

YOUTH SPORT PARENT/GUARDIAN CONCUSSION-RELATED KNOWLEDGE AND ATTITUDES: IMPLICATIONS FOR GENDER-SPECIFIC CONCUSSION EDUCATION

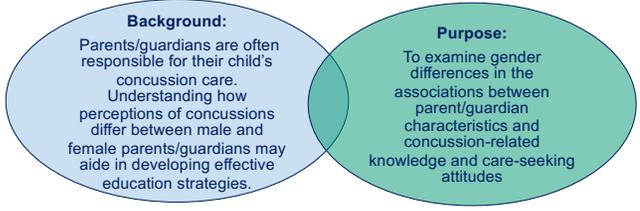


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BACKGROUND



METHODS & INSTRUMENTATION

- 1292 randomly-selected parents (≥18 years) of middle school children (~11-14 years) completed an online survey.
- Independent variables included parental and child characteristics. (Table 1)
- Dependent variables included concussion symptom knowledge (range=0-50; higher=better) and care-seeking attitudes (range=5-35; higher=more favorable).

STATISTICAL ANALYSES

- Dependent variables were categorized into three ordinal levels (~33% increments of potential scores).
- Separate ordinal logistic regression models for male and female parents identified predictors of higher levels of concussion knowledge and attitude.
- Models met proportional odds assumptions.

RESULTS OVERVIEW

- Most respondents were women (62.4%).
- Median knowledge scores for men and women were 37 (IQR: 28,43) and 40 (IQR: 34,44), respectively.
- Median attitude scores for men and women were 31 (IQR: 27,35) and 33 (IQR: 28,35), respectively.*
- Table 1 outlines key Odds Ratios (OR) for comparisons.

RESULTS

Table 1. Odds ratios (ORs) and 95% confidence intervals (CI) of higher levels of concussion-related knowledge and care-seeking attitudes, by gender, for key parent/guardian characteristics

Parent/Guardian Characteristics	Concussion symptom knowledge		Concussion care-seeking attitudes	
	Males, n=486	Females, n=806	Males, n=486	Females, n=806
	OR (95%CI)		OR (95%CI)	
Age (10-year increase)	1.61 (1.32-1.96) ¹	1.52 (1.23-1.89) ¹	1.46 (1.16-1.84) ¹	1.27 (1.01-1.58) ¹
Race/Ethnicity (White/non-Hispanic vs. Non-white)	1.18 (0.79-1.77)	2.07 (1.45-2.96) ¹	1.69 (1.05-2.73) ¹	1.49 (1.02-2.16) ¹
Education (At least bachelor's degree vs. Without bachelor's degree)	0.83 (0.55-1.26)	0.83 (0.58-1.19)	1.51 (0.94-2.43)	0.95 (0.65-1.39)
Parent concussion history (Yes vs. No)	1.87 (1.21-2.91) ¹	1.61 (1.05-2.47) ¹	1.14 (0.68-1.89)	1.81 (1.13-2.89) ¹
Competitiveness index (10%-increase)	1.36 (1.16-1.59) ¹	1.20 (1.06-1.36) ¹	1.24 (1.02-1.49) ¹	0.99 (0.88-1.12)
Child's sport participation				
Yes, football vs. None	1.42 (0.87-2.33)	1.44 (0.96-2.17)	1.54 (0.86-2.75)	2.15 (1.42-3.24) ¹
Yes, other sports vs. None	1.55 (0.82-2.93)	1.46 (0.83-2.57)	1.40 (0.67-2.92)	1.71 (0.96-3.04)
Child concussion history (Yes vs. No)	0.64 (0.39-1.04)	0.27 (0.17-0.42) ¹	0.76 (0.43-1.35)	0.69 (0.41-1.15)

¹=significant OR (i.e., 95%CI excludes 1.00)

CONCLUSIONS

- Factors associated with parent/guardian concussion-related knowledge and attitudes may differ by gender.
- Strategies should consider tailored messaging female and male parents to improve concussion identification and care among youth athletes.

*Corrected medians presented; abstract presented means

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