

# A Study of Cultural Differences in Motivational Orientations towards Sport Participation of Junior Secondary School Children in Four Cultures

## 比較四個地區初中學生參與體育活動之動機研究

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### Abstract

The study of motivational orientations of participants is essential in designing physical education or sport programs in enhancing their enjoyment and persistence. People from different regions may adopt different motivational orientations during participating in physical activities. This study compared junior secondary school students (N = 1,083) from Hong Kong, the United Kingdom, Hungary and Romania on three motivational orientations, two goal orientations and competitive trait anxiety. The data were analyzed with a four (country) by two (gender) multivariate analyses of variance (MANOVA). Results indicated that relative to the other cultures, Hong Kong scored higher in goal orientations, while Hungary and Romania were quite homogenous and scored higher in both intrinsic and extrinsic motivations; the United Kingdom scored relatively lower in all scores. Cultural difference in gender was not prominent with females scoring in a more unfavorable condition towards sport participation. These findings were discussed relative to cultural influences and concluded that cultural factors should be considered in sport motivational research.

Key words: Motivational orientation, Cross-cultural, junior secondary student

### 摘要

參與體育活動的動機研究，對於組織及設計體育活動非常重要，以達到參與者能享受及長期參與體育活動的目的。本研究將參與體育活動的動機分為「內/外發動機」、「目標定向」及「競賽焦慮」，以跨文化方式作出探索，分別在香港、英國、匈牙利及羅馬尼亞(N = 1,083)，以收集問卷形式進行。結果表示不同的文化，對參與體育活動的動機有不同的影響，推論到在進行研究時，要考慮文化影響的重要性。

## Introduction

The study of motivated behaviour is paramount to sport educators in their quest for developing successful sport and physical education programmes. How an individual behaves is affected by one's motivational orientations. Motivational orientation has several interacting components that make up the individual's intention for participation (e.g., intrinsic/extrinsic motivation), selection of goals (e.g., task and ego), and perception of competitive situation (e.g., high/low anxiety). This study tried to examine the differences towards these motivational orientations across different cultures.

## Motivational Orientation

Motivational orientations in this study were expressed in three different aspects. First, the source of motivation that was primarily based on the Cognitive Evaluation Theory (Deci, 1975; Deci & Ryan, 1985) was one of the aspects. The fundamental idea underlying Cognitive Evaluation Theory is that there are three distinct motivational forces influencing behaviour: intrinsic motivation, extrinsic motivation and amotivation. In general, intrinsic motivation refers to engaging in an activity purely for the sake of pleasure and satisfaction derived from doing the activity. Contrary to intrinsic motivation, extrinsic motivation pertains to a wide variety of behaviours that are engaged in as a means to an end but not for its own sake. The distinction between intrinsic and extrinsic motivation is frequently made on the basis of whether there is an externally mediated reward or constraint present in the situation (Deci & Ryan, 1985). Amotivation refers to a lack of intent to engage in a particular behaviour and, therefore, represents a lack of motivation. Amotivated individuals may eventually stop participating in particular activity (Deci, 1975). A number of studies have been conducted to understand why children participate in sport by looking to the source of motivation (Deci & Ryan, 1980; Wankel & Kreisel, 1985; Vlachopoulos, Karageorghis & Terry, 2000). Their findings suggested that various intrinsic motivations had been associated with greater persistence, positive emotions, and greater interest and sport satisfaction. However, it is also possible that an individual may be high in both intrinsic and extrinsic motivations (Blais, Sabourin, Boucher, & Vallerand, 1990; Vallerand & Reid, 1990).

Second, motivation orientation was examined with a goal perspective as it relates to achievement. The terms task-involved and ego-involved have been used by Nicholls (1979, 1984) to describe these dimensions. According to Nicholls (1984), when a person is task involved, perceptions of ability are

related to self-referenced standards. In a state of task involvement, the more effort needed to master a skill, the higher an individual perceives his or her ability to be when succeeding on that task. On the other hand, when ego involvement prevails, level of ability is construed with reference to the performances of others. To perceive high ability, one must perform better than others on a particular task. In studying the level (high/low) of task and ego orientations, Fox (1994) concluded that mastery and task improvement provide the strongest motivational foundation in sport for children. Thus, task orientation should be the goal adopted when considering motivation for physical activities.

Third, anxiety was defined as a component of motivation orientation in this study. Anxiety has been described as a cognitive label attached to either a situation that is judged as threatening or applied to thoughts that signify some kind of threat to an individual's psychosocial or physical well-being (Cratty, 1989). According to Murphy and Woolfolk's (1987) review, of the studies on the effects of anxiety on performance, they found an interaction effect between the amounts of anxiety necessary to maximally perform certain specific tasks. However, most theories like The Inverted-U Hypothesis (Landers & Boutcher, 1998), Individualized Zone of Optimal Functioning (Hanin, 1997), The Catastrophe Model (Hardy, 1990; 1996) seem to agree that performance is reduced by high levels of anxiety. Trait anxiety which represented the tendency to "perceive the competitive situation as threatening" (Martens, 1977) was used in this study.

## Cross-Cultural Study

Most of the works in sport psychology were conducted with western participants. There were critiques that ethical and cultural factors have to be incorporated in subsequent studies. For example, Duda and Allison (1990), when reviewing major sport psychology journals, stated that comparative research across different cultures was needed to understand the theoretical constructs in sport psychology. Markus and Kitayama (1991) also identified that there existed a cultural difference that may influence motivation. They found that the western culture adopted a prevalently independent view of the self, whereas, the eastern culture an interdependent view. They amplified the need for more cross-cultural research. Si (2000) emphasized the importance of cross-cultural studies as to verify the generality of existing theories and to explore variations between different cultures in order to develop new theories that can have a better adaptability to diverse cultures.

Indeed, several studies suggested the existence of ethnical and cultural differences in motivational orientations in sport. For example, in a sport leadership study, Chelladurai and his colleagues compared the difference between 115 Japanese and Canadian university male athletes; they concluded that cultural influence was more important than athletic imperatives on the individual leadership behaviour in a sport setting (Chelladurai, Imamura, Yamaguchi, Oinuma & Miyauchi, 1988). In a goal orientation study with 109 athletes and non-athletes in Taiwan, Kang, Gill, Acevedo and Deeter (1990) found that males were more competitive in goal orientation than females, yet, when comparing with findings in USA, cross cultural difference was not evident. Cultural differences in achievement orientation had been examined in a study with 153 USA and 205 Japanese marathon runners. Hayashi and Weiss (1994) found that Japanese athletes scored significantly higher on win orientation than USA athletes. In a recent study, Kim, Williams and Gill (2003) compared 101 USA and 298 Korean middle school athletes' goal orientation and intrinsic motivation. They concluded that USA athletes were more intrinsically motivated while Korean athletes scored higher in ego orientation. In another study on goal orientation, Isogai, Brewer, Cornelius, Etnier and Tokunaga (2003) compared 374 Japanese and 216 USA college P.E. students. The findings revealed that Japanese scored higher in ego orientation and lower in task orientation. No significant difference in gender had been observed.

As reviewed above, several studies have been conducted to examine the cultural differences between North America (USA and Canada) and Asia (Japan and Korea). The findings generally supported that there existed significant differences between the East and the West in motivational orientations. Yet, the participants in those studies were mainly athletes or physical education students who were actively involved in sport. The purpose of this study was to examine the general population who were junior secondary school children without considering their experience or interest towards sport participation. Also, countries chosen, UK, Hungary and Romania, were seldom studied in the previous literature apart from some recent studies (Soos, Szabo & Tsang, 2004) emerged as an expansion of the European Union. These countries have similarities and diversities with Hong Kong. Hong Kong and UK has distinct cultural background, yet, Hong Kong had been a Colony of UK and still UK influence can be found in Hong Kong especially in the administrative and the educational system. Hungary and Romania are European countries but their Socialist and a centrally controlled economy historical background made them different with the other western communities which are always reflected in their way of living.

## Method

### Participants

There were altogether 1,083 participants from four cultural areas. They were junior secondary school children with a mean age of 13 to 14 (Table 1).

**Table 1. Participants of the Study.**

Countries	Hong Kong	United Kingdom	Hungary	Romania	Total
Males	123	114	138	181	556
Females	113	100	114	200	527
Total	236	214	252	381	1083
Mean Age	13.15	14.24	13.03	13.08	13.31
S.D.	1.18	1.59	1.02	1.45	1.31

## Instruments

### *Sport Motivation Scale (SMS; Pelletier et al., 1995)*

The Sport Motivation Scale (SMS) validated by Pelletier and his colleagues (Pelletier et al., 1995) is an English version of the original 'Echelle de Motivation dans le Sport' (EMS; Briere et al., 1995). Motivation in the SMS is operationalised as the perceived reasons for participation in sport. The SMS contains 28 items, which can be applied to most sport and physical activity settings. The reported mean test-retest correlation for scale was .70 and internal consistency of alpha value varying from .71 to .85 at the pre-test, and from .69 to .85 at post-test. In a study conducted by Pelletier et al. (1995) with 593 university athletes, a mean Cronbach alpha (internal consistency coefficient) of .82 was reported.

### *Task and Ego Orientation in Sport Questionnaire (TEOSQ; Duda & Nicholls, 1989)*

Nicholls developed the classroom-specific Motivation Orientation Scales (Nicholls, 1989) and collaborated with Duda in developing a sport-specific measure, the Task and Ego Orientation in Sport Questionnaire (TEOSQ) (Duda & Nicholls, 1989). From a summarized data from 56 studies ranging from 10-12 year of school children, adolescents, adults and senior citizens (Duda & Whitehead, 1998), the task and ego scales of the TEOSQ had a mean internal reliability value of .79 and .81 respectively.

### *Sport Competition Anxiety Test (SCAT; Martens et al., 1990)*

Martens and his colleagues developed and validated the Sport Competition Anxiety Test (SCAT) in response to the need for a sport-specific measure of trait anxiety (Martens, 1977; Martens, Vealey, & Burton, 1990). The SCAT is used to assess individual differences in competitive trait anxiety by asking the participants how they generally feel when they compete in sports and games. SCAT has demonstrated high test-retest reliability (.77), as well as sufficient concurrent validity (.28 to .46) with other general indices of trait anxiety.

## Demographic variables

Demographic variables include participant's present class-level in school (i.e. Secondary 1, Secondary 2 or Secondary 3), gender and age.

## Procedures

The three questionnaires have been translated from English to Chinese, Hungarian and Romanian by respective bilingual scholars of the area. Accuracy of the conceptual translation was established via consultation with native (English) speaking academicians. The final versions of the questionnaires were word-processed in their respective native languages and bundled together before their distribution for completion by the students. All the questionnaires were completed before a physical education or physical activity or sport (training) class. Most students completed the three questionnaires in about 10 minutes.

## Data Analysis and Results

The ratings of the questionnaires were inputted in an Excel file rating by rating, which later were imported into the SPSS data file for subsequent analyses. Six dependent measures were analysed (task- & ego-orientation, competitive trait anxiety, amotivation, extrinsic motivation, and intrinsic motivation). The data were analysed with a four (country) by two (gender) multivariate analyses of variance (MANOVA). This test yielded a multivariate main effect for country (Wilk's Lambda = .669,  $F = 25.7$ ,  $p < .001$ ), a main effect for gender (Wilk's Lambda = .906,  $F = 18.5$ ,  $p < .001$ ), and an interaction effect (Wilk's Lambda = .964,  $F = 2.2$ ,  $p < .01$ ). The multivariate effects were followed up with the Post Hoc Tests for country to identify the dependent measures that have contributed to the multivariate effects. Cultural differences and gender differences were found in all six dependent measures. Interaction effects were found in extrinsic motivation and ego orientation (see Table 2).

**Table 2. Cultural and Gender Comparison between Hong Kong (HK), the United Kingdom (UK), Hungary (HU) and Romania (ROM).**

Countries		HK		UK		HU		ROM		Total		F-ratio	F-ratio	F-ratio
		Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	For country	For gender	interaction
Task	M	4.06	0.59	3.81	0.80	3.82	0.60	3.96	0.65	3.92	0.66	15.183**	18.704**	2.458
	F	4.00	0.51	3.42	0.72	3.72	0.58	3.83	0.67	3.76	0.65			
	Total	4.02	0.56	3.63	0.79	3.78	0.59	3.89	0.66	3.84	0.66			
Ego	M	3.60	0.80	2.78	0.91	2.61	0.99	2.79	0.98	2.93	0.99	86.195**	13.341**	3.387*
	F	3.72	0.63	2.38	0.91	2.27	1.07	2.59	1.01	2.73	1.05			
	Total	3.66	0.72	2.60	0.93	2.46	1.03	2.69	1.00	2.83	1.03			
CTA	M	20.59	4.39	19.18	4.20	20.03	4.04	19.99	4.42	19.99	4.16	5.986**	42.461**	0.823
	F	22.91	3.78	21.07	4.38	21.04	3.95	21.72	4.60	21.68	4.20			
	Total	21.70	4.26	20.04	4.38	20.49	4.08	20.90	4.59	20.81	4.27			
AM	M	3.51	1.07	3.04	1.51	2.62	1.31	3.14	1.37	3.08	1.32	13.623**	6.406*	0.636
	F	3.60	1.09	3.21	1.46	3.00	1.35	3.33	1.32	3.30	1.34			
	Total	3.56	1.08	3.12	1.48	2.79	1.33	3.24	1.35	3.19	1.33			
EM	M	4.64	0.90	4.22	1.28	4.79	1.05	4.75	1.04	4.63	1.09	22.760**	34.084**	3.301*
	F	3.92	1.05	3.73	1.16	4.67	1.06	4.46	1.11	4.26	1.14			
	Total	4.30	1.04	4.00	1.25	4.74	1.05	4.60	1.08	4.45	1.13			
IM	M	5.11	0.95	4.54	1.29	5.16	1.14	5.35	1.06	5.08	1.14	33.753**	41.837**	0.894
	F	4.63	0.99	3.86	1.23	4.86	1.14	4.94	1.11	4.66	1.17			
	Total	4.88	1.00	4.23	1.30	5.02	1.15	5.14	1.11	4.88	1.18			

\*p<.05      \*\*p<.01

In summary, it was found that Hong Kong scored high in task-goal orientation, ego-goal orientation, competitive trait anxiety and amotivation; low in both extrinsic motivation and intrinsic motivation. Gender differences were found in competitive trait anxiety, extrinsic motivation and intrinsic motivation. The United Kingdom scored low in most of the scores and gender differences were found in all scores except amotivation. Hungary and Romania were quite homogenous in scoring with low in both task-goal and ego-goal orientations and high in both intrinsic and extrinsic motivations. They also demonstrated gender differences in all scores. Gender differences for the whole sample showed that males scored high in task-goal, ego-goal orientations and also extrinsic and intrinsic motivations, while females were found high in competitive trait anxiety and amotivation.

### Discussion and Conclusion

In Hong Kong, the high score for goal orientations and a relatively lower score in motivational orientations can be speculated that students valued the aim of participation in physical activities more important than the enjoyment of participation. Similar findings were also revealed in another cross-cultural study (Kim & Gill, 1997) and concluded that students in Korea were more serious towards sport participation.

The high scores in ego-goal orientation, competitive trait anxiety and amotivation can be explained by the high competitiveness of the Hong Kong society. Under such condition, students would strive for superiority, have a threatening feeling in achievement situations and a lack of intent in case of unfavourable conditions. The mild gender differences in Hong Kong showed that males and females have similar perception in defining success in sport participation, but females suffered more in higher anxiety and lower enjoyment.

In the United Kingdom, the low scores in most of the items reflected a general under motivated attitude towards participation in physical activities. This phenomenon can be speculated that the participants were older (in average one year older than the other three samples) and other studies (Digelidis & Papaioannou, 1999; Kim, Williams & Gill, 2003) also found that participation motives would decrease with grade level.

The homogeneity of scores in Hungary and Romania can be explained by their similar political and social development, and the close geographical location of the two countries. The relatively high score in the two motivation orientations implied that students valued the enjoyment of participation in physical activities as prime importance. This relatively high score of

intrinsic and extrinsic motivations with a corresponding lower score in amotivation represented a desirable motivational situation towards participation in physical activities.

In comparing the males and females, the higher scores for males in goal orientations and motivational orientations suggested that males have a more active participation in physical activities. On the other hand, the higher scores obtained by females in competitive trait anxiety and amotivation reflected the unfavourable condition females were suffering that might result to a higher chance of dropping out for participating in physical activities. The absence of culture by gender interaction effect in most scores indicated that gender played a similar role in the psychological profiles across different cultures.

In conclusion, this study found significant differences existed between the eastern and western cultures in junior secondary students towards participation in physical activities. This finding amplified the importance of indigenous study before applying the western originated motivational theories in the eastern culture. Hence, a large scale local study is required apart from applying established theories in sport psychology in formulating strategies for the enhancement of enjoyment and persistence towards sport participation in Hong Kong.

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