elevate risk toward attentional problems associated with psychological distress. Early evaluation of PTSD and mood related symptomatology is suggested to best support treatment planning and recovery in this population. Future studies are needed to explore the nature of the relationship between cognitive and emotional sequelae in patients who present with assault-related concussions.

Categories: Concussion/Mild TBI (Child)
Keyword 1: concussion/ mild traumatic brain injury
Keyword 2: pediatric neuropsychology
Keyword 3: post-traumatic stress disorder
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73 Sex and Race/Ethnicity in Reporting of Lingering Concussion Symptoms by Adolescents

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Objective: Consideration of individual differences in recovery after concussion has become a focus of concussion research. Sex and racial/ethnic identity as they may affect reporting of concussion symptoms have been studied at single time points but not over time. Our objective was to investigate the factors of self-defined sex and race/ethnicity in reporting of lingering concussion symptoms in a large sample of adolescents.
Participants and Methods: Concussed, symptomatic adolescents (n=849; Female=464, Male=385) aged 13-18 years were evaluated within 30 days of injury at a North Texas Concussion Registry (ConTex) clinic. Participants were grouped by self-defined race/ethnicity into three groups: Non-Hispanic Caucasian (n=570), Hispanic Caucasian (n=157), and African American (n=122). Measures collected at the initial visit included medical history, injury related information, and the Sport Concussion Assessment Tool-5 Symptom Evaluation (SCAT-5SE). At a three-month follow-up, participants completed the SCAT-5SE. Pearson's Chi-Square analyses examined differences in categorical measures of demographics, medical history, and injury characteristics. Prior to analysis, statistical assumptions were examined, and log base 10 transformations were performed to address issues of unequal group variances and non-normal distributions. A three-way repeated measures ANOVA (Sex x Race/Ethnicity x Time) was conducted to examine total severity scores on the SCAT-5SE. Bonferroni post-hoc tests were performed to determine specific group differences. SPSS V28 was used for analysis with $p<0.05$ for significance. Data reported below has been back transformed.
Results: A significant interaction of Time by Race/Ethnicity was found for SCAT-5SE scores reported at initial visit and three-month follow-up ($F(2, 843)=7.362$, $p<0.001$). To understand this interaction, at initial visit, Race/Ethnicity groups reported similar levels of severity for concussion symptoms. At three month follow-up, African Americans reported the highest level of severity of lingering symptoms (M= 3.925, 95% CIs [2.938-5.158]) followed by Hispanic Caucasians(M= 2.978, 95% CIs [2.266-3.845]) and Non-Hispanic Caucasians who were the lowest(M= 1.915, 95% CIs [1.626-2.237]). There were significant main effects for Time, Sex, and Race/Ethnicity. Average symptom levels were higher at initial visit compared to three-month follow-up ($F(1, 843)=1531.526$, $p<0.001$). Females had higher average symptom levels compared to males ($F(1, 843)=35.58$, $p<0.001$). For Race/Ethnicity ($F(2, 843)=9.236$, $p<0.001$), Non-Hispanic Caucasians were significantly different than African Americans ($p<0.001$) and Hispanic Caucasians ($p=0.021$) in reported levels of concussion symptom severity.
Conclusions: Data from a large sample of concussed adolescents supported a higher level of reported symptoms by females, but there were no significant differences in symptom reporting between sexes across racial/ethnic groups. Overall, at three-months, the African American and Hispanic Caucasians participants reported a higher level of lingering symptoms than Non-Hispanic Caucasians. In order to

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improve care, the difference between specific racial/ethnic groups during recovery merits exploration into the factors that may influence symptom reporting.

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Keyword 3: self-report
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74 Timed Motor Performance in Children Medically Cleared for Return to Activities Post Mild Traumatic Brain Injury

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Objective: Children who sustain a mild traumatic brain injury (mTBI) are at increased odds of additive injury and continue to show altered motor performance relative to never-injured peers after being medically cleared (MC) to return to normal activities. There is a critical need to determine when children can return to activities without risk of short and long-term adverse effects, with research showing high re-injury rates for 3-12 months after RTP. The Physical and Neurological Examination for Subtle Signs (PANESS) measures subtle signs of motor impairment during gait, balance, and timed motor functions. Recent literature has demonstrated that PANESS timed motor function can distinguish between children medically cleared post-mTBI compared to never-injured controls. The present study examined performance on timed motor tasks in youth medically cleared from mTBI following medical clearance and 3-months later, compared to never-injured peers.
Participants and Methods: 25 children (M_{age}=14.16, SD=2.46; Male=68%) were enrolled within 6 weeks of medical clearance from mTBI (M_{days} post MC=33, SD=13.4, Range=2–59) along with 66 typically developing, never-injured controls (M_{age}=13.9, SD=2.22; Male=50%). Group differences were evaluated for the Timed Motor section of the PANESS at enrollment and at a 3-month follow-up (M_{days} from enrollment to follow-up=95.90, SD=12.69, Range=62–129). This 3-month follow-up occurred on average 4 months after medical clearance (M_{days} from MC to follow-up=130.08, SD=17.58, Range=92 – 164). The Timed Motor section includes Repetitive (foot tapping, hand patting, and finger tapping) and Sequential (heel-toe rocking, hand pronate/supinate, finger sequencing) raw time scores, measured in seconds. The Total Timed Motor Speed score is the combination of Repetitive and Sequential Movement and the side-to-side tongue item.
Results: At 3-month follow-up, mTBI participants (M=67.55, SD=8.26, Range=53.66–83.88) performed worse than controls (M=63.09, SD=10.23, Range=39.86–100.51) on Total Timed Motor Speed, $t(89)= 1.95$, $p<0.05$), including when controlling for age and sex, $F(1, 87)=4.67$, $p<0.05$. At the same time point, mTBI participants (M=36.54, SD=5.47, Range=28.74–49.17) performed worse on Sequential Speed than controls (M=32.93, SD=6.1, Range=21.49–56.76), $t(89)=2.59$, $p<0.01$, including when controlling for age and sex, $F(1, 87)=7.687$, $p<0.01$). Although groups performed similarly on Sequential Speed at the initial time point, mTBI participants exhibited a trend of less improvement from initial to follow-up (M_{mTBI}=-1.69, $M_{control}$=-3.68, $t(90)=1.445$, $p=0.076$).
Conclusions: Although groups did not significantly differ on Timed Motor Speed items at the initial time point, the mTBI group showed consistently lower scores than controls at both time points and less improvement over time. Results indicate that Total Timed Motor Speed, specifically Sequential Speed, may be a sensitive marker of persisting differences in high-level motor and cognitive learning/control in children who have been medically cleared after mTBI. More data are needed to evaluate these findings over a longer time period, and future studies should examine behavioral markers concurrently with physiologic brain recovery over time.

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Keyword 3: motor speed

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