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## ORIGINAL RESEARCH

# Perceived parenting styles differ between genders but not between elite athletes and controls

Serge Brand<sup>1</sup> Markus Gerber<sup>2</sup> Johannes Beck<sup>1</sup> Nadeem Kalak<sup>1</sup> Martin Hatzinger<sup>1,3</sup> Uwe Pühse<sup>2</sup> Edith Holsboer-Trachsler<sup>1</sup>

<sup>1</sup>Depression and Sleep Research Unit, Psychiatric Hospital of the University of Basel, Basel, Switzerland; <sup>2</sup>Institute of Exercise and Health Sciences, University of Basel, Basel, Switzerland; <sup>3</sup>Psychiatric Hospital, Solothurn, Switzerland

Correspondence: Serge Brand Depression and Sleep Research Unit, Psychiatric Hospital of the University of Basel, Switzerland, Wilhelm Klein-Strasse 27, 4012 Basel, Switzerland Tel +41 61 32 55 114 Fax +41 61 32 55 513 Email serge.brand@upkbs.ch **Abstract:** For adolescent elite athletes, parental financial and emotional support is crucial. However, parents of elite athletes may be critical and demanding. Moreover, there is evidence that girls report more favorable perceived parenting styles compared with boys. The aim of the present study was to investigate perceived parenting styles among female and male adolescent elite athletes and controls. We sampled 258 adolescent elite athletes (139 females, 119 males) and 176 controls (139 females, 37 males). Participants completed a questionnaire to assess perceived parenting styles (support, commendation, reproach, restriction, inconsistency). Results showed that parenting styles did not differ between athletes and controls, except for restriction, for which athletes reported lower levels. Female adolescents had higher scores for positive and lower scores for negative perceived parenting styles.

Keywords: parenting style, gender, elite athletes, controls

#### Introduction

Becoming an elite athlete requires a high investment in terms of time and energy.<sup>1</sup> When children or adolescents decide to perform sports at a higher level, parental support is crucial. Parents are expected to provide substantial financial support (eg, for traveling, accommodation, equipment, training camps) and to accept greater constraints on family life (eg, less leisure time, less time with their other children) to enable their children to participate at a high level in their sports.<sup>2-4</sup> But parents can also be a source of emotional support.<sup>2,3,5</sup> In this respect, Wolfenden and Holt<sup>5</sup> investigated junior elite tennis players and found that, compared with coaches, parents had the highest impact of emotional support. On the other hand, the same junior elite tennis players indicated that their parents were among the highest stressors during competitive matches.<sup>5</sup> Moreover, high-achieving children are at increased risk both of being neglected for their emotional needs and of being pushed to achieve extraordinary success.<sup>6</sup> Consistent with this, Ommundsen et al<sup>7</sup> reported higher levels of parental criticism among 677 Norwegian soccer players aged 10-14 years.<sup>7</sup> Moreover, parents' criticism was related to athletes' negative effect.<sup>7</sup> Similarly, Gould et al<sup>3</sup> found that 132 junior tennis coaches rated parents' criticism of their children as above average in both extent and seriousness. Holt et al<sup>8</sup> observed that parents' verbal reactions to their children's sport performance behaviors were placed on a continuum moving from more supportive to more controlling comments. Similarly, Holt et al<sup>9</sup> found five patterns of different parenting styles: 1) high support and understanding their children's needs and mood, 2) controlling and low understanding of children's needs

and mood, 3) inconsistencies between parents, 4) parents' inconsistencies across different situations, and 5) reciprocal influences between the children's behavior and the parents' parenting style.

To summarize, it seems that parents of adolescent junior elite athletes may be particularly supportive or particularly critical, though research results on this point remain mixed and limited. Moreover, there are very few data on possible gender differences.

The vehicle through which parents' attitudes are experienced is their perceived parenting styles. Parenting styles are relatively stable over time and create an emotional climate in which the parents' behavior is expressed.<sup>10-12</sup> Krohne and Pulsack<sup>11</sup> distinguish two positive (support, commendation) and three negative parenting styles (reproach, restriction, inconsistency). In previous research, we have been able to show that favorable perceived parenting styles are related to positive sleep patterns and personality traits among adolescents.<sup>12</sup> Moreover, parents' sleep patterns proved predictive for both their style of parenting and their adolescent child's psychological functioning and sleep patterns.<sup>13</sup> Last, with respect to high physical activity, we were able to show that elite athletes reported more favorable sleep patterns and psychological functioning compared with controls.14

There is evidence that perceived parenting styles do differ between female and male children. For example, daughters experience more parental involvement with their education than do sons.<sup>15,16</sup> Physically abused and nonabused children perceived their mothers as being more caring and less controlling, if compared with fathers; moreover, again, if compared with fathers, mothers were reported to have closer relationships with their adolescents and were less likely to use abuse or harsh punishment. Most importantly, whereas boys' and girls' perceptions of parents' parenting styles were generally similar, abused girls in particular reported being less emotionally attached to their fathers.<sup>17</sup>

## **Hypotheses**

We formulated the following two hypotheses. The first hypothesis was two-fold: i) following Tofler et al,<sup>6</sup> Ommundsen et al,<sup>7</sup> and Gould et al,<sup>3</sup> we expected higher scores for negative parenting styles among parents of adolescents involved in elite athletics compared with other parents; and ii) following Holt et al<sup>8,9</sup> and Wolfenden and Holt,<sup>5</sup> we also expected increased scores of support and

commendation among parents of adolescents involved in elite athletics compared with other parents. Second, following Carter and Wojtkiewicz,<sup>16</sup> Beyers and Goossens,<sup>15</sup> and Sunday et al,<sup>17</sup> we also anticipated that patterns might differ as between female and male adolescents, ie, we expected that, relative to male participants, female participants would report more favorable parenting styles.

# Method

#### Participants

A total of 434 adolescents (age: mean = 17.23 years, standard deviation [SD] = 1.38 years) took part in the study. Of those, 258 were athletes (139 females [age: mean = 17.04 years, SD = 1.27 years] and 119 males [age: mean = 16.90 years, SD = 1.39 years]). The female athletes' sports were volleyball: n = 56 (40.3%), skiing: n = 31 (22.3%), track-and-field athletics: n = 19 (13.7%), soccer: n = 16 (11.5%), swimming: n = 9 (6.4%), and other sports disciplines: n = 8 (5.8%). The male athletes' sports were soccer: n = 49 (41.2%), ice hockey: n = 27 (22.7%), skiing: n = 24 (20.2%), swimming: n = 10 (8.4%), and other sports disciplines: n = 9 (7.6%). A total of 176 were controls (139 females [age: mean = 17.06 years, SD = 1.28 years] and 37 males [age: mean = 17.00 years, SD = 1.70 years]). Thus, there were more female controls  $(X^2(1) = 28.63, P < 0.001)$  but the subgroups did not differ with respect to age (analyses of variance [ANOVAs]: group, gender, and group by gender interaction; all Fs(1, 430) < 1.01, P > 0.34).

#### Procedure

The elite athlete sample was recruited from Swiss Olympic classes in the German-speaking part of Switzerland. The aim of these classes is to give young athletes the opportunity both to continue with high school and an academic career and to train to a high standard in their athletic specialism. To attend a Swiss Olympic class, an adolescent must exhibit high national performance, though not necessarily at an international (Olympic) level. Swiss Olympic classes are part of normal high schools, and all athletes live at home.

Controls were recruited in the cantons of Basel and Basel Land, two districts of the German-speaking northwestern part of Switzerland. The heads of four high schools gave permission to recruit students from their schools.

All eligible students were informed about the purpose of the study and about the voluntary basis of their participation. All participants were assured of the confidentiality of their

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responses and gave informed consent. Parents' informed consent was required for those students aged less than 18 years. Of the 491 students approached, data were available from 434 students (88.39% of the sample approached). Participants completed several questionnaires over a period of about 10 minutes during class (range: 6–18 minutes). The questionnaires were taken in the mornings of ordinary school days, though without any exams.

These preliminary results form part of an ongoing research project investigating life and sleep quality in adolescents conducted in the German-speaking part of Switzerland (see also Brand et al<sup>14</sup> for more details). The study was conducted in accordance with the Declaration of Helsinki and was approved by the local ethical committee.

# Materials

#### Exercise participation

To compare physical activity of athletes and controls, level of participation in habitual exercise was assessed via a self-administered 7-day log asking students about the amount of exercise (in hours) originating i) from participation in physical exercise lessons (resulting in increased heart rate and perspiration) and ii) from participation in sports (with the goal of becoming more physically skilled or fit). The scores of the 7 consecutive days were summed to obtain the total hours of exercise: female athletes (always hours/week): mean = 17.09, SD = 5.97; male athletes: mean = 18.39, SD = 5.23; female controls: mean = 4.68, SD = 2.09; male controls: mean = 4.73, SD = 1.20; ANOVAs: group: F(1, 430) = 667.08, P < 0.001; gender: F(1, 430) = 1.79, P = 0.18; and group by gender: F(1, 430) = 1.55, P = 0.21).

#### Parenting Style Inventory

The Erziehungsstil Inventar (Parenting Style Inventory)<sup>11</sup> is a rating questionnaire to assess perceived parenting style. It is filled in by adolescents separately for mothers and fathers.<sup>12</sup> It consists of 60 items, which are aggregated into five dimensions: support (eg, "My mother/my father explains to me why she/he forbids me to do something"), commendation (eg, "My mother/my father is pleased when I ask to help her/him"), reproach (eg, "My mother/my father gets angry when I contradict her/him"), restriction (eg, "My mother/my father says that I am all fingers and thumbs"), and inconsistency (eg, "Sometimes, it's not at all clear to me why my mother/my father reproaches me"). Answers are given on a 4-point rating scale ranging from 1 (never or very seldom) to 4 (always or practically always). The higher the average score, the more pronounced a dimension is (Cronbach's  $\alpha$  of the five subscales: for mothers: 0.84–0.91, for fathers: 0.89–0.92). Support and commendation are labelled positive parenting styles; reproach, restriction, and inconsistency are labelled negative parenting styles.

### Statistical analyses

Parenting styles were reported separately for both parents (data for mothers: n = 434; data for fathers: n = 415). Ratings of mothers and fathers were then combined (N = 415).

A series of multivariate ANOVAs with the factor group (athletes vs controls) and gender (females vs males) were performed, with parenting styles as dependent variables. Test results with an  $\alpha$  error of below 0.05 were reported as significant.

## Results

# Differences in perceived parenting styles between athletes and controls

Table 1 provides an overview of the descriptive and inferential statistics for perceived parenting styles as a function of group (athletes vs controls) and gender (females vs males; note that preliminary statistical procedures revealed no systematic bias of parenting styles between athletes of team and individuals sports). First, group differences are highlighted.

With respect to the perceived parenting styles of, respectively, fathers and mothers, no statistically significant group differences were observed. For the aggregated dimension restriction, compared with athletes, parents of controls scored higher. No differences were observed on any other dimension.

# Gender differences in reported parenting styles

Table 1 also gives the breakdowns by gender for perceived parenting styles. With respect to perceptions of mothers' parenting styles, compared with males, females reported significantly higher scores for positive and lower scores for negative parenting styles. Broadly, the pattern of results also holds for both fathers' parenting styles considered separately and for the styles of parents combined. A significant group by gender interaction was found for the dimension restriction (mother; parents), with highest ("worst") scores for male controls and lowest ("best") scores for female controls

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 Table I Descriptive and statistical overview of dimensions of parenting styles, separated by groups (athletes vs controls) and by gender (females vs males)

	Groups				Statistical analyses		
	Athletes		Non-athletes		Factor group	Factor gender	Interaction group by gender
	Females Mean (SD)	Males Mean (SD)	Females Mean (SD)	Males Mean (SD)	F F(df)	F F(df)	F F(df)
Mother (n = 434)					(1, 434)	(1, 434)	(1, 434)
Positive parenting							
Support	36.18 (6.17)	33.26 (6.06)	36.26 (7.01)	31.68 (9.59)	0.91	22.43***	1.11
Commendation	39.29 (6.61)	37.07 (6.86)	38.29 (7.68)	35.15 (10.53)	2.83	9.54**	0.28
Negative parenting							
Reproach	25.54 (7.56)	27.06 (6.07)	24.63 (7.17)	26.74 (8.41)	0.55	4.72*	0.13
Inconsistency	20.40 (4.11)	20.98 (4.25)	20.51 (4.25)	21.62 (7.46)	0.49	2.48	0.25
Restriction	15.66 (3.98)	17.16 (4.70)	15.50 (4.99)	19.62 (8.80)	3.75	22.48***	4.90*
Father $(n = 415)$					(1,413)	(1, 413)	(1, 413)
Positive parenting							
Support	34.31 (7.27)	33.15 (7.95)	34.19 (6.89)	32.62 (8.75)	0.14	2.46	0.06
Commendation	37.19 (7.93)	35.61 (8.03)	35.50 (8.82)	35.26 (8.03)	1.12	0.89	0.49
Negative parenting							
Reproach	24.65 (7.87)	25.99 (7.05)	22.74 (6.88)	26.21 (7.51)	0.98	7.94**	1.54
Inconsistency	20.51 (4.67)	21.11 (5.02)	20.02 (4.23)	22.09 (6.57)	0.19	5.62*	1.68
Restriction	15.06 (3.61)	16.56 (5.47)	14.51 (3.96)	17.76 (6.55)	0.37	19.67***	2.69
Parents combined $(n = 415)$					(1, 413)	(1, 413)	(1, 413)
Positive parenting							
Support	34.99 (6.31)	33.03 (6.45)	35.32 (5.93)	32.16 (8.23)	0.15	12.76***	0.70
Commendation	37.89 (7.17)	36.38 (7.02)	36.69 (7.69)	35.32 (8.08)	1.88	3.05	0.01
Negative parenting							
Reproach	25.33 (7.37)	26.70 (5.86)	23.70 (6.31)	26.49 (6.75)	1.56	7.93**	0.92
Inconsistency	20.63 (4.45)	21.03 (3.85)	20.30 (3.61)	21.95 (5.67)	0.41	4.81*	1.79
Restriction	15.38 (3.50)	16.71 (4.56)	15.03 (3.93)	19.15 (6.96)	4.66*	31.92***	8.41**

**Notes:** Higher scores imply that the dimension is more pronounced. \*P < 0.05; \*\*P < 0.01; \*\*\*P < 0.001.

(see Figure 1). Taken together, for only one out of five parenting styles were there differences between athletes and controls. At the same time, females generally reported more positive and fewer negative parenting styles.

## Discussion

The key finding of the present study is that parenting styles did not differ between elite athletes and controls but between female and male participants, with female participants reporting generally higher scores for positive and lower scores for negative perceived parenting styles.

Two hypotheses were formulated, and each of these is now considered in turn. Contrary to the first part of the first hypothesis, compared with controls, athletes did not perceive their parents' styles of parenting as being more restrictive, reproaching, or inconsistent. Thus, our data are at odds with the studies indicating that parents of athletes are more critical.<sup>3,6,7</sup> However, also contrary to the second part of the first hypothesis, compared with controls, athletes did not perceive their parents' styles of parenting as being more supportive. Again, our data are at odds with the studies indicating that parents of athletes are more supportive.<sup>5,8,9</sup> The reasons for our failure to replicate previous findings remain unclear. However, it is possible that issues related to the heterogeneity of samples investigated so far in other studies (children, adolescents, different female/male ratios), to sample sizes, to both the definition and assessment of exercise, and to assessment of parenting styles or child–parent interactions could be responsible for this inconsistent picture.

With respect to the second hypothesis, we anticipated that female participants would report more favorable perceived parenting styles compared with male participants. Our data did support this hypothesis. Irrespective of whether they were involved in elite athletics, females reported significantly more positive parenting styles and significantly fewer negative parenting styles. In contrast, male controls reported the highest ("worst") levels of restriction. These results fit well

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**Figure I** The degree of restriction differs significantly between athletes and controls (factor group: F(1, 413) = 4.66, P < 0.05), with an increased restriction for controls, and between female and male participants (factor gender: F(1, 413) = 31.92, P < 0.001), with an increased restriction for males. The significant group by gender interaction (F(1, 413) = 8.41, P < 0.01) reflects highest ("worst") scores for male controls. The graph shows means and standard deviations (error bars).

with previous research showing that daughters experience more parental involvement with their education than do sons.<sup>6,15,16</sup> Moreover, the present data mirror the observation that male low exercisers may be at increased risk of being unappreciated and for developing poor sleep and low psychological functioning.<sup>14</sup>

Several limitations warrant against overgeneralization of the findings. First, participants were exclusively recruited either from high schools (controls) or from high school classes for elite athletes; consequently, neither subsample is entirely representative of adolescents as a whole. Second, the cross-sectional design of the study precludes conclusions about the direction of influence. Thus, for example, it remains unclear whether parents' behaviour results in low exercise among male controls or alternatively whether low exercise levels among the male controls trigger negative responses on the part of their parents. Third, the pattern of results may be due to other variables such as socioeconomic status or parents' and children's psychological functioning and psychopathology, which have not been assessed within the present study. Fourth, results may potentially be biased because only adolescents who were willing and able to fill in the questionnaires were included in the study. Lastly, but importantly, it is conceivable that in the control group there may be some equally "achievement-oriented" and invested parents whose parenting style does not differ from those of sport parents but whose interest is focused on other domains such as music or academic achievement.

### Conclusion

Taken together, the pattern of results supports the view that perceived parenting styles do not differ between athletes and controls. On the other hand, perceived parenting styles do differ as a function of gender, indicating that future research on parenting styles in adolescents should take this variable into account.

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## Disclosure

The study was conducted without external funding and we declare no conflicts of interest.

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