Motivation in Sport and Physical Activity: Synthesis of Theories and Methods.

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Introduction
Trend in PA & Sedentary Behaviour in Singapore

Wang et al., 2008
Barriers to PA

Men vs Women

- Not sporty type
- Injury
- Rest/Relax
- No time
- Poor health

ADNFS (1992); Ball, Crawford, & Owen (2000)
Define motivation

Overview of the three theoretical frameworks
  - sport ability beliefs
  - achievement goal theory
  - self-determination theory

Synthesis of theories and methods - some examples

Summary
Understanding Motivation

- Direction
- Persistence over time
- Persistence
- Intensity
- Performance

Motivation
WHY DO YOU DO WHAT YOU DO?
Study of Motivation

Theory Y

Theory X

= +

Theory Z
Dweck & her colleagues (Dweck & Leggett, 1988) proposed that theories of intelligence that people hold create different goals.
Sport Ability Beliefs
Biddle et al., 2003

\( \chi^2 = 815.49, \text{df} = 343, \text{NNFI} = 0.915, \text{CFI} = 0.921, \text{RMSR} = 0.065, \text{RMSEA} = 0.047 \)
Biddle et al., 2003

\[ \chi^2 = 815.49, \text{ df} = 343, \text{ NNFI} = 0.915, \text{ CFI} = 0.921, \text{ RMSR} = 0.065, \text{ RMSEA} = 0.047 \]
Wang et al. 2002
Entity beliefs do not allow feelings of confidence and control over future outcomes, especially when perceived competence is low, thus resulting in less adaptive responses.

Incremental beliefs, through the pursuit of task goals, allow the feeling that success is under one’s personal control (Duda & Nicholls, 1992; Nicholls, 1989), resulting in more adaptive motivational patterns.

It is apparent that looking at self-conceptions of ability or beliefs is useful in understanding students’ motivation in physical activity settings.
Nicholls’ AGT (1989) assumes individuals strive to demonstrate competence and avoid showing incompetence.
## Achievement Goal Theory

### Predictions:

<table>
<thead>
<tr>
<th>Goal Orientation</th>
<th>Perceived Ability</th>
<th>Behaviour Pattern</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ego/Performance High</td>
<td>High</td>
<td>Adaptive</td>
</tr>
<tr>
<td>Ego/Performance Low</td>
<td>Low</td>
<td>Maladaptive</td>
</tr>
<tr>
<td>Task/Mastery High or Low</td>
<td>High or Low</td>
<td>Adaptive</td>
</tr>
</tbody>
</table>
## A 2x2 Achievement Goal

<table>
<thead>
<tr>
<th>Valence</th>
<th>Mastery Approach</th>
<th>Performance Approach</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Approach</strong></td>
<td>Mastery-Approach</td>
<td>Performance-Approach</td>
</tr>
<tr>
<td><strong>Avoidance</strong></td>
<td>Mastery-Avoidance</td>
<td>Performance-Avoidance</td>
</tr>
</tbody>
</table>
Wang, Biddle & Elliot 2007

Clustering Variable

- Z Score
- Moderate
- Low
- High
- Mastery
ENJOY
EFFORT
BOREDOM
PA
Outcome Variable
Z Score
Moderate
Low
High
Mastery

Wang, Biddle & Elliot 2007
Wang, Biddle & Elliot 2007
According to SDT, people are active organisms seeking to master their internal and external environment (Ryan & Deci, 2008).
Three psychological needs are essential conditions for self-growth, integrity and well-being.
Goals pursuit are driven by psychological needs.
Self-Determination Theory

Ext Events

Needs Satisfied

Intrinsic Motivation ↑

Task

Int Events

Needs Thwarted

Intrinsic Motivation ↓

Ego
Nature of Motivation

- Amotivation
- Extrinsic Motivation
- Intrinsic Motivation
Self-Determination Continuum:

Amotivation

Non-regulation

Extrinsic Motivation

External Regulation

Introjected Regulation

Identified Regulation

Integrated Regulation

Intrinsic Motivation

Intrinsic

The self-determination Continuum
Free Choice Behaviour

Task  Ego
Spray, Wang, Biddle, & Chatzisarantis, 2006

![Bar chart showing the comparison between Auto and Control conditions for Enjoy, Free Chocie, and perf.](chart.png)

- **Enjoy**: Auto condition significantly higher than Control.
- **Free Chocie**: Auto condition significantly higher than Control.
- **perf**: Auto condition significantly higher than Control.
Free Choice Behaviour

![Bar chart showing Free Choice Behaviour with Auto and Control conditions. Auto condition has a significantly higher value than Control, indicated by an asterisk (*) indicating significance.](#)
Teachers, as the significant others in the PE classroom, should adopt an autonomy-supportive style when communicating with their students. This will minimize the internally controlling effect of ego involvement and facilitate internalisation towards more autonomous behaviour (internal locus of causality).

According to SDT, this internalisation process causes the individual to initiate and regulate his or her behaviour in more self-determined ways, thereby increasing intrinsic motivation.
If the aim of educators is to promote intrinsic goals and interest towards physical activity among students, then they should strive to foster incremental beliefs in their students and promote mastery-approach goals.

They should also create social contexts that will facilitate students’ needs for competence, autonomy and relatedness.
To summarise, the above review has highlighted the potential of integrating different motivational theories.

Specifically, sport ability beliefs, achievement goals and self-determination have significant impact on students’ intrinsic motivation in PE activity.

Psychological research in PE is valuable in providing insight into students’ experiences towards physical activity.
Translating Theory into Practice
Promoting Competence

Corrective feedback

Praise improvement

Recognize effort
Promoting Competence

- Pitch learning at correct level
- Promote mod difficult goals
- Goal setting
- Individualised instruction
Promoting Autonomy

- Provide rationale
- Allow decision making
- Provide Choice
- Empathy
Promoting Relatedness

Know students personally

Positive Tones

Respect

Genuine Concern

Encouragement
• Want More Practical Tips?

• Please visit:

  http://merl.nie.edu.sg
Thank You!