Physical Self-efficacy and Goal Orientation of Hong Kong Primary Students in Physical Education Lessons
Conducted in 2009

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Literature Review

Current Situation

In US, Europe and HK

1. Physical Activity Behavior (PAB) **decreased** when age **increased** (from primary school to secondary school)

2. General students’ PAB dropped in Hong Kong (Study on the prevention of cardiovascular disease, pointed out that 15.1% of the children is not active or not interested in sport)
Literature Review

Current Situation

Obesity rate of Hong Kong primary school children increased.

<table>
<thead>
<tr>
<th>School year</th>
<th>Obesity rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Primary school students (P.1 – P.6)</td>
</tr>
<tr>
<td>1995/96</td>
<td>16.1</td>
</tr>
<tr>
<td>1996/97</td>
<td>15.9</td>
</tr>
<tr>
<td>1997/98</td>
<td>16.4</td>
</tr>
<tr>
<td>1998/99</td>
<td>17.6</td>
</tr>
<tr>
<td>1999/00</td>
<td>17.7</td>
</tr>
<tr>
<td>2000/01</td>
<td>17.9</td>
</tr>
<tr>
<td>2001/02</td>
<td>17.6</td>
</tr>
<tr>
<td>2002/03</td>
<td>18.6</td>
</tr>
<tr>
<td>2003/04</td>
<td>18.7</td>
</tr>
<tr>
<td>2004/05</td>
<td>18.7</td>
</tr>
</tbody>
</table>
Literature Review

PA, Physical self-efficacy and Goals orientation

- Some predictors on the decline of the physical condition and PAB of the children were found in domestic and international studies: (Two main PREDICTORS)

1. Children’s **Physical self-efficacy** are not met in physical education
   - E.g. teachers and students are often looked down on them, lose confidence
   - Current Key Learning Area of PE didn’t focus on developing students’ Physical self-efficacy

2. or failed to establish their **own goals** during the lesson
   - E.g. could not establish the motive of setting goal because of the lack of confidence, etc.
   - Most primary school use direct instruction skill rather than constructivist model to teach students; seldom will teacher include goal setting into the curriculum or pedagogy.
Literature Review

- Goal Orientation Theory in Education
  - ‘Explain the relationship between students’ beliefs about the causes of school success, and their engagement and persistence in academic learning’

  - Task involvement (learning goals)
  - Ego involvement (performance goals)
Literature Review

- Task involvement
  - Individuals seek to develop their competence relative to their own abilities
  - Develop their abilities via acquiring new skills, improving their level of competence and mastering new environment
  - Focused on the intrinsic value of learning and effort utilization
  - Abilities can be improved and incremented
  - More confident in investing or expending effort
Literature Review

- **Ego involvement**
  - Individuals seek to develop their competence relative to the abilities of others
  - Show and prove their abilities by seeking favorable judgments and avoiding negative judgments
  - Need for public recognition, to perform in a superior manner, or to be better than others
  - Abilities are evidenced by doing better than others and surpassing normative-based standards
  - Self concept can be questioned if there are no immediate success
Physical Self-Efficacy

– ‘People’s beliefs about their capabilities to produce designated levels of performance that exercise influence over events that affect their lives’
Research Questions

- Are physical self-efficacy and the goal orientations important to physical activity behavior for primary school students in Hong Kong?
- Are there any differences of demographic data on physical self-efficacy and the goal orientations among primary school students in Hong Kong?
Methodology

- **Convenience Sampling**
  - Investigation of 6 different primary schools: 3 in Hong Kong Island; 3 in New Territories
  - Age between 6 and 12
  - The Task and Ego Orientation in Sport Questionnaire (TEOSQ-12 items)
  - Physical Self-Efficacy Scale (PSES-22 items)
  - 300 questionnaires distributed
    - 280 questionnaires collected
      (School teacher assist to collect)
    - 12 invalid questionnaire
    - 268 valid questionnaires inputed
### Result - Descriptive

<table>
<thead>
<tr>
<th>Age</th>
<th>Number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>6-7 (P.1, P.2 Students)</td>
<td>23</td>
<td>8.6</td>
</tr>
<tr>
<td>8-9 (P.3, P.4 Students)</td>
<td>66</td>
<td>24.6</td>
</tr>
<tr>
<td>10-12 (P.5, P.6 Students)</td>
<td>179</td>
<td>66.8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gender</th>
<th>Number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boy</td>
<td>162</td>
<td>60.4</td>
</tr>
<tr>
<td>Girl</td>
<td>106</td>
<td>39.6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sport Team Member</th>
<th>Number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>104</td>
<td>38.8</td>
</tr>
<tr>
<td>No</td>
<td>164</td>
<td>61.2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Experience (School Sport Team)</th>
<th>Number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 year</td>
<td>47</td>
<td>45.2</td>
</tr>
<tr>
<td>2-3 years</td>
<td>13</td>
<td>12.5</td>
</tr>
<tr>
<td>3-4 years</td>
<td>39</td>
<td>37.5</td>
</tr>
<tr>
<td>&gt; 5 years</td>
<td>5</td>
<td>4.8</td>
</tr>
</tbody>
</table>
## Result

(Differences of Demographics on Goal Orientations)

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Gender (p)</th>
<th>Age (p)</th>
<th>District (p)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal orientations</td>
<td>&lt;.05*</td>
<td>&lt;.05*</td>
<td>&lt;.05*</td>
</tr>
<tr>
<td>Ego goal orientation</td>
<td>&lt;.05*</td>
<td>&lt;.05*</td>
<td>&lt;.05*</td>
</tr>
<tr>
<td>Task goal orientation</td>
<td>&lt;.05*</td>
<td>&gt;.05</td>
<td>&lt;.05*</td>
</tr>
</tbody>
</table>

P<.05*
Male (higher); Older (higher); HK (higher)
## Result

**(Differences of Demographics on Physical self-efficacy)**

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Gender (p)</th>
<th>Age (p)</th>
<th>District (p)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical self-efficacy</td>
<td>&lt;.05*</td>
<td>&lt;.05*</td>
<td>&lt;.05*</td>
</tr>
</tbody>
</table>

P<.05* ; Male (higher); Older (higher); HK (higher)

**NOTE:** No differences were found between school team and non school team on 1) Goal Orientations and; 2) Physical self-efficacy
## Result

*(Correlation between Goal Orientations and Physical self-efficacy)*

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Goal Orientation</th>
<th>Ego goal Orientation</th>
<th>Task goal Orientation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical self-efficacy</td>
<td>&lt;.05*</td>
<td>&lt;.05*</td>
<td>&lt;.05*</td>
</tr>
</tbody>
</table>

P<.05* (Pearson Coefficient)
Positive Correlation
P<.05* (Spearman’s Rank Correlation)
Positive Correlation
Discussion

Finding One:

- The results analysis shows that 
  - OLDER HONG KONG DISTRICT MALE primary school student had a higher GOAL ORIENTATIONS and PHYSICAL SELF-EFFICACY.

**IMPLICATIONS!!!!!!**

- Specific PE curriculum should be developed in different district for different students with different age as they have different self-efficacy and goal orientations in performing their task in PE lessons.
Discussion

Finding Two and Three:

- The results analysis shows that
  - The higher Physical self-efficacy, the higher the Goal orientations.
  - The higher the Physical self-efficacy and the Goal orientations, the higher the chance of joining the extra curriculum physical activity voluntarily.

**IMPLICATIONS!!!!!!**

- New PE curriculum and the new Pedagogy of 334 education reform shall take the goal orientations and physical self-efficacy into account as it potentially affects PAB of primary students.
- Neither study the causal relationship between physical self-efficacy and the goal orientations nor use the path analysis to check the path relationship between them, more studies shall be conduct to investigate the mechanism behind.
Reference


THANK YOU