

# Differences in motivational orientation, self-perceived physical fitness, exercise activity, and self-esteem between participants in different sport events among Finnish 11- to 15-year old students.



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## □ INTRODUCTION

In the last decade, two new concepts in the field of sport psychology are most noteworthy: motivational orientation theory and perceived physical competence. Both concepts have proven their worth in sport psychology, so it seems only logical to explore how they are related to different athletic groups.

## □ AIMS

The aim of this study was to find possible differences in:

- ❖ **Motivational orientation (MO)** (task and ego orientation)
- ❖ **Self-perceived physical fitness (SPPF)**
- ❖ **Self-esteem (SE)**
- ❖ **Exercise activity (EA)**
- ❖ **Exercise intention** at the age of 20 (EI)

between adolescents participating in two sets of athletic groups:

- ❖ **individual (I)** vs. **team (T)** vs. both sports (I+T)
- ❖ **no-contact (NC)** vs. **contact (C)** vs. both sports (NC+C)

## □ METHODS

The data were collected as part of the 1998 WHO cross-national study on Health Behaviour in School-Aged Children.

### Subjects

**4864 children**, representing Finnish children in the 5th, 7th, and 9th grades in compulsory comprehensive school (mean ages 11y9m, 13y9m, and 15y9m; 49% male, 51% female). Subjects were classified based on their sport preferences (table 1)

Table 1: frequency of sport preference

	individual	team	individual + team
<b>boys</b>	974	298	268
<b>girls</b>	2119	17	116

  

	no-contact	contact	no-contact + contact
<b>boys</b>	1029	202	317
<b>girls</b>	2242	6	81

### Instruments

- ❖ Perceptions of Success Questionnaire (Roberts & Treasure)
- ❖ Rosenberg's Self-Esteem Questionnaire
- ❖ Lintunen's Perceived Physical Competence Scale
- ❖ Single-item measures were used to measure exercise activity and exercise intention

### Statistics

Analyses were exploratory and performed separately for boys and girls, using ANOVA and Scheffe's post-hoc multiple comparison.

## □ DISCUSSION & CONCLUSION

Finnish boys participating in team sports or in both team and individual sport seem to be better off than boys in individual sports only as they have better scores on most of the variables. For Finnish girls a similar conclusion can be drawn on the difference between participants in both team and individual sports versus participants in individual sports only. Analogous results were found for the second comparison with boys in contact sports or in both contact and no-contact sports doing better than their counterparts practicing only no-contact sports.

**Limitation:** - Cross-sectional → no causal relationships can be drawn

**Strengths:** - Nationally representative sample  
- 73 different sports included  
- Inclusion of a mixed sports participation group

## □ RESULTS 1: I – T – I+T (boys)

Boys participating in individual sports scored lower on task orientation, self-perceived physical fitness, exercise activity and exercise intention in comparison with both boys in team sports and boys practicing both individual and team sports. (table 2)

Table 2. Task and ego orientation, SPPF, EA, and EI scores for boys participating in individual sports (I), team sports (T), and both (I + T)

Boys		task	ego	SPPF	EA	EI
I	Mean	24,33	18,22	24,35	26,25	3,79
	sd	5,02	6,35	4,75	4,10	1,42
	n	869	984	858	748	960
T	Mean	25,44	18,81	26,81	26,35	4,91
	sd	4,41	5,55	4,22	3,39	1,08
	n	269	279	281	225	298
I+T	Mean	25,31	19,00	27,09	26,69	4,67
	sd	4,49	5,65	4,42	3,80	1,27
	n	242	245	234	182	266
<b>F</b>		7,701	2,124	51,228	14,076	102,794
<b>sign</b>		0,000	ns	0,000	ns	0,000

\* : a higher score means a lower exercise intention

## □ RESULTS 1: I – T – I+T (girls)

Girls participating in individual sports scored lower on self-perceived physical fitness and exercise intention in comparison with girls practicing both individual and team sports. Girls in individual sports also scored lower on exercise activity when compared with both girls practicing only team sports and with girls in both individual and team sports. The difference in ego orientation could not be substantiated by Scheffe's post-hoc test. (table 3)

Table 3. Task and ego orientation, SPPF, EA, and EI scores for girls participating in individual sports (I), team sports (T), and both (I + T)

Girls		task	ego	SPPF	EA	EI
I	Mean	25,42	16,48	24,24	24,22	3,63
	sd	4,62	6,12	4,64	4,24	1,29
	n	1910	1966	1938	1755	2099
T	Mean	25,71	17,35	25,82	23,54	5,18
	sd	3,10	7,02	4,10	4,86	1,07
	n	17	17	17	13	17
I+T	Mean	26,43	17,92	26,56	24,54	4,95
	sd	3,92	6,33	4,44	3,79	0,97
	n	111	111	107	90	116
<b>F</b>		2,607	3,043	13,598	0,430	69,94
<b>sign</b>		ns	0,048	0,000	ns	0,000

\* : a higher score means a lower exercise intention

## □ RESULTS 2: NC – C – NC+C (boys)

Due to the limited number of girls participating in contact sports analyses were limited to a comparison of the boys.

Boys participating in no-contact sports scored lower on task orientation, self-perceived physical fitness, exercise activity and exercise intention when compared with both boys participating in contact sports and with boys in both no-contact and contact sports. (table 4)

Table 4. Task and ego orientation, SPPF, EA, and EI scores for boys participating in no-contact sports (NC), contact sports (C), and both (NC+C)

Boys		task	ego	SPPF	EA	EI
NC	Mean	24,35	18,14	24,49	26,35	3,82
	sd	5,14	6,26	4,78	3,98	1,43
	n	916	946	909	794	1016
C	Mean	25,38	18,71	26,77	26,35	4,96
	sd	4,50	5,71	4,28	3,37	1,04
	n	180	187	188	152	202
NC+C	Mean	25,40	18,86	27,06	26,42	4,70
	sd	4,40	5,60	4,18	3,85	1,24
	n	288	294	278	219	315
<b>F</b>		6,932	1,938	44,133	0,028	93,79
<b>sign</b>		0,001	ns	0,000	ns	0,000

\* : a higher score means a lower exercise intention

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