Abstracts

participation for reasons including time constraints and feeling too sick.

Conclusions It is feasible to monitor concussed youth to determine the timeline to symptom resolution and adherence to physical and cognitive rest recommendations. This protocol can enable randomised trials to determine the role of cognitive and physical rest in recovery.

THE CONTRIBUTION OF ADVERSE CHILDHOOD EXPERIENCES TO POST-INJURY PSYCHOLOGICAL OUTCOMES IN URBAN BLACK MEN IN THE US

Ashley Brooks-Russell, Sonya Wytinck, Emily Wilfong, Carol Runyan. University of Pennsylvania, USA; Children’s Hospital of Philadelphia, USA; Drexel University, USA

Statement of purpose To examine whether adverse childhood experiences (ACEs) contribute to severity of PTSD and depression symptoms after recent serious injury in Black men.

Methods/approach Injured Black adult men were consecutively enrolled during hospitalisation for an acute, serious injury. Baseline data, including demographics and injury-related characteristics, were collected during interviews conducted in hospital. A questionnaire assessed whether seven Adverse Childhood Experiences had been experienced prior to the age of 18 years. Primary outcomes were collected at 3 months post-discharge during an in-person interview using the PTSD Checklist (PCL-C) for PTSD symptom severity and the Quick Inventory of Depressive Symptoms-Self Report (QID-SR) for depression symptom severity.

Results 231 men (mean age = 37 years, SD = 15.8) were included in this analysis. Injury was classified as unintentional (52%) or intentional (48%), i.e. the result of interpersonal violence. Mean number of ACEs was 2.51; 83% reported at least 1 ACE and 37.7% reported >4. No association was found between number of ACEs and whether the index injury was intentional versus unintentional. Intentional injuries were associated with higher mean PCL-C scores (42.8 vs. 33.6, p < 0.0001) and higher mean QID-SR scores (10.0 vs. 8.0, p < 0.01). In adjusted multiple regression, younger age, intentional injury, and number of ACEs were independently associated with higher PCL-C scores. Intentional injury and number of ACEs were independently associated with higher QID-SR scores.

Conclusions This sample of urban Black men reported substantial histories of childhood trauma and adversity. There is a dose response relationship with higher numbers of ACEs contributing to more severe symptoms of PTSD and depression after serious traumatic injury.

Prevalence and Perceptions of Risk of Alcohol vs. Marijuana Impaired Driving Among Adults in Colorado

Alison Culyba, Kenneth Ginsburg, Joel Fein, Elizabeth Miller, Charles Branas, Therese Richmond, Douglas Wiebe. Craig-Dalimer Division of Adolescent Medicine, Children’s Hospital of Philadelphia & Department of Biostatistics and Epidemiology, Perelman School of Medicine at the University of Pennsylvania, USA; Craig-Dalimer Division of Adolescent Medicine, Children’s Hospital of Philadelphia, USA; Division of Emergency Medicine, Children’s Hospital of Philadelphia, USA; Division of Adolescent and Young Adult Medicine, Children’s Hospital of Pittsburgh, USA; Department of Biostatistics and Epidemiology, Perelman School of Medicine at the University of Pennsylvania, USA; School of Nursing, University of Pennsylvania, USA

Statement of purpose This study will present the prevalence of self-reported marijuana and alcohol impaired driving, compare perceived risks of driving under the influence of alcohol versus marijuana, and examine risk factors associated with impaired driving.

Methods Data are from a telephone survey conducted by the Colorado Department of Transportation in 2014. The survey included questions assessing substance use, perceptions of risks and consequences related to impaired driving, and frequency of impaired driving among a representative sample of Colorado adults. The sample (n = 770) was weighted to reflect the 2010 Census estimates for Colorado.

Results Few respondents perceived it safe to drive under the influence of alcohol (6%). However, those who reported past month marijuana use were more likely to report that they could safely drive after using marijuana (49%) compared to those that did not use in the past month or those that used alcohol in the past month. Of those that used marijuana in the past month, 73% endorsed marijuana impaired driving is safer than alcohol impaired driving. Marijuana users reported driving under the influence of marijuana on an average of 5.1 days in the past month compared to alcohol users who reported driving alcohol impaired on 1.2 days. Marijuana impaired drivers were more likely to be male, younger (18–34) and have some college education as compared to a bachelor degree or more education.

Conclusions Perceptions of risk associated with marijuana impaired driving is lower than that associated with alcohol, particularly for current marijuana users. Current marijuana users drive impaired more frequently than alcohol users.

EXAMINING THE ROLE OF SUPPORTIVE ADULTS IN VIOLENCE EXPOSURE AMONG MALE YOUTH IN URBAN ENVIRONMENTS

Alison Culyba, Kenneth Ginsburg, Joel Fein, Elizabeth Miller, Charles Branas, Therese Richmond, Douglas Wiebe. Craig-Dalimer Division of Adolescent Medicine, Children’s Hospital of Philadelphia & Department of Biostatistics and Epidemiology, Perelman School of Medicine at the University of Pennsylvania, USA; Craig-Dalimer Division of Adolescent Medicine, Children’s Hospital of Philadelphia, USA; Division of Emergency Medicine, Children’s Hospital of Philadelphia, USA; Division of Adolescent and Young Adult Medicine, Children’s Hospital of Pittsburgh, USA; Department of Biostatistics and Epidemiology, Perelman School of Medicine at the University of Pennsylvania, USA; School of Nursing, University of Pennsylvania, USA

Statement of purpose Adult connection has demonstrated a protective effect on multiple adolescent health outcomes. We examine how the nature of relationships with adults impacts violence exposure.

Methods/approach 283 adolescent males in Philadelphia, ages 10–24, were enrolled via household random-digit dial and interviewed in person. Relationships with key family members were divided into supportive, unsupportive, and mixed, as defined by youth. Reported violence involvement and violence witnessing scores were created using 17 self-reported items, and dichotomized using natural breakpoints. Logistic regressions examined how relationships with adult family members corresponded to violence involvement and witnessing violence.

Results Median participant age was 18 and 98% were African American. 68% of youth identified at least one supportive adult family member including mothers (60%), fathers (27%), and
maternal grandmothers (15%). 33% of youth reported high violence involvement, 30% reported high violence witnessing, and 17% reported both. Youth who reported at least one supportive adult had significantly decreased odds of violence involvement (OR = 0.38; 95% CI = 0.23–0.65) and violence witnessing (OR = 0.49; 95% CI = 0.29–0.83). Compared to youth with unsupportive maternal relationships, those with supportive relationships had decreased odds of violence involvement (OR = 0.17; 95% CI = 0.05–0.57). Having a supportive paternal relationship trended towards decreased odds of violence involvement (OR = 0.47, 95% CI = 0.10–2.31), but was relatively uncommon. Findings adjusted for age were consistent.

Conclusions Supportive family connexion is strongly associated with decreased odds of violence exposure and violence witnessing. Youth who characterised supportive maternal relationships had significantly less violence involvement; those who characterised supportive paternal relationships also trended towards less violence involvement.

Significance and contributions Next studies should fully evaluate the impact of supportive fathers, investigate causal mechanisms underlying the observed relationships, and identify opportunities to bolster family connexion that may reduce adolescent violence exposure.

HELMET CAMERA STUDY OF ADULT AND CHILD BICYCLING PATTERNS AND INJURY RISK FACTORS BY GENDER

Cara Hamann, Corinne Peek-Asa, Daniel McGehee. University of Iowa, USA

10.1136/injuryprev-2015-041654.69

Statement of purpose The purpose of this study was to naturalistically examine bicycling behaviours and risks by age and gender.

Methods/approach We conducted a naturalistic, first-hand, bicycling study of 10 children (aged 10 to 14) and 10 adults. Participants were asked to record all of their bicycling trips, via a GPS-enabled helmet camera and trip diaries, for one week. Eligible participants lived in Johnson County, Iowa, and regularly rode their bicycle. Data were manually reviewed and coded to identify and calculate rates of safety-critical events (bicyclist and driver errors, near crashes, and crashes) and bicycle trip characteristics (route, distance, time of day, sidewalk riding, and use of on and off-street bicycle facilities).

Results Video and GPS data were captured for 283 bicycle trips (57 h, 670 miles). During the one week study period, boys took more trips than girls (Mean trips: 12.6 vs. 8.8) but trip lengths were similar (Mean miles per trip: 1.1 vs. 1.3). Male and female adults took a similar number of trips (Mean: 15.2 vs. 15.6), but males had longer trips (Mean miles per trip: 5.0 vs. 2.0; p = 0.01). Children had lower error rates than adults (0.13 vs. 0.31 per mile), but they rode more often on the sidewalk (56.4% vs. 12.7%; p < 0.01), where traffic rules apply less frequently.

Conclusions The use of GPS-enabled helmet cameras is an effective tool for capturing bicycling experiences first-hand. Data captured in this study revealed large variations between both adults and children and males and females in bicycling behaviours.

Significance and contributions Data from this study are unique, as they are the first naturalistic cycling data collected among children and in the United States. Results begin to reveal differences by age and gender in bicycling safety and use of the transportation system, which can inform both intervention development and infrastructure design.