

ORIGINAL ARTICLE

Age of first exposure to American football and long-term neuropsychiatric and cognitive outcomes

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Previous research suggests that age of first exposure (AFE) to football before age 12 may have long-term clinical implications; however, this relationship has only been examined in small samples of former professional football players. We examined the association between AFE to football and behavior, mood and cognition in a large cohort of former amateur and professional football players. The sample included 214 former football players without other contact sport history. Participants completed the Brief Test of Adult Cognition by Telephone (BTACT), and self-reported measures of executive function and behavioral regulation (Behavior Rating Inventory of Executive Function-Adult Version Metacognition Index (MI), Behavioral Regulation Index (BRI)), depression (Center for Epidemiologic Studies Depression Scale (CES-D)) and apathy (Apathy Evaluation Scale (AES)). Outcomes were continuous and dichotomized as clinically impaired. AFE was dichotomized into < 12 and ≥ 12 , and examined continuously. Multivariate mixed-effect regressions controlling for age, education and duration of play showed AFE to football before age 12 corresponded with $> 2 \times$ increased odds for clinically impaired scores on all measures but BTACT: (odds ratio (OR), 95% confidence interval (CI): BRI, 2.16, 1.19–3.91; MI, 2.10, 1.17–3.76; CES-D, 3.08, 1.65–5.76; AES, 2.39, 1.32–4.32). Younger AFE predicted increased odds for clinical impairment on the AES (OR, 95% CI: 0.86, 0.76–0.97) and CES-D (OR, 95% CI: 0.85, 0.74–0.97). There was no interaction between AFE and highest level of play. Younger AFE to football, before age 12 in particular, was associated with increased odds for impairment in self-reported neuropsychiatric and executive function in 214 former American football players. Longitudinal studies will inform youth football policy and safety decisions.

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Aufgaben für alle Gruppen

1. Einleitung:

Was ist *Chronic Traumatic Encephalopathy* (CTE)?

- > Welche Bedeutung haben wiederholte Schläge auf den Kopf?
- > Welche neuronalen Veränderungen finden sich?

2. Methoden & Resultate:

a) Was war die Fragestellung?

b) Was sind BRIEF-A, CES-D, AES und BTACT?

Vokabel-Hinweis: „items“ bei Fragebögen = Fragen

c) Welche Befunde zeigen sich?

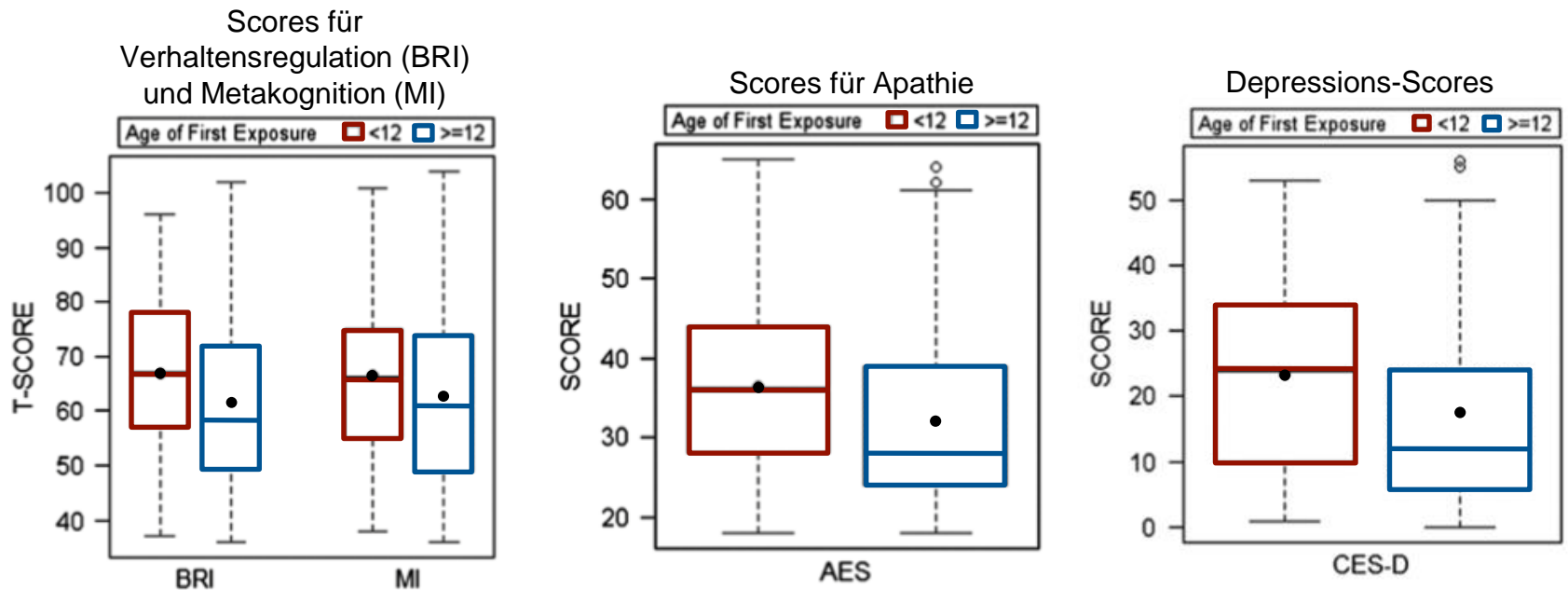
—> Welches Bild ergibt sich in Zusammenhang mit dem Age of First Exposure (AEF)?

Vokabel-Hinweis:

clinically meaningful = klinisch bedeutsam = da liegt eine Störung vor

Abbildung 10

Ergebnisse der Studie von Alosco et al., 2017



Alosco et al., 2017