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ABSTRACT

This study surveyed the connection of empathy and self-esteem with active sporting. The subjects were 1,381 members of Finnish baseball teams between the ages of 8 to 16. The instruments used in testing the subjects were: (1) the modified Mehrabian & Epstein Empathy test (1972); (2) the Battle Self-Esteem Scale, Form B (1981); (3) the Coopersmith modified Self-Esteem Scale (23 items); (4) the Assertiveness Scale by Osborn & Harris (1978); (5) the Narcissism Scale by Emmons (1984); and (6) the Torrance Creativity Scale (Figural form). A questionnaire surveying interests and psychosomatic symptoms was also planned for the study. The findings indicated: (1) empathy as well as self-esteem and self-assertiveness seemed to increase statistically significantly with age; (2) girls were more empathetic and more sensitive than boys; (3) there were no differences according to sex in self-esteem; (4) the subjects became increasingly narcissistic and self-assertive but less sensitive with the years spent in active playing; and (5) no effect on total empathy scores was found, although self-esteem increased with the playing years. An analysis of these results is presented. (JD)

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**THE RELATION OF EMPATHY AND SELF-ESTEEM WITH
ACTIVE SPORTING**

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ABSTRACT

The aim of the study is to survey the connection of empathy and self-esteem with active sporting. We suppose that active sporting interest can increase self-esteem and empathy. The form of sport chosen was Finnish baseball (the national game) as it is a team play requiring intellectual capacities and cooperation. Therefore it was assumed that several years of active baseball playing would promote the player's capacity of consideration of others.

The subjects were gathered from the members of teams that had attended three national-level training camps. The subjects came from various parts of the country (urban/rural) and were aged eight to sixteen. Their total number was 1381.

The methods used were the modified Mehrabian & Epstein Empathy test (1972), the Battle Self-Esteem Scale, Form B (1981), the Coopersmith modified Self-Esteem Scale (23 items), the Assertiveness Scale by Osborn & Harris (1978), the Narcissism Scale by Emmons (1984), and the Torrance Creativity Scale (Figural form). A questionnaire surveying interests and psychosomatic symptoms was also planned for this study.

Empathy as well as self-esteem and self-assertiveness seemed to increase statistically significantly with age. Girls were more empathetic ($F_{2,1377} = 141.1$), and more sensitive than boys ($F_{2,1368} = 95.3$). There were no differences according sex in self-esteem. However, boys turned out to be more narcissistic than girls ($F_{2,1377} = 85.6$). Most empathetic players (the extreme quarter) had significantly more sensitivity, more self-esteem and less narcissism than the least empathetic ones. The subjects became increasingly narcissistic and self-assertive but less sensitive with the years spent in active playing. No effect on total empathy scores was found, although the self-esteem increased with the playing years.

Against the supposition a team play requiring cooperation does not seem to have a positive influence on empathy. But active sporting encourages a young person's self-esteem and self-assertiveness which may also lead to higher scores in narcissism. This, however, can be explained by the fact that narcissism and empathy are invariably in negative correlation: increased narcissism does not lead to increased empathy.

THEORETICAL REFERENCE

The empathy and self-esteem of young Finnish baseball players children's sports should be done on children's own conditions with playfulness and

avoiding unnecessary competition. Testing one's own psychic and physical limits and overcoming oneself are the source of inner motivation which has necessarily nothing to do with competing others. Physical exercise and

sports relax and raise the spirits. They also have an evident influence on mental health and self-image. Sports and exercise affect one's self-concept, self-esteem and self-appraisal. Good performance and success in team games add confidence in one's own talents and skills. Sports and exercise affect directly certain parts of the self-concept - that one concerning the concept of one's body and physical capacity. An integrated and positive self-image is one of the cornerstones of a sound personality. The positive self-image also seems to involve good marks in sports, good school success in general, an active interest in sports and good physical shape (Felkes & Kay 1971; Kay, *et al.*, 1972; Leonardson 1977; Martinek, *et al.*, 1978; Lintunen, *et al.*, 1984). Stoner & Bandy (1977) noticed female subjects in team sports had a higher need for deference than nonparticipants while nonparticipants had a higher need for intraception, change, and heterosexuality. Johnson (1972) studied 66 women athletes in basketball and compared their test results with 21 bowlers, 79 field hockey players, and with 24 tournaments. The basketball players scored significantly lower than other three groups on personality traits, such as dominance, capacity for status, sociability, social presence, self-acceptance, responsibility, self-control, tolerance, achievement via conformance, achievement via independence, intellectual efficiency, and psychological-mindedness.

Bird (1979) studied 17 body contact ice hockey players, aged 8- to 11-yr.-old girls, and 44 boys, age 18- to 11-yr. old who played recreational competitive hockey in the same locale. Factors tough-minded, enthusiastic, self-assured, reserved, and excitable were the largest discriminators between the female and male profiles. The boys did not differ from the norms for the CPQ by Porter & Cattell (1968), although the girls differed significantly from norms, being more tough-minded and enthusiastic. Bird suggested that girls with certain personality structures may elect to participate and remain in sports. Dowd & Innes (1981) tested 93 sportsmen and sportswomen with the Cattell 16 PF. Players were in volleyball team and in individual squash sports. Volleyball players were more forthright, less shrewd and less anxious than the squash players. State-level players (competitive) trained more frequently, had participated in sport for longer, were more intelligent and less anxious than the average players. At the more elite level of competition volleyball/team players seem to be more assertive, intelligent, controlled, venturesome, imaginative, stable, reserved, and less anxious. The ability to apply talents in a disciplined manner and self-control was also greater in high-level performers in baseball (LaPlace, 1954) and swimming (Ogilvie, 1968). High-level performers in wrestling, hockey, and baseball have been found to be more self-sufficient

than the normal population (Kroll, 1967; Ogilvie, 1968; Bird, 1970). There is evidence that self-sufficiency is significantly greater in samples of participants in individual sport than team athletes (Peterson, et al., 1967; Ogilvie, 1968).

Competition situations are not fruitful for the self-image and self-esteem. The most important thing in a competition is good results. Rubinstein's study (1977) showed that self-esteem developed in training camp circumstances with no competitiveness, but did not develop during competitive training camps. Competition situations cause more pressure for girls than for boys. Team competition levels down the effects on one individual. The defeats and victories are shared as a group performance (Kalliopuska, 1983a).

Vanfraechem-Raway (1976) studied three handball teams during a championship with tests and sociometry. The best team was the most cohesive one. Among the players who were rejected, some were very passive whereas others were very aggressive. However, there was no evidence of a relation between an absence of adaptation and a low status.

Competitiveness and aggressive behaviour correlate positively (Barnett & Bryan, 1974). The activist personality characteristics (aggressive, competitive, and perfectionist) are more evident among athletes with an extrinsic orientation than among athletes with an intrinsic orientation (Snyder & Spreitzer 1979). Kirkcaldy (1982) noticed that males in attacking team sport positions were substantially higher in tough-mindedness, dominance, aggressiveness, and extraversion compared to mid-field players. Athletes were more likely than nonathletes to describe themselves as "competitive". Maloney and Petrie (1972) studied Canadian youth in grades 8 through 12 and found that males and participants in organized athletics were more likely to be oriented toward skill and victory than females and nonparticipants. Males and athletes were more likely to embrace a professional orientation toward sport than females and nonathletes. However, Balazs (1975) studied the EPPS test results and life histories of 24 Olympic female champions. The EPPS data revealed that they had a high need for achievement, for autonomy, for aggression, and for succorance. Olympic champions has a deep desire to excel, early goal-setting, and the ability to follow through on these goals, a strong self-concept, well-developed heterosexuality, and supportive parents who had high expectations for their daughters.

Competitiveness and empathy correlate negatively as well as aggressiveness and empathy (Marcus, et al., 1979; Kalliopuska 1983a). Novotny and Petrak (1983) compared characteristics of 67 junior ice hockey players (mean age 18 yrs) with those of 89 older student male players (mean age 15 yrs) and 20 younger student male players (mean age

12 yrs). The juniors in higher competition were f.ex. more extraverted, less trustful in life situations, more sophisticated and spontaneous, more ambitious, less emotional, more flexible interpersonally, and more conventional and imitative than other subjects. However, lower competition juniors scored highest in intelligence. School students were the most self-confident.

The competitiveness manifests itself in the coach's views: the success of the team is sought for at any cost. Another coach might have the need to educate the trainees (Koskinen & Makkonen, 1984). According to Norske (1985) the children do not want violent sports but are more prone for the fair play if they are allowed to make their own rules. According to Hahn (1985) diminishing sport violence requires changes in the values attached to success and winning. The most powerful guards of sport violence are the coaches. Particularly, a success-oriented coach will allow playing against the rules - at least if the adversary team has superiority (Salminen, 1985). Penman, et al. (1974) found that the more successful coaches had a more authoritarian personality than the less successful coaches.

Active sporting at its best increases self-esteem and develops holistic empathy. However, there may also be dangers involved: the ambition of sport societies, coaches or parents may diminish the agreeableness of the sports. The positiveness of sports and exercise depends on the social surroundings which create the need and form the facilities for the activities. If the human concept supports the homo ludens the sports activities can be expected to support the development of a holistic personality, promote empathy and strengthen the self-esteem.

The aim of the study was to survey the connection between active sporting and empathy and self-esteem. The Finnish baseball is the Finnish non-violent national game. It is a team game which requires both intellectual and emotional harmony and the smooth cooperation of the members of a team. Several years of active baseball playing will presumably increase the self-esteem and assertiveness of the junior players as well as promote considerate behaviour - empathy in the playground and during training.

METHOD

Subjects

The junior teams competing the training camp championship of summer 1985 formed the subject material of the study. Altogether 560 girls and 819 boys in three training camps were tested in small groups. Their age varied from eight to sixteen years. The training camps were national and therefore the subject material represents extensively all social classes.

Measures

Empathy was studied with the Mehrabian & Epstein 33-item scale (1972), whose answer alternatives were modified to a three-step form. Sensitivity is one of the essential components of empathy (six items) (Kalliopuska, 1984). The self-esteem was measured with Battie's 30-item scale (1981) with answers either yes or no. The self-assertiveness was studied with the Osborn & Harris 30-item scale (1978), with 5-step answers. The 36-item questionnaire with modified 3-step form designed primarily by Emmons was used for measuring narcissism (1984).

RESULTS

This study showed again that girls are statistically very significantly more empathetic than boys ($F_{2,1377} = 141.1$). The difference between the sexes was evident with the very young and it increases with age (Table 1). However, the differences in the empathy scores for girls and for boys was below the average when compared to earlier studies (Kalliopuska, 1980; Kalliopuska, 1983a; 1983b). The reason is probably the fact that the empathy scores for baseball playing girls were lower than the girls' empathy scores on the average. The empathy scores go up with age ($F_{8,1377} = 4.7$). This study also supports the view on the development of empathy as a function of age. There are no differences in empathy according to social class, although the trend was for higher empathy scores for upper class children. Urban and rural children do not differ in empathy ($F_{2,1377} = 0.6$). Girls were more sensitive than boys ($F_{2,1368} = 95.3$), the differences being greatest among the very young. Sensitivity does not increase with age - as has been earlier noticed (Kalliopuska, 1984). Active sporting may have an influence on low sensitivity scores. There are no differences in sensitivity according to social class or place of living.

Contrary to earlier Finnish results (Rauste 1974; Kauppinen-Toropainen 1983) girls and boys do not differ in self-esteem ($F_{2,1377} = 3.3$) (Table 2).

On the other hand, it may also be considered that active baseball playing keeps up the girls' high self-esteem (Table 3). Self-esteem increases very significantly with age ($F_{8,1368} = 13.3$). There were no differences in the self-esteem according to social class with the very young trainees ($F_{3,520} = 5.9$). In the whole material the results showed highest

self-esteem in the highest (N= 388) and the lowest (N=22) social class ($F_{3,1363} = 16.7$).

The typical sex difference in self-assertiveness does not show in this study ($F_{2,1377} = 2.0$). Playing baseball seems to increase the girls' self-assertiveness, because younger boys had higher self-assertiveness level than younger girls ($F_{2,1377} = 8.9$). The self-assertiveness also seems to increase with age significantly ($F_{8,1368} = 8.2$). In self-assertiveness there are no differences as to social class or place of living.

Sound self-esteem involves a certain amount of self-love, which then forms the basis for loving others. Self-respect and self-acceptance are necessary prerequisites for self-love. The self-love should, however, not suffocate empathy and prosociability (Kalliopuska 1984). Narcissism increases with age ($F_{8,1371} = 2.9$) and with the years of active baseball playing ($F_{9,1364} = 4.7$). Narcissism is statistically significantly more general among boys than girls ($F_{2,1377} = 85.6$). There are no differences in narcissism according to social class and place of living.

The whole testing material (N=1381) on the junior players of Finnish baseball was divided into extreme quarters according to their empathy score. Comparing these quarters gave following results:

- the most empathetic players were statistically significantly more sensitive than the least empathetic ones ($F_{1,751} = 777.0$).
- the most empathetic players had statistically significantly better self-esteem than the least empathetic ones ($F_{1,751} = 7.0$).
- the most empathetic players were less narcissistic than the least empathetic ones ($F_{1,751} = 35.5$).
- the most empathetic players smoke less than the least empathetic ones ($F_{1,751} = 8.3$).

The subjects became increasingly narcissistic and self-assertive but less sensitive with years spent in active Finnish baseball playing. There was no effect on total empathy scores. On the other hand, self-esteem increased with the years in active sport (Tables 3,4). Against the supposition a team play requiring cooperation not seem to have a positive influence on empathy. But active sporting encourages a young person's self-esteem and self-assertiveness which may also lead to higher scores in narcissism. This, however, can be explained by the fact that narcissism and empathy are invariably in negative correlation (Watson, et al. 1984): increased narcissism does not lead to increased empathy. As mentioned before competitiveness and empathy correlate negatively: therefore the increase of narcissism might be a natural trend in competitive sport although the

game itself has the possibility to promote empathy and prosociability. The results did not support Bird's idea (1979) that the certain personality structure may lead to play a specific game. On the contrary, the active Finnish baseball playing may develop personality characteristics, f.ex. self-esteem, self-assertiveness, and narcissism.

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TABLE 1: EMPATHY AND SENSITIVITY AMONG BOYS AND GIRLS

	EMPATHY		SENSITIVITY	
	M	SD	M	SD
YOUNGSTER TRAINEES				
CAMP (N = 524)				
GIRLS (N = 198)	69.4	6.1	14.8	2.2
BOYS (N = 326)	64.5	6.3	12.8	2.9
TOTAL (N = 1379)				
GIRLS (N = 560)	71.0	6.8	14.6	2.3
BOYS (N = 819)	64.7	7.0	12.6	2.9

TABLE 2: SELF-ESTEEM, SELF-ASSERTIVENESS, AND NARCISSISM AMONG BOYS AND GIRLS

	SELF-ESTEEM		SELF-ASSERTIVENESS		NARCISSISM	
	M	SD	M	SD	M	SD
YOUNGSTER TRAINEES						
CAMP (N = 524)						
GIRLS	18.9	4.3	96.8	11.8	24.2	7.9
BOYS	19.7	4.1	97.8	12.3	31.4	10.0
All (N = 1381)						
GIRLS	20.2	4.3	100.0	12.2	24.3	10.0
BOYS	20.6	4.4	100.1	12.6	32.2	11.6

TABLE 3: EMPATHY AND SENSITIVITY ACCORDING TO TRAINING YEARS

YEARS	EMPATHY		SENSITIVITY	
	M	SD	M	SD
1	67.9	7.4	13.9	2.7
2	67.6	6.6	13.7	2.7
3	66.9	7.1	13.6	2.9
4	66.8	8.0	13.1	3.0
5	67.3	7.4	12.9	3.0
6	67.8	8.0	13.2	2.6
7	67.2	8.0	13.4	2.9
8	67.3	8.6	13.2	2.0
9	68.9	7.9	12.9	2.6
10	64.6	6.9	11.6	2.5

$F_{9,1363} = 1.0$ $F_{9,1363} = 2.6^{**}$

TABLE 4: SELF-ESTEEM, SELF-ASSERTIVENESS AND NARCISSISM ACCORDING TO TRAINING YEARS

Years	Self-esteem		Self-assertiveness		Narcissism		
	M	SD	M	SD	M	SD	
1	19.3	4.2	96.6	11.3	26.4	9.8	
2	19.6	4.4	97.9	14.3	27.5	10.3	
3	20.3	4.2	100.4	12.5	29.0	11.7	
4	21.2	4.2	100.3	11.6	30.3	12.2	
5	21.3	4.5	101.0	11.3	29.9	12.9	
6	21.4	4.3	101.7	12.6	30.0	12.1	
7	22.4	3.5	104.4	12.4	31.8	11.6	
8	19.7	6.0	100.6	6.6	35.1	13.3	
9	23.1	3.6	107.6	11.3	35.2	17.8	
10	24.6	2.7	107.6	16.2	44.8	21.6	
		$F_{9,1364} = 7.9^{***}$		$F_{9,1364} = 3.3^*$		$F_{9,1364} = 4.7^{**}$	

TABLE 5: SENSITIVITY IN THE EMPATHY QUARTERS AMONG FINNISH BASEBALL PLAYERS

	M	SD	N	$F_{1,751}$
THE LOWEST QUARTER	11.0	2.5	377	
THE HIGHEST QUARTER	15.6	1.9	376	777.0 ^{***}

TABLE 6: SELF-ESTEEM IN THE EMPATHY QUARTERS AMONG JUNIOR FINNISH BASEBALL PLAYERS

	M	SD	N	F _{1,751}
THE LOWEST QUARTER	20.2	4.4	377	
THE HIGHEST QUARTER	21.1	4.3	376	7.0**

TABLE 7: NARCISSISM IN THE QUARTERS AMONG JUNIOR FINNISH BASEBALL PLAYERS

	M	SD	N	F _{1,751}
THE LOWEST QUARTER	32.0	12.2	377	
THE HIGHEST QUARTER	26.9	11.4	376	35.5***

TABLE 8: SELF-ESTEEM ACCORDING TO AGE AMONG JUNIOR FINNISH BASEBALL PLAYERS

AGE	SELF-ESTEEM (BATTLE)			F _{8,1371}
	M	SD	N	
8 YR.	19.8	7.2	4	13.3***
9 YR.	19.2	4.5	48	
10 YR.	19.0	4.4	253	
11 YR.	19.6	3.8	312	
12 YR.	20.6	4.3	293	
13 YR.	21.6	4.1	321	
14 YR.	21.6	4.6	94	
15 YR.	22.9	4.7	50	
16 YR.	20.6	3.8	5	

TABLE 9: SELF-ASSERTIVENESS AND NARCISSISM ACCORDING TO AGE AMONG JUNIOR FINNISH BASEBALL PLAYERS

AGE	SELF-ASSERTIVENESS		NARCISSISM		N
	M	SD	M	SD	
8 YR.	91.0	15.4	25.5	12.0	4
9 YR.	96.5	14.4	29.9	9.8	48
10 YR.	96.9	11.8	28.8	9.8	253
11 YR.	98.3	11.7	28.6	10.0	311
12 YR.	100.0	12.8	27.6	12.2	294
13 YR.	103.4	12.4	29.1	12.2	321
14 YR.	102.4	11.4	30.8	15.2	94
15 YR.	105.1	11.2	35.4	14.8	50
16 YR.	102.2	12.9	26.2	10.9	5

TABLE 10 NARCISSISM AND SMOKING AMONG FINNISH BASEBALL PLAYERS

SMOKING	NARCISSISM		N	F
	M	SD		
HAS NEVER SMOKED	27.4	10.6	873	
HAS ONLY TRIED SMOKING	30.7	11.7	430	
HAS STOPPED SMOKING	32.5	13.7	43	30.5***
SMOKES	44.3	14.7	32	