during the group discussion, it is important to consider their demographics, including their teaching experience. The order in which participants sit in a Focus Group is also notable. Anecdotally, it has been observed by experienced facilitators that participants seated near each other can sometimes interact in ways which could affect their views in the overall discussion. Interaction among group members is one of the key elements of a Focus Group design. It gives a different dynamic to group discussions from that in separate semi-structured interviews with a set of individuals. However, in some groups outspoken participants may sway quieter neighbors. Similarly, as has been noticed by these authors previously, sometimes one participant may develop an antipathy to another so that the discussion is not just rancorous, but each is more bent on negating the other's comments than on truly participating in the discussion. None of that was observed in this group of participants, who seemed genuinely interested in the topic and personally vested in the outcome of the exercise.

3.1.1. Demographics of Participants and Physical Layout of the Session

In Table 1 are detailed the demographics of the participants, including their school district, type of school, sex, and number of years and forms teaching in secondary schools. In Figure 1 is given the layout used.

Table 1. Demographics of Focus Group Participants

Participant	Sex	District	Type of School	Forms Teach	Years Teaching ¹
Michelle	Female	Northeast	Co-ed	1- 6	8 years
Alvin	Male	Port of Spain	Co-ed	1- 5	13 years
Jill	Female	Victoria	All boys	1- 5	14 years
Kenny	Male	St George East	Co-ed	1- 5	14 years
Tara	Female	Caroni	All girls	1- 6	11 years
Des	Female	Port of Spain	Co-ed	1 -5	5 years

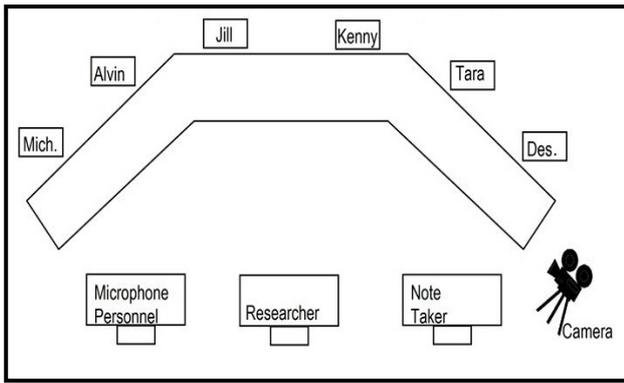


Figure 1. Seating schematic of Focus Group participants, facilitator, and others

3.1.2. Extracted Themes from the Focus Group Discussion

The main themes which guided the Focus Group discussion and the sub-themes, based on participants' comments in each main area are shown in the schematic in Figure 2.

The 10 main themes break down into 17 sub-themes. Parts of the discussion under a main theme were considered as belonging to a sub-theme when several different views/statements expressed by the participants all represented various aspects of the same sub-topic. These statements, in turn, are referred to in later discussion as 'sentiments.'

The group discussed the general landscape of physical education, not just in terms of the programmes at their own schools but also airing observations which came from their own practice. This was followed by stating elements which made structured physical activity stand out from unstructured 'play' and giving views on (a) whether physical activity should be compulsory for all; (b) whether Physical Education should be treated as a Life Skills area or as a CSEC examination subject, written after 5 years in secondary schools in Trinidad and Tobago, as it is now; (c) the role of Physical Education in the fight against obesity;

(d) should Physical Education (P.E.) be taught by dedicated P.E. teachers or by those instructing academic subjects; (e) the role of the Government in fighting obesity in school children; (f) the role of the parents; (g) solutions (h) concerns, and successes.

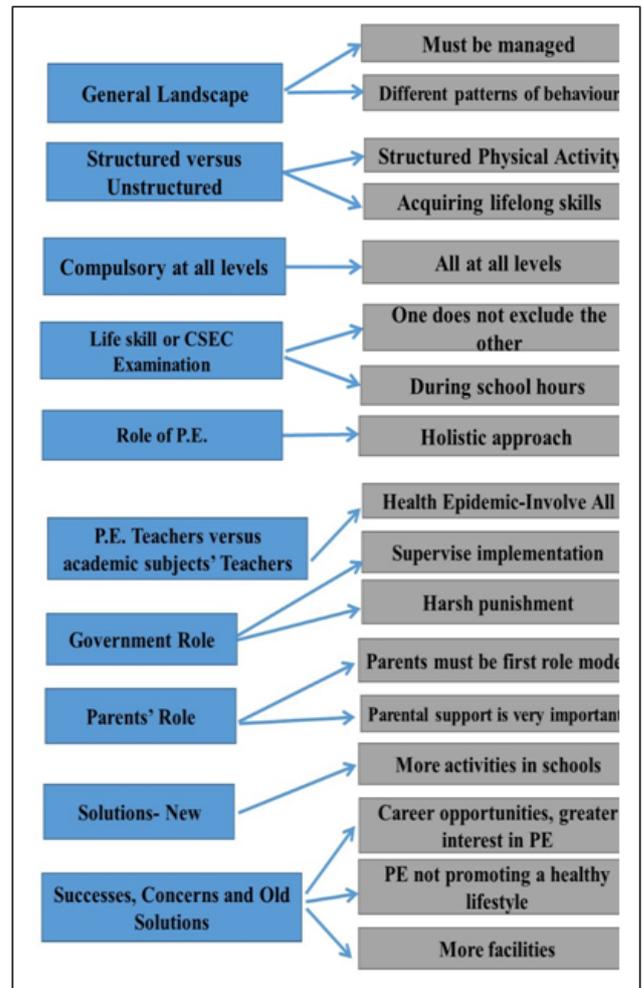


Figure 2. Extracted sub-themes from Focus Group discussion

Table 2. Consensus Matrix Summary of Focus Group Themes and Sentiments

THEMES/SENTIMENTS	FOCUS GROUP PARTICIPANTS					
	Mich	Alvin	Jill	Kenny	Tara	Des
I. GENERAL LANDSCAPE						
i. Informal Physical Activity						
a Not at break time-too short (1)	A	A	A	+	A	NR
b Must be managed-to avoid overtime (2)	A	A	A	+	A	A
c Once managed-students settle to work (3)	A	A	A	+	A	A
d Ability to settle depends on students- (4)	+	A	A	A	A	A
II. STRUCTURED VS UNSTRUCTURED						
i. Structured Physical Activity						
a Set guidelines and rules (5)	+	A	A	A	A	A
b Know how to use equipment (6)	+	A	A	A	A	A
c Must be in a defined space (7)	A	A	+	A	A	A
d Must follow syllabus guidelines (8)	SA	SA	SA	+	SA	SA
e Use of lesson plans (9)	A	A	A	+	A	A
f Must have set goals and objectives (10)	A	A	A	+	A	A
g Must be supervised and managed (11)	SA	SA	SA	+	SA	SA
h Structure to acquire lifelong skills (12)	D	+	D	NR	A	NR
i Structure to achieve objectives (13)	D	+	D	NR	NR	NR
j Structured physical activities must start from form one (14)	SA	SA	SA	SA	SA	+
ii. Unstructured Physical Activity						
k Unstructured is free play in safe environment (15)	SA	SA	SA	+	SA	SA
l Unstructured develop leadership qualities (16)	SA	SA	SA	+	SA	SA
m Change from unstructured to structure to formalize what they know (17)	SA	NR	+	NR	NR	A
n Structured or unstructured, always someone in charge (18)	A	A	A	+	A	A

THEMES/SENTIMENTS	FOCUS GROUP PARTICIPANTS					
	Mich	Alvin	Jill	Kenny	Tara	Des
III. COMPULSORY AT ALL LEVELS						
a Physical activity should be compulsory at all levels (19)	SA	+	SA	SA	SA	SA
IV. P.E. AS LIFE SKILLS PROGRAMME / CSEC EXAM?						
a Both must be done in all schools (20)	+	SA	SA	SA	SA	SA
b Daily life skill programme to keep the body healthy (21)	A	A	A	A	A	+
c Examinable to help students to be more marketable (22)	A	A	A	A	A	+
d Daily life skill programme creates the opportunities to be active during schools (23)	A	A	+	A	A	A
e Daily life skill programme can develop skills which compliment a résumé (24)	A	A	+	A	A	A
f Physical activity should be done daily (25)	SA	+	SA	SA	SA	SA
g Morning period best for physical activities (26)	A	A	A	A	D	+
h After school may be better for physical activity (27)	NR	NR	NR	NR	+	NR
i During school hours to create opportunity for all students (28)	SA	SA	+	SA	D	SA
j After school, there are clubs and training sessions (29)	+	A	A	A	A	A
V. P.E.'s ROLE IN OBESITY						
a One on one approach about their health choices (30)	+	A	A	A	A	A
b Building nutrition and health awareness (31)	+	A	A	A	A	A
c Role models for the students (32)	A	+	A	A	A	A
d Holistic approach-all must be on board (33)	A	A	A	A	+	A
e Psychological approach- YouTube graphic and vivid videos on obesity (34)	A	A	A	+	A	A
f Building nutrition and health awareness by rewarding with healthy meals (35)	NR	NR	NR	NR	NR	+

3.1.3. The Consensus Matrix as a Summary Tool

A consensus matrix in Table 2 is used to summarize the themes and small capsules of longer responses, within each main thematic area, made by the group participants. This is a modification of the original matrix [18]. Their method of entering information in the matrix is used. The code recommended by those authors is that the speaker should be denoted by '+' while other group members' responses to what is being said should be coded as A- agree, SA- strongly agree, D- disagree, SD- strongly disagree, and NR- no response. The modification used in this work involves identifying under each theme the sentiments expressed and denoting in parentheses, after each sentiment, the verbatim statement from which that sentiment is extracted. Before a fuller discussion of the themes in the next section, it is informative to look at some of the sentiments expressed by the participants, which led to the named sub-themes. These are given in the first column of Table 2.

3.1.4. Verbatim Statements of Focus Group Participants

When used to cross validate and amplify on the sentiments entered into the consensus matrix, the verbatim statements can deepen the understanding of the group discussion. These are given below.

1. No problem if it is not break time (time is too short and no time to clean up so hygiene problems)- **Kenny**
2. Informal activity must be properly managed either by teachers or by someone else so that students will not go over time into another subject area. - **Kenny**
3. Once managed, students come to class prepared to work and settle nicely- **Kenny**
4. It depends on the students, some settle and some are restless - **Michelle**
5. Students have set guidelines and rules of what must be done- **Michelle**
6. Students must know how to treat equipment- **Michelle**

7. Structured must be in a defined space and equipment- **Jill**
8. Structured follows syllabus guidelines. **Kenny**
9. Structured also follows a lesson plan. -**Kenny**
10. Must have goals and objectives to achieve -**Kenny**
11. Structured is supervised and managed -**Kenny**
12. Students need structured physical activities to acquire lifelong skills -**Alvin**
13. Students need structured physical activities so objectives can be achieved -**Alvin**
14. All students need structured physical activities in secondary schools, and this must be upheld from form one-**Des**
15. Unstructured is free play doing whatever the students want in a safe environment- **Kenny**
16. Unstructured allows students to develop leadership qualities- **Kenny**
17. Students must be taken from the unstructured to structured, so you can build on what they know -**Jill**
18. In all physical activities, unstructured or structured, there is always someone in charge, teachers or students -**Kenny**
19. Physical activity should be compulsory at all levels starting from the primary school- **Alvin**
20. Both life skills programme and CSEC examinable must be offered in all schools- **Michelle**
21. Physical education should be a life skills program which should be done daily for maintenance of a healthy body-**Des**
22. Physical education must be examinable for career opportunities-**Des**
23. Daily life skills programme because it might be the only opportunity for students to be active-**Jill**
24. Companies and Universities are looking for individuals who are healthy and play sports-**Jill**
25. Daily physical activity must be done in all schools and should start in primary schools first- **Alvin**
26. Daily physical activity is best during the morning period- **Des**
27. After school might be better for physical activities - **Tara**

28. During school hours so all students will get the opportunity to participate in physical activity -**Jill**
29. After school students are more involved in sport club and training sessions so only a few will participate -**Michelle**
30. One-on-one approach reminding them occasionally about their health choices -**Michelle**
31. Building nutrition and health awareness when students are seen with unhealthy foods -**Michelle**
32. Set the example as the teacher and role model- **Alvin**
33. Take a holistic approach; all must be aware of healthy habits -**Tara**
34. You Tube video forces the point with students for a period -**Kenny**
35. Students are rewarded for good behavior with healthy meals-**Des**
36. Usually the responsibility of the Physical Education teacher -**Jill**
37. Both should share the venture to assist with obesity epidemic and healthy habits-**Des**
38. Yes, a shared venture but with students also -**Tara**
39. The responsibility will fall on physical education teachers to educate students -**Alvin**
40. This should be a whole school approach, but Physical Education teachers are the main stakeholders to educate students -**Kenny**
41. Ministry of education can do more -**Michelle**
42. MOE can supervise what the cafeteria is selling - **Michelle**
43. Box lunches need to be better prepared and more nutritious -**Michelle**
44. MOE needs to provide schools with proper facilities -**Michelle**
45. There are no checks and balances when directives are sent to schools -**Jill**
46. When directive is sent out to schools, Ministry of Education needs to follow it through-**Alvin**
47. MOE needs to be more proactive -**Alvin**
48. Need to do more monitoring in schools -**Jill**
49. MOE should be more stringent with getting adherence to policies and making teachers accountable -**Kenny**
50. Harsh punishment and penalties should be given for breaking of directives and policies-**Des**
51. When Ministry implements a policy, it must be supervised -**Tara**
52. Parents must be their children's role model and encourage healthy living first -**Michelle**
53. Parents must be educated about the importance of parental support -**Kenny**
54. Students are more interested in P.E., because of career opportunities -**Alvin**
55. Successful examination results are obtained in NCSE and CSEC-**Jill**
56. Number one subject with hundred percent pass rate -**Tara**
57. P.E. teachers are upgrading and educating themselves -**Kenny**
58. A subject that goes beyond the classroom and saves lives-**Des**
59. P.E. is not reporting what it is promoting, maintenance of health -**Alvin**
60. P.E. is still seen as play by administrators and students -**Jill**
61. P.E. teachers don't appreciate their subject -**Kenny**
62. P.E. teachers are their worst enemies -**Kenny**
63. P.E. teachers need to be more proactive and stand up for their subject -**Tara**
64. P.E. teachers need to be proactive and sell their subject -**Kenny**
65. Too much of a dependency syndrome-**Des**
66. P.E. grant must be uniform for all P.E. teachers - **Kenny**
67. More physical activities for students in schools -**Jill**
68. More regular physical activities in schools -**Alvin**
69. P.E. being offered to the whole school from 1 to 6 - **Kenny**
70. P.E. must be compulsory from 1 to 6 in all schools - **Tara**
71. More social media to educate all stakeholders -**Jill**
72. Health clubs and health fairs to be run by students- **Des**
73. Proper facilities in schools-**Des**
74. More facilities in schools -**Kenny**
75. Actual classroom for use by P.E. teachers where it can be conducive for the students to learn -**Kenny**
76. Proper use of support systems, PTA, Ministry of health -**Kenny**
77. Ministry of Education must lead the way and be more proactive -**Kenny**
78. Communities around the schools must get more involved- **Jill**
79. Assist students to be more responsible -**Des**

3.2. Semi-structured Interview with an Advocate

The semi-structured interview with the Advocate went into detail in four pre-planned areas. First, it was important to outline the context for the discussion by understanding the interviewee's concept of the role of Physical Education. Then, the reasons for introducing the for-credit subject of *Physical Education and Sport*, what those involved hoped to achieve, the obstacles they faced, and how they rated the success of the implementation were discussed in the rest of the interview.

3.2.1. Physical Education – the Concept, Strengths, and Weaknesses

Although this was not the first area addressed in the interview, it is perhaps one of the most important insights which came out of the discussion. In describing her own involvement in Physical Education, the advocate called it "a science and an art", a lifestyle for all, providing fundamentals, which "you take through life". She argued that understanding of the human body would influence 'what you put in it, what you do to it, how you take care of it.' The strength of Physical Education, she specified, lies in exactly this 'awareness of how the body works and awareness of nutritional aspects'. Lack of resources, incomplete implementation, and no structured post-implementation monitoring were cited as the weaknesses undermining most Physical Education programmes.

3.2.2. Rationale for Introduction of 'Physical Education and Sport'

At the time the lobbying began for the introduction of Physical Education (P.E.) into the secondary school curriculum, those involved in it believed that P.E. was underappreciated, regarded as play, and as a subject which did not need dedicated teachers. In fact, some teachers, trained in other subjects, either also taught P.E. or taught their own subjects in the period designated for P.E. since, in some instances, schools did not monitor closely the teaching of P.E.. The advocates at the time felt that if the subject were examinable it would gain respect and would force people to recognize the health benefits associated with properly implemented P.E. The advocacy was really for Physical Education but since Sports had the 'fame and glory,' they felt it would be easier to push through a subject that was 'Physical Education and Sport'.

3.2.3. Desired Outcomes, Challenges, and Benefits of the Introduction/ Implementation

Acceptance of the subject, its accreditation, and recognition of potential health benefits of Physical Education were the main desired outcomes from the introduction. The advocate felt that, apart from poor school infrastructure and facilities, the biggest challenge faced was in the attitudes of the P.E. teachers themselves. Despite workshops developed to assist them, she recalled teachers at the time feeling incapable of teaching examinable Physical Education, fearing that they could not get the students ready in time to write the examination, and unsatisfied with the financial and physical resources. However, she suggested that teachers do prefer to teach examinable subjects. Once Physical Education became an examinable subject and students writing the examination were very successful, attitudes towards P.E. changed as the subject gained respect, more students read the subject with each passing year, and teachers themselves became more confident and more knowledgeable about the subject.

The fight against obesity, new job opportunities, and the government's apportioning a large share of its budget to health all helped to facilitate introduction of the examinable subject. In fact, the emphasis on health was so strong that even the name of the compulsory programme for students in forms 1 to 3 was changed from 'Physical Education' to 'Health and Physical Education'. The question was also asked about whether the same thing could not have been accomplished if it had just been introduced as a mandatory daily programme instead of an examinable subject. The advocate, however, felt that students needed the examination credit to be more marketable. (That said, now the credit is there, it does not obviate the introduction now of a programme of structured physical activity for all, even those already reading *Physical Education and Sport* as an examinable subject, given the overemphasis now placed on theory and classroom training in that subject.)

3.2.4. Strengths and Weaknesses of the Existing Physical Activity Programme

The advocate expressed very little satisfaction with the current state of the *Physical Education and Sport* subject. She mentioned that 'except for the introduction of CAPE

(The examinations written after 6 and 7 years in secondary schools in Trinidad and Tobago), nothing has changed'. She expressed disappointment that it had turned into a 'mere academic subject', resulting in 'its true benefits (not being) utilized'. She felt the breakdown occurred because of the lack of implementation and monitoring, the main weaknesses in the area along with a lack of resources. She expressed the belief that the subject encouraged in students reading it 'an awareness of what physical education entails, awareness of how the body works; and awareness of the nutritional aspect and of what is required'. She suggested that if Physical Education were taught in a thematic manner by teachers who collaborated, rather than teaching in isolation, students would benefit and would achieve more. Quality improvement could be achieved through full implementation of all the subject requirements, monitoring of the curriculum being delivered, teachers working within the contexts of proper policies, proper infrastructure, sufficient resources, including adequate staffing with training and workshops provided to teachers in the subject area, and a viable time allocated to teaching the subject.

3.3. Interview with Curriculum Officers

The joint interview with the two curriculum officers resulted initially in a factual account about what is needed currently for introducing any subject/programme at all onto the syllabuses for the Caribbean Examination Council (CXC) examinations (CSEC and CAPE). In the latter part of the interview, however, they gave their views on what advantages a structured programme of Physical Activity could bring and what would be the challenges to introduction and implementation.

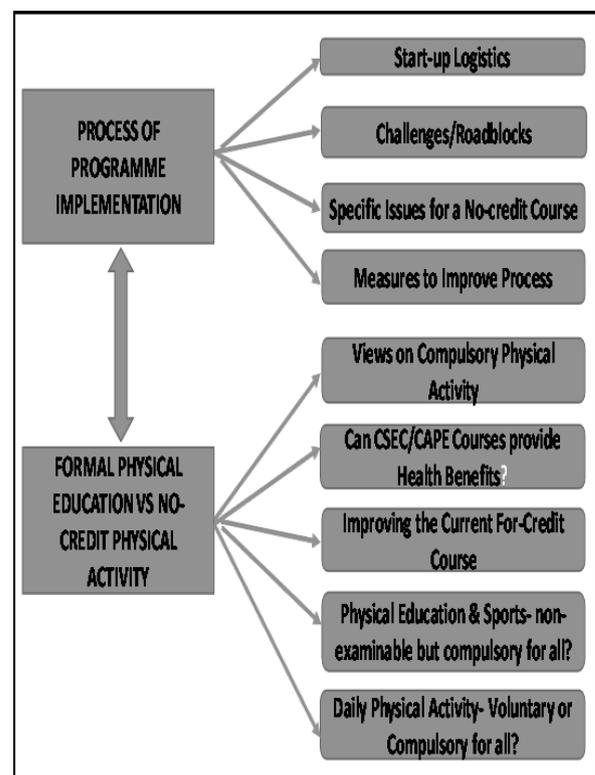


Figure 3. Themes extracted from the semi-structured interview with Curriculum Officers

3.3.1. Major Themes and Sub-themes Extracted from the interview

The schematic in Figure 3. captures the thematic breakdown of that interview. It gives a broad overview of the areas covered which should allow the gross comprehension of the content of the interview.

3.3.2. Details of Interview with Curriculum Officers

The detailed statements from the interview with the Curriculum Officers are given in Table 3. These give a richer insight into the views which were grouped into the more gross sub-themes. They serve to connect those overarching themes with the summary and discussion in the next section.

Table 3. Verbatim Statements from the Interview with the Curriculum Officers

THEMES	SUB-THEMES	SENTIMENTS
Subject or Program Introduction/Implementation	Logistics of Start-Up	<ul style="list-style-type: none"> *A proposal should be sent to the CEO for vetting. It should highlight any information collected on need for the programme and should address any concerns which the proposer anticipates. *The CEO forwards potentially viable proposals to the curriculum division for review by specialist officers. *A proposal may be passed with recommendations by this unit. If so, the CEO sends the proposal to the Permanent Secretary for approval, after which it moves up through the various levels of authority to Cabinet. *The duration of this vetting and approval process depends on the quality of the proposal and its ability to fill a GAP or meet a need in the school curriculum.
	Challenges/Roadblocks in the Programme Approval Process for Addition to the Secondary School Curriculum	<ul style="list-style-type: none"> *A proposal should show clearly that the programme it describes is aligned to the strategic objectives of the Ministry of Education and to the country’s national development goals. A subject/programme will have an easier path to being added to the curriculum if it is shown to be ‘unique and essential’, addressing areas which no other current curriculum subject does. *If the above aspects are not clear, there may be requests for more information at every stage. It can be sent back by the CEO to the curriculum division or by the Permanent Secretary and/or the Minister, seeking clarification. *Some subjects may be easier to implement than others, depending on how the discipline of the subject itself is perceived
	Specific Issues Related to Introducing into the Secondary School Curriculum a No Credit Compulsory Course	<ul style="list-style-type: none"> *There is precedent since Health and Family Life Education (HFLE) was introduced, as a no-credit compulsory course to be incorporated into other subject areas. *There was support for HFLE because of ‘youth violence and deviant behaviour’ but some teachers feel this requires specialist attention because of its importance. *The rigidity of the teaching system selection may provide a challenge. Teachers are assigned to a subject and are specified as such. *Even though those same teachers may be qualified to teach at the forms 1 to 3 levels in other areas, they may be unwilling to do so since those subjects are not in their specified area *There may be timeframe challenges since the many areas on the curriculum compete for time. *There may be manpower challenges in terms of who is available to teach the subject. *With Physical Activity, there will be both manpower and infrastructural challenges (facilities and equipment) *There could be safety (physical) challenges, resulting in the need for qualified people to give some treatment to injuries etc.
	Suggested Measures to Enhance Programme Implementation	<ul style="list-style-type: none"> *Buy-in from principals, teachers and auxiliary staff *Target a person in each school to act as a change agent to push the programme.
Optional Physical Education and Sport Program compared with Compulsory Physical Activity	Views on Compulsory Physical Activity In Secondary Schools	<ul style="list-style-type: none"> *It needs to be increased due to rising levels of lifestyle diseases in children. *It meets the Ministry’s goal of ensuring that children are healthy and growing. *There may not be time for it within normal school hours
	Can CSEC and CAPE Physical Education and Sport Subject Fill The Need To Provide Students with Beneficial Physical Activity?	<ul style="list-style-type: none"> *No because it is read by far too few students (less than 50%) *No, because the practical/theory ratio (70/30) is not being followed, resulting in far too little actual physical activity
	What Can Be Done to Improve the Current For-Credit Programme?	<ul style="list-style-type: none"> *Let students know there are health benefits *Let them have fun while learning
	Would The Physical Education and Sport Programme be better as non-examinable but compulsory for all?	<ul style="list-style-type: none"> *No, students would feel that they are being forced. *Health benefits are being recognized slowly but still not correct appreciation of them. So, need education *There is a progression from birth to old age in how people exercise. There is nothing till about 16 years, then a gym craze, which slows down from then till about 50 years, with older people usually exercising for medical reasons rather than choice. *Physical Education is not taught properly now. Students do not live what they learn. This must change at Ministerial level.
Would it be easier to introduce daily Physical Activity as a voluntary programme rather than a mandatory programme?	<ul style="list-style-type: none"> *Easier in the short term but not sustainable because interest would wane. *A voluntary programme would be difficult to implement nationwide since only some schools may have buy-in. *For a mandatory programme, policies, resources, and structures should be put in place. Industrial Relations must be considered. 	

4. Discussion

4.1. Focus Group Themes

4.1.1. General Landscape

In the early exchanges, the facilitator took pains to ensure that the group understood the intended purpose of the study so that special emphasis was placed on the elements of informal Physical Activity (P.A.) which (a) would not be examinable, (b) would be independent of the current formal Physical Education CSEC programme but which (c) would be mandatory. It was important for the participants to understand those three elements. The discussion opened with a general articulation of what informal physical activity could be and how it could fit into the school day before a longer exposition of what the participants considered structured versus unstructured activity. Participants felt that in general informal physical activity should be given enough time to make a difference so that squeezing it into a short break time would be unrealistic. All agreed that it must be managed within the school day, so as not to trigger over-time payments to teachers, and managed so that students ended physical activity and could settle down to work on their return to class. One participant suggested that all students might not so easily accomplish the switch from such activity to classroom work.

4.1.2. Structured and Unstructured Physical Activity

Participants were clear although not necessarily always in consensus on what to each of them constituted structured and unstructured physical activity, either of which could be considered informal. All agreed that structured physical activity must be supervised and managed and should be carried out in a defined space, with a syllabus, which encompasses lesson plans and training in the use of P.E. equipment. It should have set rules and guidelines, and goals and objectives. They all believed too that such a programme should start from as early as form one. There was some disagreement among participants, though, on whether informal physical activity had to be structured to achieve its objectives and how important it was in acquiring lifelong skills.

Participants seemed less inclined to believe that a successful informal programme could be unstructured. They considered that nothing more than 'free play in a safe environment', although there still needed to be someone in charge. All felt such activity could build leadership qualities because students decide for themselves what they can and cannot do although it was thought by some that after a period of unstructured 'play', students should enter a programme of structured activity to 'build on what they know'. This was intended to show that although it is informal physical activity, students would need to have some knowledge of skilled activities and of certain precautions to take to prevent injuries.

4.1.3. Physical Education- Life Skills Programme or CSEC Subject

The discussion turned to Physical Education, as offered now, to set a context for introducing a no-credit, mandatory programme of structured physical activity

alongside the formal P.E. programme now taught in schools as a CSEC subject. Participants strongly believed that both should be done in all schools and that informal physical activity, done daily, should be compulsory at all levels. All but one participant felt that it should be done during school hours to provide opportunities for all students to participate and they thought that the morning was the best time for this activity. The lone dissenter felt that after school would be better for physical activity but agreed that there could be competition at that time from club activities and training programmes. They agreed that Physical Education, while it could be considered a Life Skills programme, which could keep the body healthy by offering opportunities to be active during school hours, could provide skills to complement a résumé and should also be examinable to make graduates more marketable. Hence, the current *Physical Education and Sport* subject serves this last purpose for those who want it but would be complimented by adding to the curriculum for all students a mandatory programme of physical activity to provide needed health benefits

4.1.4. The Role of Physical Education/Activity in Combatting Obesity

Participants articulated several advantages of Physical Education/Activity in the fight against obesity. Among these were the opportunities it provided to build knowledge of nutrition and health awareness, possibly using healthy meals as an incentive or as a reward, and to forge lifelong habits. A one-on-one approach could inform each student about his or her health choices. The group recognized, though, that all should be involved, including academic and P.E. teachers, cafeteria staff, library staff, auxiliary staff and even those in administration. Staff should act as role models for the students, exhibiting good health and nutrition habits. They also agreed that utilizing a psychological approach, perhaps with graphic videos showing the pitfalls of obesity, would tend to encourage students to make wiser choices and to practice what they learnt in Physical Education programmes.

4.1.5. Roles of Parents, Teachers, and the Government

Parents, it was felt, should be their children's first and most important role models, providing them and the school with support. All recognized that, within the school, it was no longer solely the P.E. teacher's responsibility but that all teachers could help to ensure that students were trained in the elements of a healthy lifestyle. Calling it a 'health epidemic,' participants felt that, even while the onus should be on P.E. teachers as the main 'stakeholders' in this effort, a whole school approach, which even includes the students themselves, was needed.

A bigger role for the Government was suggested, especially in the areas of controlling the nutritional quality of food in the box lunches and of that sold in the school cafeterias. The group believed that the Government should be pro-active in the fight against obesity, providing schools with better or more facilities, laying out strict policies and directives, with penalties for non-compliance, perhaps also boosting compliance by supervising implementation of their policies, following up on directives, and monitoring progress in schools.

4.1.6. Successes and Concerns

All members of the group felt that at least some progress had been achieved by P.E. teachers over the years, with some proven successes. Still, some concerns remain. Among the successes listed were the high pass rates (100%) in *Physical Education and Sport* at CSEC, the fact that there were new career opportunities in P.E. which could attract students to the subject, and that P.E. teachers themselves were constantly upgrading and improving their skill sets. One very important quality mentioned was the belief that P.E., in extending beyond the borders of the classroom, resulted in the saving of lives by promoting healthy lifestyles. That said, the concern was expressed that although P.E. teachers promoted this, they did not report on what could be accomplished often enough. Other concerns revolved around the impression in most people's minds that P.E. was just a glorified form of playing, that students depend too much on teachers, wanting to be guided in everything and have everything provided for them, and that P.E., as a taught subject, was not appreciated enough even by its own practitioners. Many agreed that P.E. teachers should stand up for their subject and really tout its benefits. Finally, there were views expressed on the P.E. uniform and equipment grant, which the teachers felt was not being equitably distributed, with some principals holding back on the disbursements.

4.1.7. Potential Solutions

This section repeats some, although not all, of what was expressed when the participants articulated their views on the role of the Ministry of Education. They felt that more and better facilities, including a dedicated classroom provided to P.E. teachers for use when needed, should be the top priority of the MOE and the first step in a solution to the problem of obesity. Without such facilities, it would not be possible to offer regular physical activity at all forms in secondary schools, especially not if it was made compulsory, as was suggested. Participants strongly agreed that such prolonged regular exposure to Physical Activity programmes in school would result in better health on average for students now and in the future. It was suggested too that social media, health clubs, and health fairs could all be used to promote the benefits of physical activity and to encourage students to participate in it willingly.

Participants felt that the Ministry of Education should lead the way, through school Physical Activity programmes, in the fight against obesity but that P.E. teachers should at the same time make proper use of the secondary support systems provided by the Ministry of Health, the Parent-Teachers Association, and, possibly, communities in the areas around schools, if they could be encouraged to support this effort in the form of contributions and sponsorship of activity days and fairs etc., to name two possibilities. Finally, there was strong consensus that there could be no progress without buy-in from students. To this end, it was felt that pathways should be created to make students more independent and more responsible for their own health choices, especially about their willingness to eat fatty foods, spend most of their time using electronic devices, and being essentially sedentary.

4.2. Views of the Advocate

The Advocate was clear on several things in her interview. From the time of the introduction of the for-credit subject to now, she has believed that the healthy benefits of Physical Education, which is physical and not classroom activity, is important for all school children. Although they wanted the validation for the subject by having it introduced as 'for credit,' the real aim was for children to get the health benefit. The advocates for the subject exploited the prevailing thinking of the day in that they got buy-in from teachers by ensuring the subject was examinable, which is what teachers prefer, and they got a boost from the strong emphasis on health which existed then and the new job opportunities in the area opening at the time. Obviously the programme which is the focus of this study will not enjoy support for all the same reasons. There is still a state interest in good health, but the problem of obesity is so much greater today than then that the interest is not necessarily enough to match the problem and the subject of *Physical Education and Sport* already in place, may be confusing the issue for some by giving the impression that the problem is being handled. The Advocate interviewed left no doubt, however, that she believed the *Physical Education and Sport* subject had failed in its original purpose and that something additional was needed to combat the problem of obesity.

4.3. Interview with Senior Curriculum Officers

4.3.1. Current Process for Introduction/Implementation

This was discussed in terms of the logistics of start-up, challenges and roadblocks to getting on the secondary school curriculum, specific issues which could arise for a no-credit programme, such as the one being studied in this work, and measures which could enhance programme or subject implementation. The main themes of discussion in the interview are shown in [Figure 3](#). Excerpts from the interview are further detailed in [Table 3](#).

4.3.2. Logistics of Start-up and Challenges to Adoption

Proposals, highlighting any evidence of need for or benefits of training in the subject or programme area, must be sent to the chief education officer who will then forward them, if viable, to the curriculum division for review by specialist officers. If this unit passes the programme with minor recommendations, it then moves to the Permanent Secretary and up through various levels of authority to the cabinet. The quality of the proposal and the need it satisfies are determinants of the duration of the vetting process. If the proposal is clearly 'unique and essential' and aligned to the 'strategic objectives of the Ministry of Education and to the national development goals,' its passage through the outlined steps is likely to be much easier. It was noted, although not strictly applicable here, that in some cases the importance of the discipline in which the subject is to be implemented may be a facilitating factor in getting that subject added to the curriculum.

4.3.3. Specific Issues for a No-credit Compulsory Course

The officers envisaged challenges to the introduction for new no-credit compulsory programmes or subjects. Among these, they listed the 'rigidity' of the teaching system, with teachers unwilling to go outside of their dedicated assignments to teach another subject; limited time on the curriculum for a no-credit offering; inadequate manpower, facilities, and equipment resources; and uniquely to Physical Activity, the challenge of having trained staff to treat injuries which could occur during the activity. With these 'roadblocks,' the officers still thought that buy-in from principals, teachers and auxiliary staff would facilitate implementation.

The officers commented on the growing incidence of lifestyle diseases in children and agreed that the time had come for physical activity to be increased in the nation's schools, even in normal school hours. They felt too that a compulsory Physical Activity programme meets the Ministry's goal for promoting healthy children. They did not think that the current *Physical Education and Sport* subject, with its small enrollment and lack of implementation of the 70/30 practical/theory ratio for activity, was meeting the needs of secondary school children. That programme could be improved, they felt, by introducing some fun in the learning process while making children more aware of the health benefits of such a programme. This understanding is improving but at too slow a pace. Still, they did not believe that the *Physical Education and Sport* subject should be changed from an examinable to a no-credit compulsory subject.

5. Conclusion

This work examines three important dimensions, without which a valid estimate of feasibility cannot be made. The Focus Group exploits insights from Physical Education teachers, the individuals who are on the ground with a first-hand view of the growing connected problems of inactivity and obesity in secondary school children. They are also aware of the health benefits of physical activity and, knowing the general school landscape, they can pinpoint the challenges and barriers to implementation of a no-credit daily structured Physical Activity programme in secondary schools. Interviewing the Advocate, who was at the forefront of introducing and implementing a for-credit subject, which had similar aims as the programme, which is the focus of this study, was necessary to get an idea of the barriers she faced in both the introduction and implementation steps, not just from the Ministry of Education but from other teachers who were unwilling to have their curricula disrupted by the insertion of any new course. She could also comment on whether the original programme, *Physical Education and Sport*, achieved its desired aims, which would have made this present day programme somewhat unjustified. In fact, even failure of that subject could have led to the view that trying again would have been futile, especially with or even with a no-credit programme which focused only on physical activity with no component of classroom instruction. Instead, the recommendation was that, given

the failure of the for-credit programme, a structured Physical Activity programme is urgently needed. Finally, the Curriculum Officers from the Ministry of Education were able to detail factually what Ministry steps would need to be covered. Their interview, however, went beyond this in that they supported the idea of introduction of the no-credit programme and made useful suggestions for its meeting the requirements of the Ministry of Education.

All the interviewees in this study show consensus in several areas. They all agreed that the current *Physical Education and Sport* subject is not doing what it was intended to do, namely raising health awareness and promoting the practice of good health habits among secondary school children. The programme has not been properly implemented or monitored, becoming too theoretical to realize its full benefit. When this is considered within the context of the increase in lifestyle diseases among secondary school students, all those interviewed seemed to recognize that something additional is needed and that a no-credit programme of compulsory physical activity could have realizable benefits if adopted despite clear challenges. Among some of the steps they feel would lead to successful implementation are (1) the hiring of more P.E. teachers; (2) an increase in the number of periods in the school day allocated to physical activity; (3) a better supply of equipment; (4) improved facilities; and (5) mandatory and proper monitoring of the new programme after introduction.

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