Intimate Partner Violence and Brain Injury: A Panel Discussion

October 4, 2023
Noon-1:15 pm ET

2023 Webinar Series

NASHIA

Welcome!

Maria Crowley, MA, CRC

Director, Professional Development

NASHIA

Moderator

NASHIA

Webinar Information

- Problems?
  - Send a chat to the moderator
  - Visit Zoom's Support site
- Questions?
  - Please use the Q and A feature
- Closed Captioning
  - Available at the bottom of the viewing window

NASHIA

About NASHIA

Nonprofit organization created to assist
State government in promoting partnerships
and building systems to meet the needs
of individuals with brain injury
and their families.

NASHIA

Join NASHIA!

- Individual and Group Memberships
- Save on Training and Certificates of Attendance
- Access to National Member Directory
- Networking Meetings
- info@nashia.org

Today's Webinar

- Handouts and SW CEs/Certificate of Attendance:
  -Available after the webinar
  -$15, free for members
  -Members needing Certificate of Attendance, contact: mcrowley@nashia.org

- Archived Recording:
  -nashia.org> Training U > Trainings On Demand

NASHIA

Today's Presenters:

Dr. Anne P. DePrince

Dr. Kim Gorgens

NASHIA

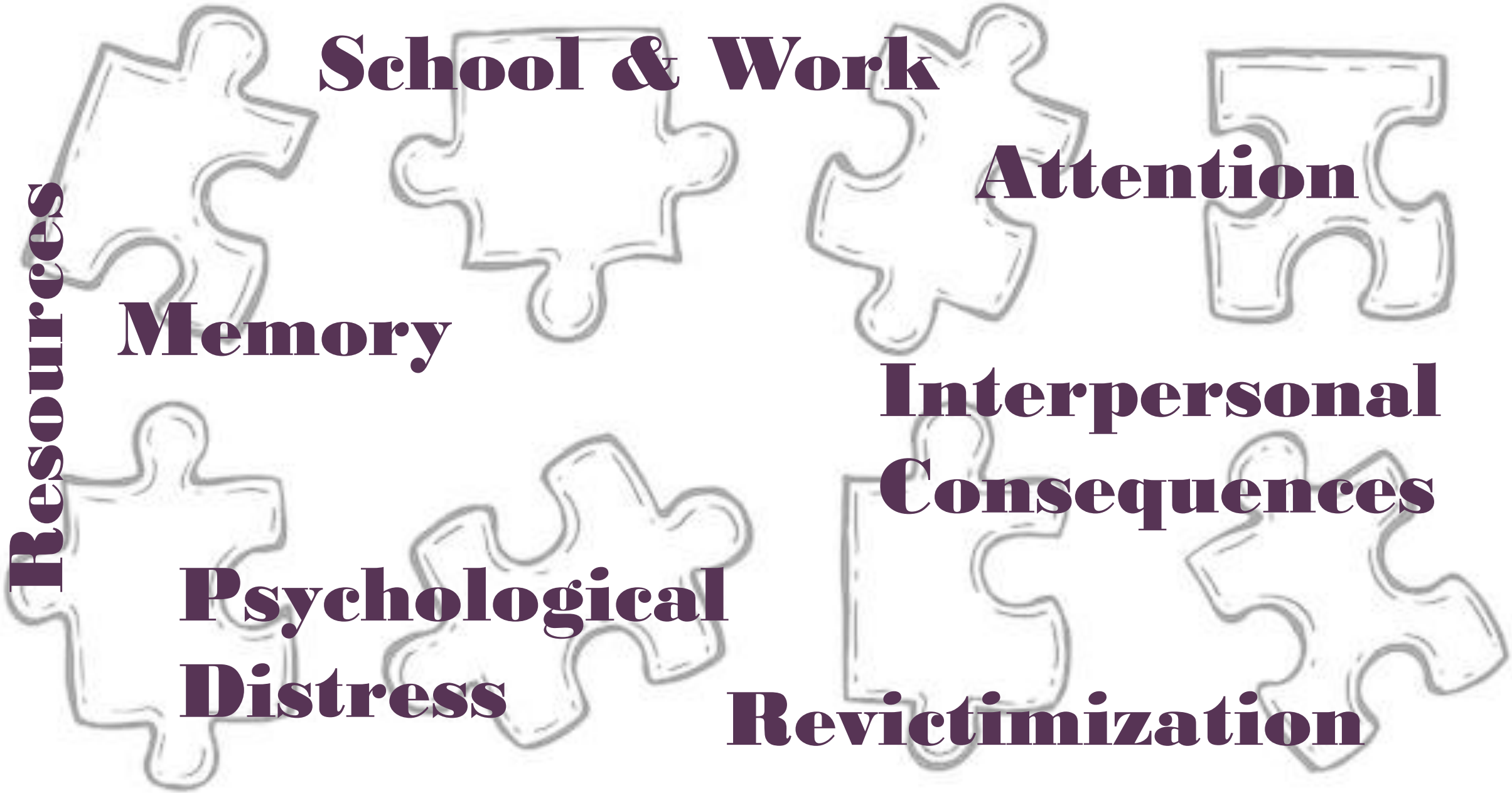
Intimate partner abuse and brain injuries

Presenters: Anne P. DePrince, PhD & Kim Gorgens, PhD
Co-PI: Julia Dmitrieva, PhD
University of Denver

@apdeprince @bubblewrapbrain
traumaresearchnotes.blog

Today:
Background
Colorado-Based Research
Implications

Brain injury can have consequences that overlap with what trauma researchers study through a psychological trauma lens…

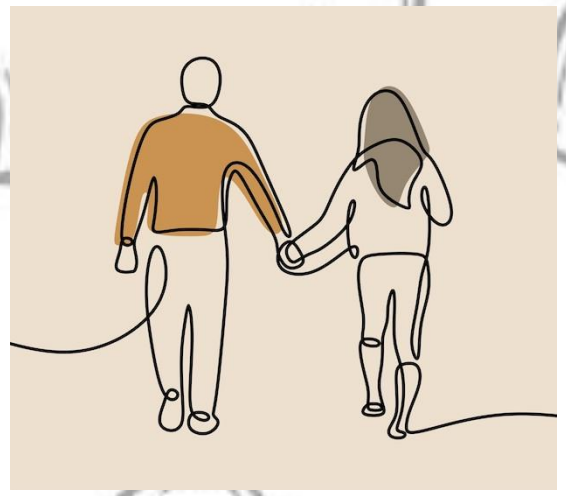

School & Work
Attention
Resources
Memory
Interpersonal
Consequences
Psychological
Distress
Revictimization

School & Work

Attention

Resources

Memory



Interpersonal Consequences

Psychological Distress

Revictimization

Voices | Opinion

The Invisible Victims of Traumatic Brain Injury

Most people know it's a problem for athletes and soldiers—but it affects victims of domestic violence even more

By Anna P. DePrince, Kim Gorgens on November 13, 2019

Credit: Getty Images

Thousands of athletes returned to high school, college and professional football fields this fall, renewing discussions about the risk for and potentially devastating consequences of traumatic brain injuries (TBI) in contact sports. However, an even larger population of people affected by TBI will continue to go unrecognized and undiagnosed: women who are victims of domestic violence.

One in seven women has been injured by an intimate partner. Among women experiencing domestic violence, a handful of research teams

READ THIS NEXT

POLICY & ETHICS
NASA Soars and Others Plummet in Trump's Budget Proposal
February 11, 2020 — Alexandra Witze, Nidhi Subbaraman, Giuliana Viglione, Jeff Tollefson and Nature magazine

COGNITION
Feral Dogs Respond to Human Hand Cues
1 hour ago — Susanne Bard

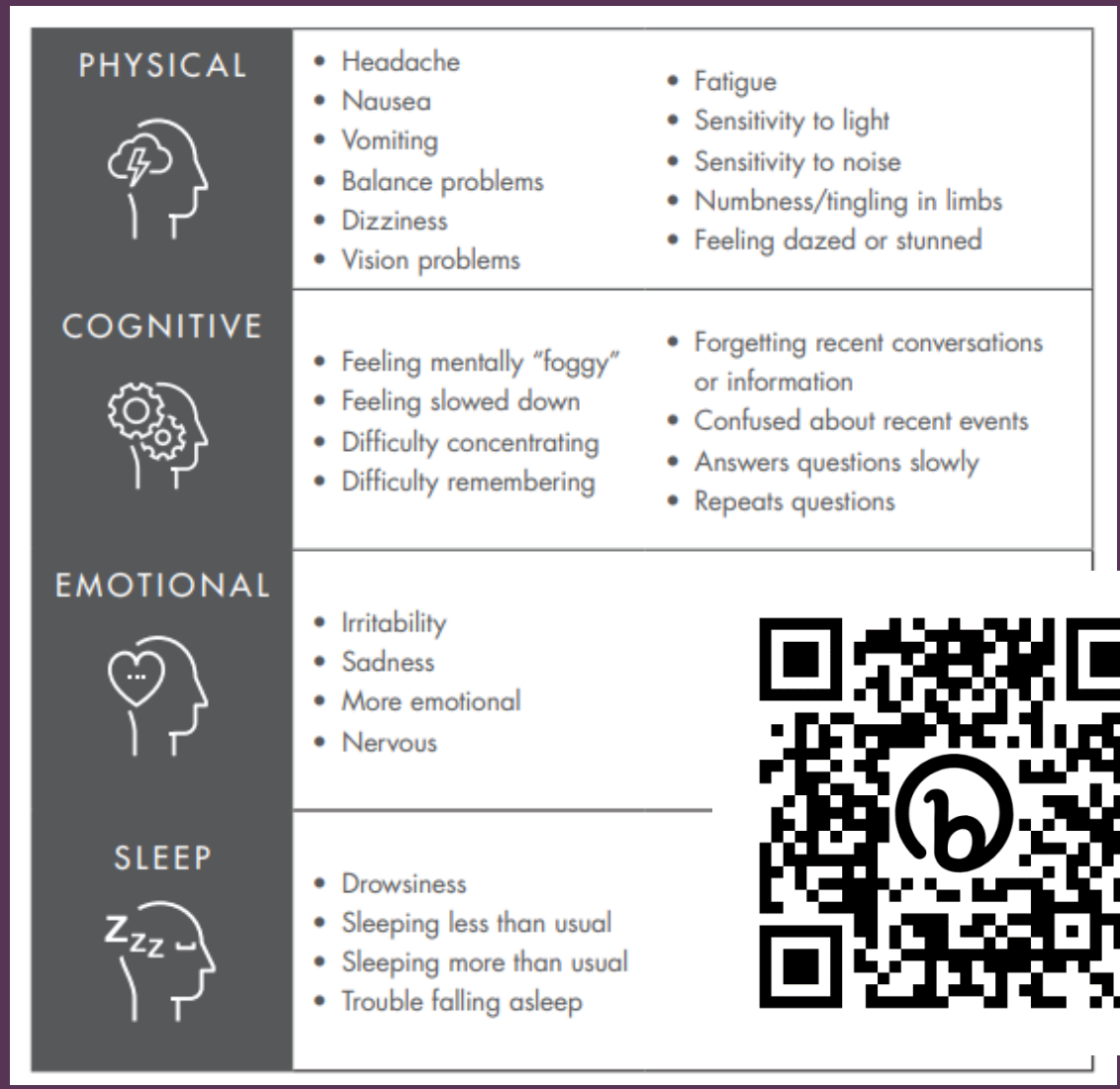
POLICY & ETHICS
Climate Change Once Again Left Out of Trump's Federal Budget
1 hour ago — Jean Chemnick, Thomas Frank and E&E News

ELECTRONICS
Augmented Reality Is Getting Real
1 hour ago — Wade Roush

PUBLIC HEALTH
Disease Caused by the Novel Coronavirus Officially Has a Name: Covid-19
2 hours ago — Andrew Joseph and STAT

POLICY & ETHICS
LEGO, We Have a Problem
2 hours ago — Roxanne Hughes | Opinion

- Attention and memory;
- Affect;
- Awareness of self and environment;
- Daily activities (e.g., sound and light sensitivity can trigger headaches and cognitive fatigue).



https://mindsourcecolorado.org/wp-content/uploads/2021/03/21-MINDSOURCE-Juvenile-A.H.E.A.D.-Week-1.pdf

How common are TBIs after intimate partner abuse?

Group	% of women
General adult population	9%
Psychiatric inpatient	29%
Psychiatric outpatient	19%

McGuire, L.M. et al. (1998). Prevalence of traumatic brain injury in psychiatric and non-psychiatric subjects. *Brain Injury, 12*, 207-214.

Group	% of women
General adult population	9%
Psychiatric inpatient	29%
Psychiatric outpatient	19%
Denver Triage Project: Police-reported intimate partner abuse	56%

JOURNAL OF TRAUMA & DISSOCIATION
http://dx.doi.org/10.1080/15299732.2016.1252001

Routledge
Taylor & Francis Group

ARTICLE

Head injury screening and intimate partner violence: A brief report

Kerry L. Gagnon, MA and Anne P. DePrince, PhD

Department of Psychology, University of Denver, Denver, Colorado, USA

ABSTRACT

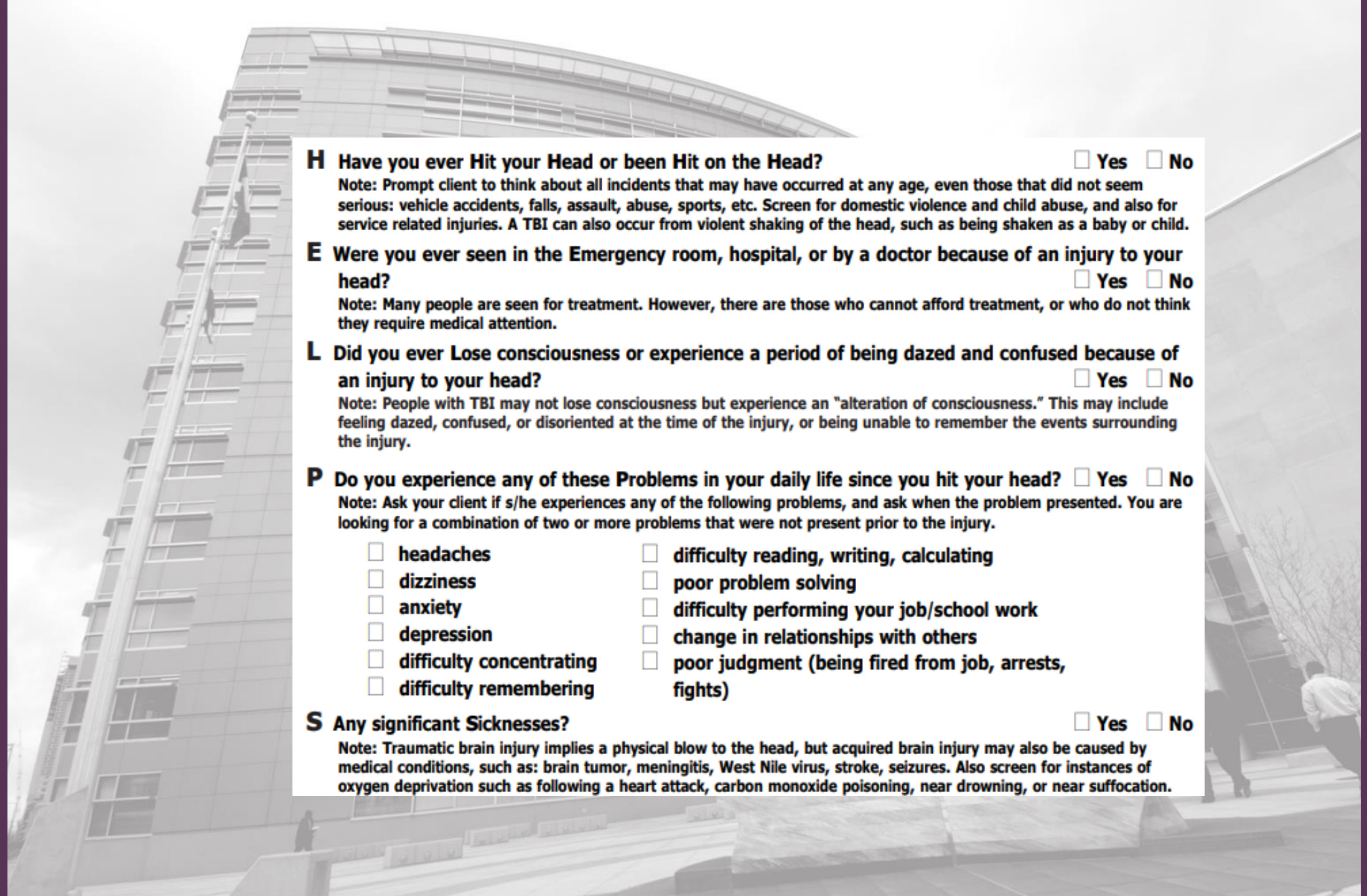
Objective: Although the importance of traumatic brain injury has gained public attention in recent years, relatively little attention has been paid to head injuries among women who have experienced intimate partner violence (IPV). The present study screened for lifetime exposure to mild traumatic brain injuries (mTBIs) among a sample of women who had experienced recent IPV (median days since target incident = 26). *Method:* Participants included ethnically diverse women whose IPV experiences were reported to law enforcement. Women (*n* = 225) were asked about injuries to the head sustained during the target IPV incident as well as over the lifetime, and related symptoms. *Results:* The vast majority of women (80%) reported a lifetime head injury. More than half (56%) screened positive for mTBI, defined as at least one instance in which they experienced a change in consciousness or a period of being dazed and confused as a result of a head injury. A minority of women (13%) reported injuries to the head during the target IPV incident. Most women who had experienced a lifetime head injury reported frequent and current cognitive difficulties. *Conclusion:* These findings highlight the importance of assessing head injuries and related symptoms among women who have experienced IPV, pointing to important implications for policy and practice.

ARTICLE HISTORY
Received 14 February 2016
Accepted 11 October 2016

KEYWORDS
Health impact of trauma; intimate partner violence

The importance of traumatic brain injuries (TBIs) has captured public attention in recent years, particularly in terms of the impact of TBIs on combat veterans (e.g., MacGregor, Dougherty, Tang, & Galarneau, 2013; Terrio et al., 2009) and athletes (e.g., Cusimano et al., 2013). TBIs are linked to a host of disruptive postconcussive symptoms, including pain (e.g., headaches) and cognitive problems (e.g., difficulty concentrating, memory loss; Faul, Xu, Wald, & Coronado, 2010; Ryan & Warden, 2003) as well as risk for later depression and suicidality (e.g., Perna, 2005; Wasserman et al., 2008). Though TBIs can range from mild (e.g., alteration in mental status and consciousness) to severe (e.g., an extended period of unconsciousness of amnesia), mild TBIs (mTBIs) are most common (Faul et al., 2010) and are strongly linked with postconcussive symptoms.

CONTACT Kerry L. Gagnon, MA Kerry.Gagnon@du.edu Department of Psychology, University of Denver, 2155 South Race Street, Denver, CO 80208.



H **Have you ever Hit your Head or been Hit on the Head?** ☐ Yes ☐ No

Note: Prompt client to think about all incidents that may have occurred at any age, even those that did not seem serious: vehicle accidents, falls, assault, abuse, sports, etc. Screen for domestic violence and child abuse, and also for service related injuries. A TBI can also occur from violent shaking of the head, such as being shaken as a baby or child.

E **Were you ever seen in the Emergency room, hospital, or by a doctor because of an injury to your head?** ☐ Yes ☐ No

Note: Many people are seen for treatment. However, there are those who cannot afford treatment, or who do not think they require medical attention.

L **Did you ever Lose consciousness or experience a period of being dazed and confused because of an injury to your head?** ☐ Yes ☐ No

Note: People with TBI may not lose consciousness but experience an "alteration of consciousness." This may include feeling dazed, confused, or disoriented at the time of the injury, or being unable to remember the events surrounding the injury.

P **Do you experience any of these Problems in your daily life since you hit your head?** ☐ Yes ☐ No

Note: Ask your client if s/he experiences any of the following problems, and ask when the problem presented. You are looking for a combination of two or more problems that were not present prior to the injury.

- ☐ headaches
- ☐ dizziness
- ☐ anxiety
- ☐ depression
- ☐ difficulty concentrating
- ☐ difficulty remembering
- ☐ difficulty reading, writing, calculating
- ☐ poor problem solving
- ☐ difficulty performing your job/school work
- ☐ change in relationships with others
- ☐ poor judgment (being fired from job, arrests, fights)

S **Any significant Sicknesses?** ☐ Yes ☐ No

Note: Traumatic brain injury implies a physical blow to the head, but acquired brain injury may also be caused by medical conditions, such as: brain tumor, meningitis, West Nile virus, stroke, seizures. Also screen for instances of oxygen deprivation such as following a heart attack, carbon monoxide poisoning, near drowning, or near suffocation.

Table 1. Prevalence of current and lifetime postconcussive symptoms ($N = 180$).

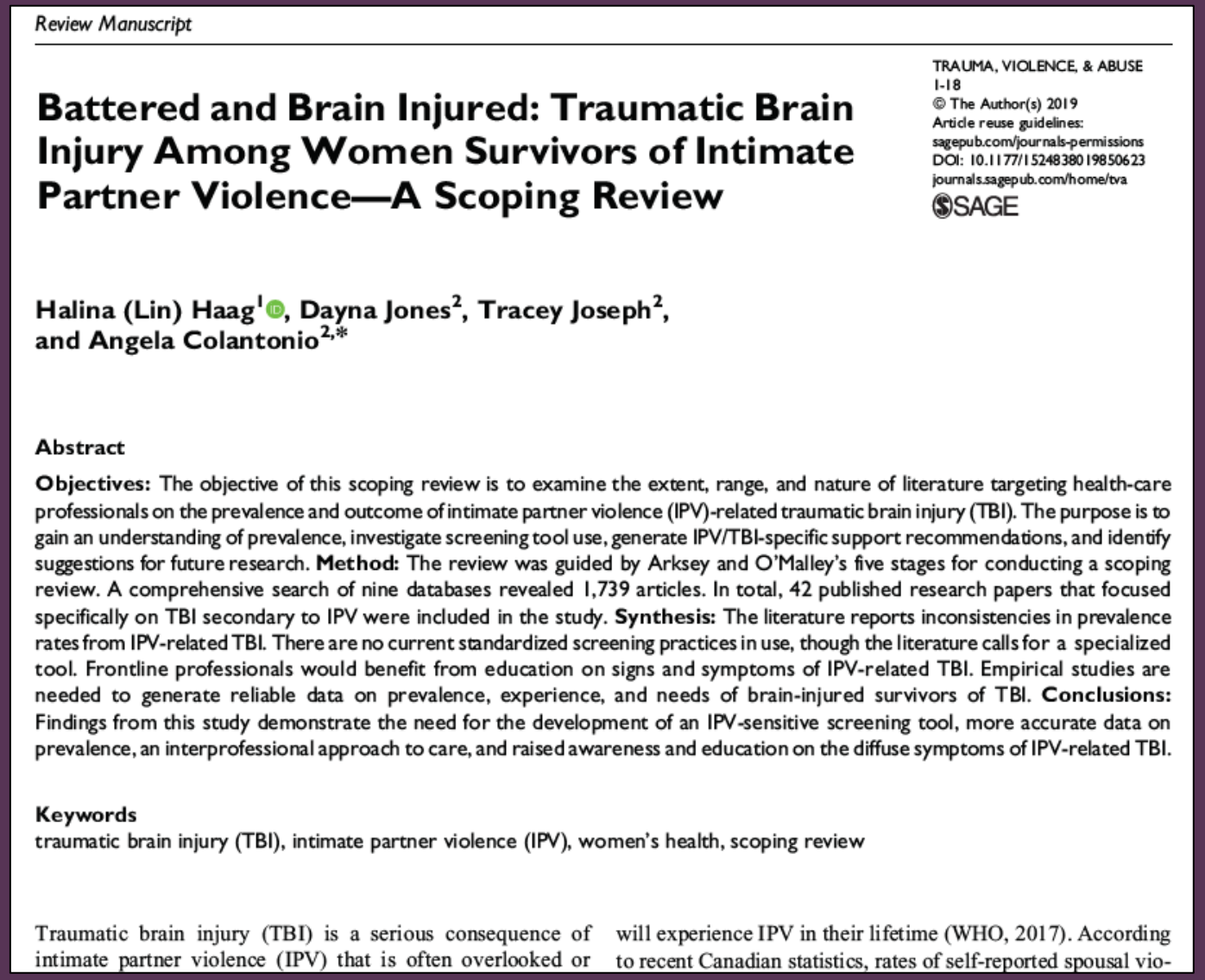
Symptom	Current (%)	Lifetime (%)
Headaches	45	29
Trouble remembering things	34	11
Difficulty finding the right words	33	11
Trouble concentrating	29	15
Losing things	28	10
Trouble in distracting environments	27	9
Easily distracted	27	14
Forgetting appointments	27	8
Trouble paying attention to more than one thing	26	9
Dizziness	27	21
Work became harder	18	12
Trouble doing more than one thing at a time	14	5
Trouble following directions	13	6

Average: 3

Our findings are in line with others.

20-75%

of participants with mile TBIs across 40+ studies, many in emergency settings



Review Manuscript

TRAUMA, VIOLENCE, & ABUSE
1-18

DOI: 10.1177/1524838019850623
journals.sagepub.com/home/tva
SAGE

Battered and Brain Injured: Traumatic Brain Injury Among Women Survivors of Intimate Partner Violence—A Scoping Review

Halina (Lin) Haag[1], Dayna Jones[2], Tracey Joseph[2], and Angela Colantonio[2,*]

Abstract

Objectives: The objective of this scoping review is to examine the extent, range, and nature of literature targeting health-care professionals on the prevalence and outcome of intimate partner violence (IPV)-related traumatic brain injury (TBI). The purpose is to gain an understanding of prevalence, investigate screening tool use, generate IPV/TBI-specific support recommendations, and identify suggestions for future research. **Method:** The review was guided by Arksey and O'Malley's five stages for conducting a scoping review. A comprehensive search of nine databases revealed 1,739 articles. In total, 42 published research papers that focused specifically on TBI secondary to IPV were included in the study. **Synthesis:** The literature reports inconsistencies in prevalence rates from IPV-related TBI. There are no current standardized screening practices in use, though the literature calls for a specialized tool. Frontline professionals would benefit from education on signs and symptoms of IPV-related TBI. Empirical studies are needed to generate reliable data on prevalence, experience, and needs of brain-injured survivors of TBI. **Conclusions:** Findings from this study demonstrate the need for the development of an IPV-sensitive screening tool, more accurate data on prevalence, an interprofessional approach to care, and raised awareness and education on the diffuse symptoms of IPV-related TBI.

Keywords
traumatic brain injury (TBI), intimate partner violence (IPV), women's health, scoping review

Traumatic brain injury (TBI) is a serious consequence of intimate partner violence (IPV) that is often overlooked or will experience IPV in their lifetime (WHO, 2017). According to recent Canadian statistics, rates of self-reported spousal vio-

PRESENTER
Naomi Wright, M.A.

There are distinct profiles of PTSD and TBI symptoms among women who have experienced intimate partner abuse and head injury

Background

Head injuries and strangulation are prevalent among women who have experienced intimate partner abuse (56% of a community sample;, Gagnon & DePrince, 2016). Given the overlap in PTSD and Traumatic Brain Injury (TBI) symptoms, identifying subgroups of women based on common symptom screening tools can provide important information to healthcare providers. The current results support the use of short injury/symptom screeners.

Method

***N*=236**
Women were enrolled in a parent study if they were involved in an IPA incident with a male offender that was reported to police.

Women participated in a 3-hour interview about health and relationships as the first part of a larger longitudinal study.

***n*=179**
A subset of women were included in the present study, if they reported "hitting their head or being hit on the head" in their lifetime.

Participants: 236 women, 18–61 years old, 72% racial and/or ethnic minority, English speaking, education range from grade school to postgraduate training.

As part of the interview, women were asked to report head injuries, PTSD symptoms, and TBI symptoms using self-report measures:

PTSD Symptoms Posttraumatic Diagnostic Scale (Foa et al., 1997)	**TBI Symptoms** HELPS Screening Tool (Picard et al., 1999)
Unwanted thoughts	Being easily distracted
Nightmares	Trouble concentrating
Reliving traumatic event	Trouble remembering
Physical/somatic reactions	Difficulty paying attention
Avoiding internal reminders	Distracting environment
Difficulty remembering event	Forgetting appointments
Anhedonia	Doing more than one thing
Mental distancing	Headaches
Numbing	Word finding
Diminished hope for future	Losing things
Difficulty sleeping	Work is harder
Irritability	Dizzy
Difficulty concentrating	Following directions
Being on alert	
Jumpy	

Extra results

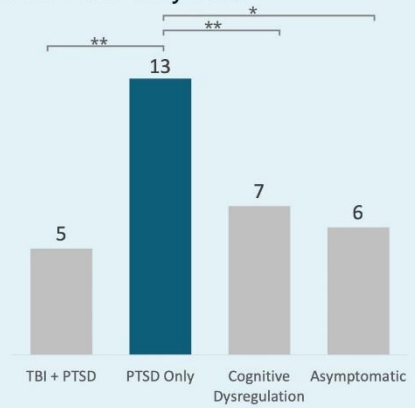
Visit our team website, traumaresearchnotes.blog/posts, for details regarding latent class fit statistics, probability of indicator variables within classes, and additional research updates from our team.

Women sorted into **four classes** based on PTSD and TBI symptoms

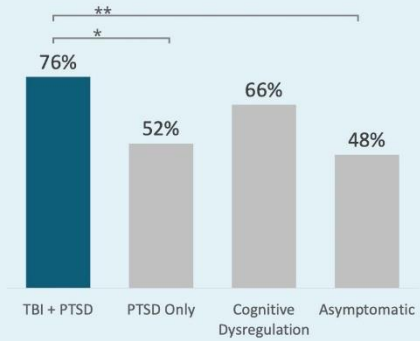
43 TBI + PTSD	52 PTSD Only	36 Cognitive Dysregulation	48 Asymptomatic

Women's symptom profiles related to injury characteristics

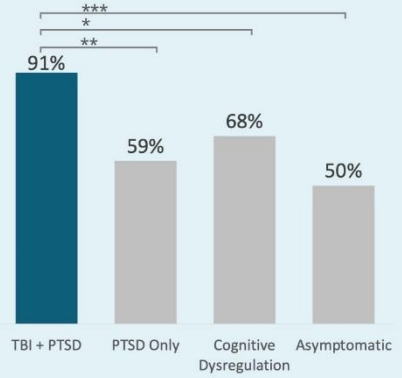
More years had passed since the most recent head injury for women in the PTSD-only class



Women in the PTSD + TBI class were more likely to have been hospitalized for a head injury than women in the PTSD-only and Asymptomatic classes



Women in the PTSD + TBI class were more likely to have lost consciousness due to a head injury than women in all other classes.



* p < .05; ** p < .01; ***p < .001

Research described here was funded by the National Institute of Justice (2007-WG-BX-0002). The opinions, findings, and conclusions or recommendations expressed in this poster are those of the authors and do not necessarily reflect those of the Department of Justice. Thank you to the Traumatic Stress Studies Group, Joanne Belknap, and community/criminal justice collaborators for making this project possible.

Naomi M. Wright, M.A. & Anne P. DePrince, Ph.D.

Women's Health Project:

Extending research beyond emergency settings to women seeking services after intimate partner abuse.

Collaborators: Rose Andom Center, Drs. Kim Gorgens and Julia Dmitrieva, and graduate students.

Women's Health Project:

Extending research beyond emergency settings to women seeking services after intimate partner abuse.

Collaborators: Rose Andom Center, Drs. Kim Gorgens and Julia Dmitrieva, and graduate students.

H **Have you ever Hit your Head or been Hit on the Head?** ☐ Yes ☐ No

Note: Prompt client to think about all incidents that may have occurred at any age, even those that did not seem serious: vehicle accidents, falls, assault, abuse, sports, etc. Screen for domestic violence and child abuse, and also for service related injuries. A TBI can also occur from violent shaking of the head, such as being shaken as a baby or child.

E **Were you ever seen in the Emergency room, hospital, or by a doctor because of an injury to your head?** ☐ Yes ☐ No

Note: Many people are seen for treatment. However, there are those who cannot afford treatment, or who do not think they require medical attention.

L **Did you ever Lose consciousness or experience a period of being dazed and confused because of an injury to your head?** ☐ Yes ☐ No

Note: People with TBI may not lose consciousness but experience an "alteration of consciousness." This may include feeling dazed, confused, or disoriented at the time of the injury, or being unable to remember the events surrounding the injury.

P **Do you experience any of these Problems in your daily life since you hit your head?** ☐ Yes ☐ No

Note: Ask your client if s/he experiences any of the following problems, and ask when the problem presented. You are looking for a combination of two or more problems that were not present prior to the injury.

- ☐ headaches
- ☐ dizziness
- ☐ anxiety
- ☐ depression
- ☐ difficulty concentrating
- ☐ difficulty remembering
- ☐ difficulty reading, writing, calculating
- ☐ poor problem solving
- ☐ difficulty performing your job/school work
- ☐ change in relationships with others
- ☐ poor judgment (being fired from job, arrests, fights)

S **Any significant Sicknesses?** ☐ Yes ☐ No

Note: Traumatic brain injury implies a physical blow to the head, but acquired brain injury may also be caused by medical conditions, such as: brain tumor, meningitis, West Nile virus, stroke, seizures. Also screen for instances of oxygen deprivation such as following a heart attack, carbon monoxide poisoning, near drowning, or near suffocation.

Ohio State University TBI Identification Method — Interview Form

Step 1

Ask questions 1-5 below. Record the cause of each reported injury and any details provided spontaneously in the chart at the bottom of this page. You do not need to ask further about loss of consciousness or other injury details during this step.

I am going to ask you about injuries to your head or neck that you may have had anytime in your life.

1. In your lifetime, have you ever been hospitalized or treated in an emergency room following an injury to your head or neck? Think about any childhood injuries you remember or were told about.
   ☐ No ☐ Yes—Record cause in chart
2. In your lifetime, have you ever injured your head or neck in a car accident or from crashing some other moving vehicle like a bicycle, motorcycle or ATV?
   ☐ No ☐ Yes—Record cause in chart
3. In your lifetime, have you ever injured your head or neck in a fall or from being hit by something (for example, falling from a bike or horse, rollerblading, falling on ice, being hit by a rock)? Have you ever injured your head or neck playing sports or on the playground?
   ☐ No ☐ Yes—Record cause in chart
4. In your lifetime, have you ever injured your head or neck in a fight, from being hit by someone, or from being shaken violently? Have you ever been shot in the head?
   ☐ No ☐ Yes—Record cause in chart
5. In your lifetime, have you ever been nearby when an explosion or a blast occurred? If you served in the military, think about any combat- or training-related incidents.
   ☐ No ☐ Yes—Record cause in chart

Interviewer instruction:
If the answers to any of the above questions are "yes," go to Step 2. If the answers to all of the above questions are "no," then proceed to Step 3.

Step 2

Interviewer instruction: If the answer is "yes" to any of the questions in Step 1 ask the following additional questions about each reported injury and add details to the chart below.

Were you knocked out or did you lose consciousness (LOC)?

If yes, how long?

If no, were you dazed or did you have a gap in your memory from the injury?

How old were you?

Step 3

Interviewer instruction: Ask the following questions to help identify a history that may include multiple mild TBIs and complete the chart below.

Have you ever had a period of time in which you experienced multiple, repeated impacts to your head (e.g. history of abuse, contact sports, military duty)?

If yes, what was the typical or usual effect—were you knocked out (Loss of Consciousness - LOC)?

If no, were you dazed or did you have a gap in your memory from the injury?

What was the most severe effect from one of the times you had an impact to the head?

How old were you when these repeated injuries began? Ended?

Step 1	Step 2						
	Loss of consciousness (LOC)/knocked out				Dazed/Mem Gap		Age
Cause	No LOC	< 30 min	30 min-24 hrs	> 24 hrs	Yes	No	

If more injuries with LOC: How many?_____ Longest knocked out?_____ How many ≥ 30 mins.?_____ Youngest age?_____

Step 3	Typical Effect		Most Severe Effect				Age	
Cause of repeated injury	Dazed/ memory gap, no LOC	LOC	Dazed/ memory gap, no LOC	LOC < 30 min	LOC 30 min - 24 hrs.	LOC > 24 hrs.	Began	Ended

Step 1	Step 2						
	Loss of consciousness (LOC)/knocked out				Dazed/Mem Gap		Age
Cause	No LOC	< 30 min	30 min-24 hrs	> 24 hrs	Yes	No	

If more injuries with LOC: How many?_____ Longest knocked out?_____ How many ≥ 30 mins.?_____ Youngest age?_____

Step 3	Typical Effect		Most Severe Effect				Age	
Cause of repeated injury	Dazed/ memory gap, no LOC	LOC	Dazed/ memory gap, no LOC	LOC < 30 min	LOC 30 min - 24 hrs.	LOC > 24 hrs.	Began	Ended

ngs

o have ongoing
he following:

ess before age 15

ver, including a period
enced multiple blows

s or a more severe TBI

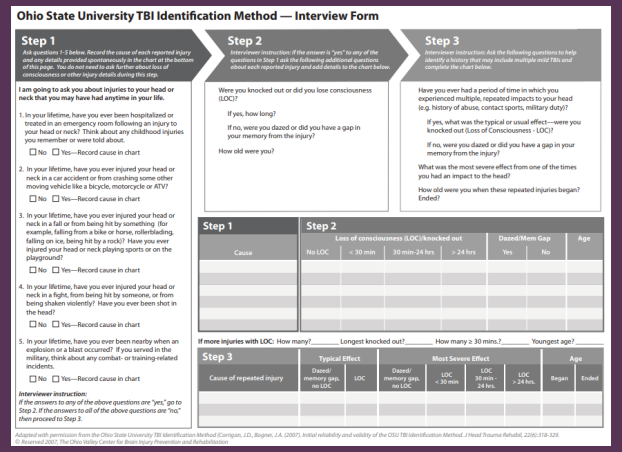
nother way that their
brain function has been impaired

For more information about TBI or the OSU TBI Identification Method visit:

- Ohio Valley Center at OSU
  www.ohiovalley.org/informationeducation
- BrainLine.org
  www.brainline.org

(Updated July 2013)

	Item	n	%
HELPS-Lifetime (n=102)	Have you ever Hit your Head or been Hit on the head? (H)	86	84.3%
	Were you ever seen in the Emergency room, hospital, or by a doctor because of an injury to your head? (E)	59	57.8%
	Did you ever Lose consciousness or experience a period of being dazed and confused because of an injury to your head? (L)	69	67.6%
	H or E	87	85.3%
	H or E or L	87	85.3%
	H or E plus L	69	67.6%
	H or E plus L plus at least 2 symptoms	63	61.8%
OSU (n = 99)	Any head injury	86	86.9%
	Any head injury plus AOC	79	79.8%



Ohio State University TBI Identification Method — Interview Form

Step 1

Ask questions 1-5 below. Record the cause of each reported injury and any details provided spontaneously in the chart at the bottom of this page. You do not need to ask further about loss of consciousness or other injury details during this step.

I am going to ask you about injuries to your head or neck that you may have had anytime in your life.

1. In your lifetime, have you ever been hospitalized or treated in an emergency room following an injury to your head or neck? Think about any childhood injuries you remember or were told about.
   ☐ No ☐ Yes—Record cause in chart
2. In your lifetime, have you ever injured your head or neck in a car accident or from crashing some other moving vehicle like a bicycle, motorcycle or ATV?
   ☐ No ☐ Yes—Record cause in chart
3. In your lifetime, have you ever injured your head or neck in a fall or from being hit by something (for example, falling from a bike or horse, rollerblading, falling on ice, being hit by a rock)? Have you ever injured your head or neck playing sports or on the playground?
   ☐ No ☐ Yes—Record cause in chart
4. In your lifetime, have you ever injured your head or neck in a fight, from being hit by someone, or from being shaken violently? Have you ever been shot in the head?
   ☐ No ☐ Yes—Record cause in chart
5. In your lifetime, have you ever been nearby when an explosion or a blast occurred? If you served in the military, think about any combat- or training-related incidents.
   ☐ No ☐ Yes—Record cause in chart

Interviewer instruction:
If the answers to any of the above questions are "yes," go to Step 2. If the answers to all of the above questions are "no," then proceed to Step 3.

Step 2

Interviewer instruction: If the answer is "yes" to any of the questions in Step 1 ask the following additional questions about each reported injury and add details to the chart below.

Were you knocked out or did you lose consciousness (LOC)?

If yes, how long?

If no, were you dazed or did you have a gap in your memory from the injury?

How old were you?

Step 3

Interviewer instruction: Ask the following questions to help identify a history that may include multiple mild TBIs and complete the chart below.

Have you ever had a period of time in which you experienced multiple, repeated impacts to your head (e.g. history of abuse, contact sports, military duty)?

If yes, what was the typical or usual effect—were you knocked out (Loss of Consciousness - LOC)?

If no, were you dazed or did you have a gap in your memory from the injury?

What was the most severe effect from one of the times you had an impact to the head?

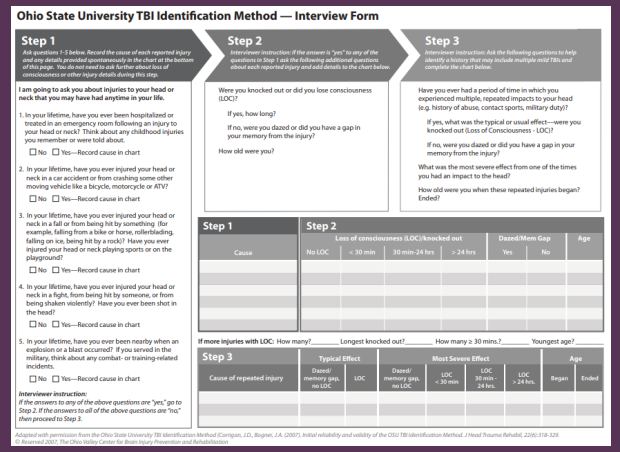
How old were you when these repeated injuries began? Ended?

Step 1	Step 2						
	Loss of consciousness (LOC)/knocked out				Dazed/Mem Gap		Age
Cause	No LOC	< 30 min	30 min-24 hrs	> 24 hrs	Yes	No	

If more injuries with LOC: How many?_____ Longest knocked out?_____ How many ≥ 30 mins.?_____ Youngest age?_____

Step 3	Typical Effect		Most Severe Effect				Age	
Cause of repeated injury	Dazed/ memory gap, no LOC	LOC	Dazed/ memory gap, no LOC	LOC < 30 min	LOC 30 min - 24 hrs.	LOC > 24 hrs.	Began	Ended

	n	%
Any head injury	86	86.90%
Any head injury plus AOC	79	79.80%
1st LOC before age 15	**19**	**19%**
LOC >30 min	**21**	**21%**
3+ with AOC	**55**	**54%**
3+ recent with AOC	**2**	**2%**



Ohio State University TBI Identification Method — Interview Form

Step 1

Ask questions 1-5 below. Record the cause of each reported injury and any details provided spontaneously in the chart at the bottom of this page. You do not need to ask further about loss of consciousness or other injury details during this step.

I am going to ask you about injuries to your head or neck that you may have had anytime in your life.

1. In your lifetime, have you ever been hospitalized or treated in an emergency room following an injury to your head or neck? Think about any childhood injuries you remember or were told about.
   ☐ No ☐ Yes—Record cause in chart
2. In your lifetime, have you ever injured your head or neck in a car accident or from crashing some other moving vehicle like a bicycle, motorcycle or ATV?
   ☐ No ☐ Yes—Record cause in chart
3. In your lifetime, have you ever injured your head or neck in a fall or from being hit by something (for example, falling from a bike or horse, rollerblading, falling on ice, being hit by a rock)? Have you ever injured your head or neck playing sports or on the playground?
   ☐ No ☐ Yes—Record cause in chart
4. In your lifetime, have you ever injured your head or neck in a fight, from being hit by someone, or from being shaken violently? Have you ever been shot in the head?
   ☐ No ☐ Yes—Record cause in chart
5. In your lifetime, have you ever been nearby when an explosion or a blast occurred? If you served in the military, think about any combat- or training-related incidents.
   ☐ No ☐ Yes—Record cause in chart

Interviewer instruction:
If the answers to any of the above questions are "yes," go to Step 2. If the answers to all of the above questions are "no," then proceed to Step 3.

Step 2

Interviewer instruction: If the answer is "yes" to any of the questions in Step 1 ask the following additional questions about each reported injury and add details to the chart below.

Were you knocked out or did you lose consciousness (LOC)?

If yes, how long?

If no, were you dazed or did you have a gap in your memory from the injury?

How old were you?

Step 3

Interviewer instruction: Ask the following questions to help identify a history that may include multiple mild TBIs and complete the chart below.

Have you ever had a period of time in which you experienced multiple, repeated impacts to your head (e.g. history of abuse, contact sports, military duty)?

If yes, what was the typical or usual effect—were you knocked out (Loss of Consciousness - LOC)?

If no, were you dazed or did you have a gap in your memory from the injury?

What was the most severe effect from one of the times you had an impact to the head?

How old were you when these repeated injuries began? Ended?

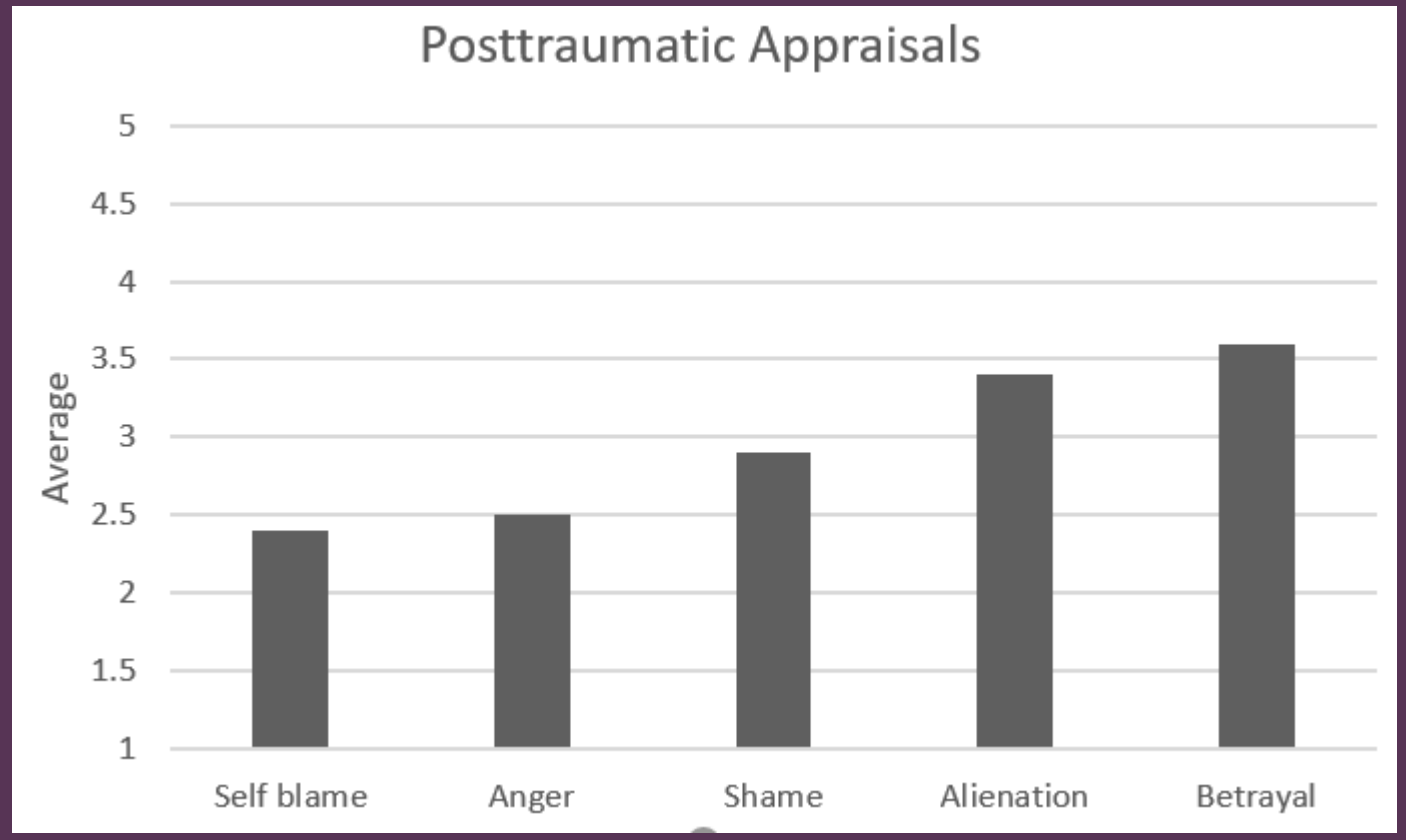
Step 1	Step 2						
	Loss of consciousness (LOC)/knocked out				Dazed/Mem Gap		Age
Cause	No LOC	< 30 min	30 min-24 hrs	> 24 hrs	Yes	No	

If more injuries with LOC: How many?_____ Longest knocked out?_____ How many ≥ 30 mins.?_____ Youngest age? _____

Step 3	Typical Effect		Most Severe Effect				Age	
Cause of repeated injury	Dazed/ memory gaps, no LOC	LOC	Dazed/ memory gaps, no LOC	LOC < 30 min	LOC 30 min - 24 hrs.	LOC > 24 hrs.	Began	Ended

	n	%	Of those, DV-specific:	
Any head injury	86	86.90%		
Any head injury plus AOC	79	79.80%		
1st LOC before age 15	**19**	**19%**		
LOC >30 min	**21**	**21%**	9	47%
3+ with AOC	**55**	**54%**	35	80%
3+ recent with AOC	**2**	**2%**	2	100%

Co-Occurring Psychological Distress



Symptom Severity	Average	
PTSD	14.4	Exceeds cutoff for probable PTSD
Depression	11.6	Moderate-severe

Co-Occurring Health and Service Needs

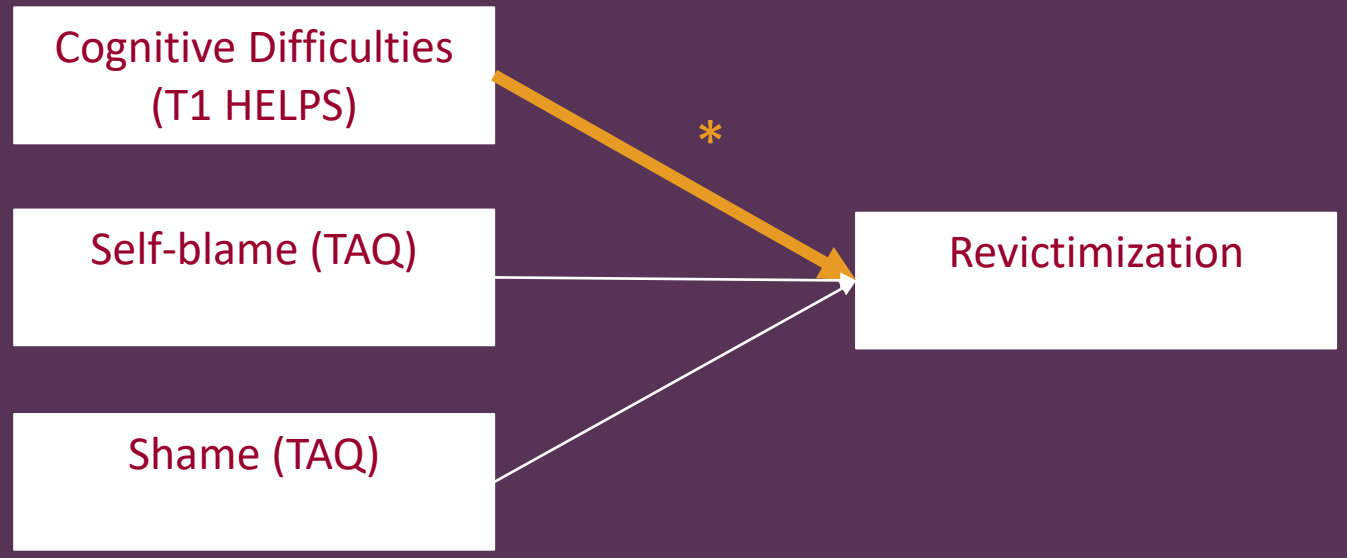
- Health Problems: Average of 8 over the year prior to T1
- General Service Needs: Average of 8 needs at T1
- Health Service Needs: 1 in 5 said that they did not get care right away when needed

Health Literacy and Trust in Physicians

- Spot of good news: High trust and literacy

Revictimization (Time 2, 3 months)

Exploring factors that might make risk detection and response more difficult and/or that perpetrators target.



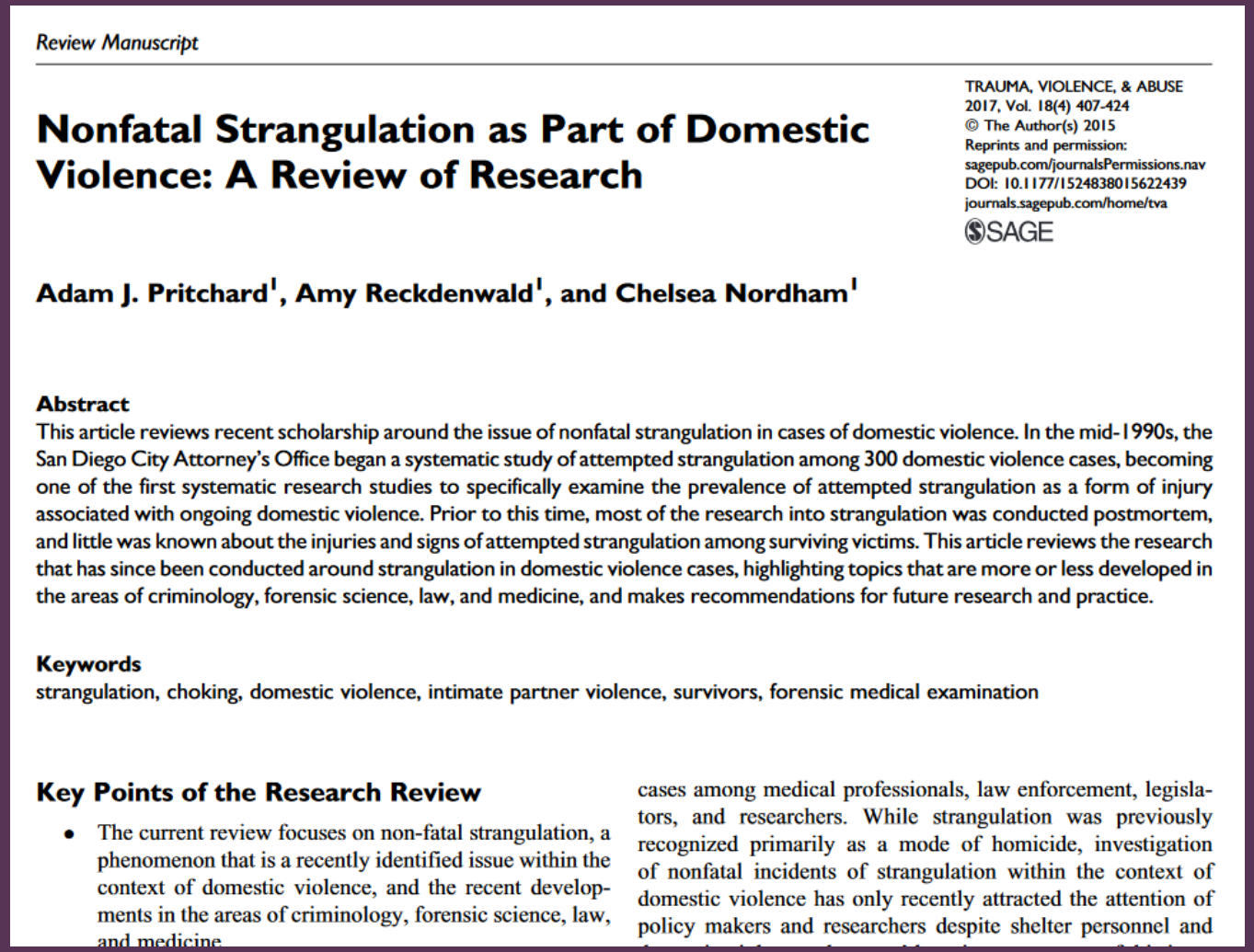
New head injuries (Time 2, 3 months)

10% of women reported a new head injury with AOC.

n=65

Other sources of potential brain injuries

At Time 1, 68.6% of respondents had been strangled by the target intimate partner.



Review Manuscript

Nonfatal Strangulation as Part of Domestic Violence: A Review of Research

TRAUMA, VIOLENCE, & ABUSE
2017, Vol. 18(4) 407-424

DOI: 10.1177/1524838015622439
journals.sagepub.com/home/tva
SAGE

Adam J. Pritchard[1], Amy Reckdenwald[1], and Chelsea Nordham[1]

Abstract

This article reviews recent scholarship around the issue of nonfatal strangulation in cases of domestic violence. In the mid-1990s, the San Diego City Attorney's Office began a systematic study of attempted strangulation among 300 domestic violence cases, becoming one of the first systematic research studies to specifically examine the prevalence of attempted strangulation as a form of injury associated with ongoing domestic violence. Prior to this time, most of the research into strangulation was conducted postmortem, and little was known about the injuries and signs of attempted strangulation among surviving victims. This article reviews the research that has since been conducted around strangulation in domestic violence cases, highlighting topics that are more or less developed in the areas of criminology, forensic science, law, and medicine, and makes recommendations for future research and practice.

Keywords

strangulation, choking, domestic violence, intimate partner violence, survivors, forensic medical examination

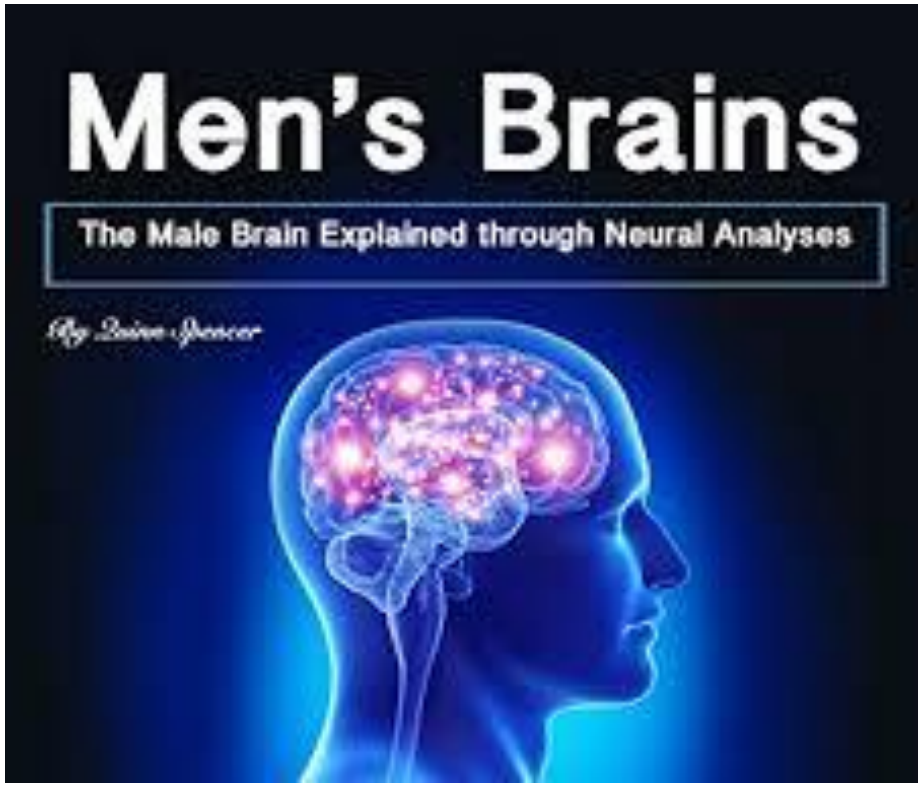
Key Points of the Research Review

- The current review focuses on non-fatal strangulation, a phenomenon that is a recently identified issue within the context of domestic violence, and the recent developments in the areas of criminology, forensic science, law, and medicine

cases among medical professionals, law enforcement, legislators, and researchers. While strangulation was previously recognized primarily as a mode of homicide, investigation of nonfatal incidents of strangulation within the context of domestic violence has only recently attracted the attention of policy makers and researchers despite shelter personnel and

Considering these findings in larger research context:

Female Brains are Unique


Men's Brains
The Male Brain Explained through Neural Analyses

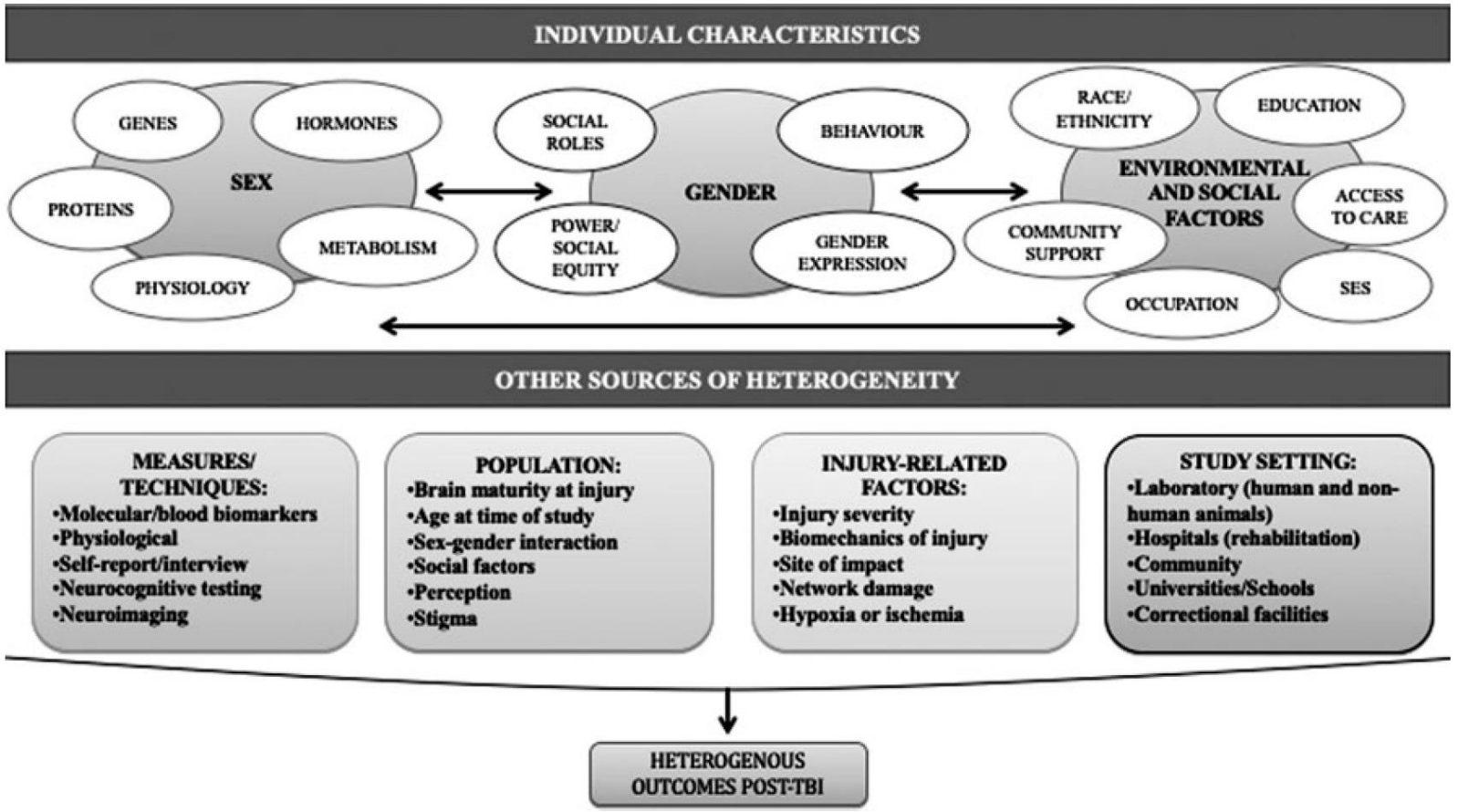


Figure 1. Flowchart summarizing the interrelated constructs of sex and gender, specifically in the context of traumatic brain injury. Relationships are depicted bidirectionally (⟷). Adapted with permission from Mollayeva et al.[7] SES indicates socioeconomic status; TBI, traumatic brain injury.

Valera, et al., 2021. Understanding Traumatic Brain Injury in Females: A State-of-the-Art Summary and Future Directions. *Journal of Head Trauma Rehabilitation.*

Special Risks to Women

- Women report significantly more postconcussive symptoms and have a higher rate of long-term disability
  - **(Bazarian, et al., 2010; Corrigan et al., 2010)**
- Poorer physical health after injury (e.g., more inflammation)
  - **(Bonomi et al., 2006; Kwako, et al., 2011**)
- More cognitive difficulties, including executive dysfunction and memory deficits after injury
  - (**Faul, et al., 2010; Ryan & Warden, 2003**)
- More affective problems, particularly suicidality after injury
  - (**Perna, 2005; Wasserman, et al., 2008**)
- Higher risk of early onset dementing disease
  - **(Mollayeva, et al., 2019)**
- 50% women with TBI reported not receiving needed care, particularly for mental health symptoms
  - More structural and financial barriers than women without TBI
    - **(Toor et al., 2016)**

Violence-Related TBI

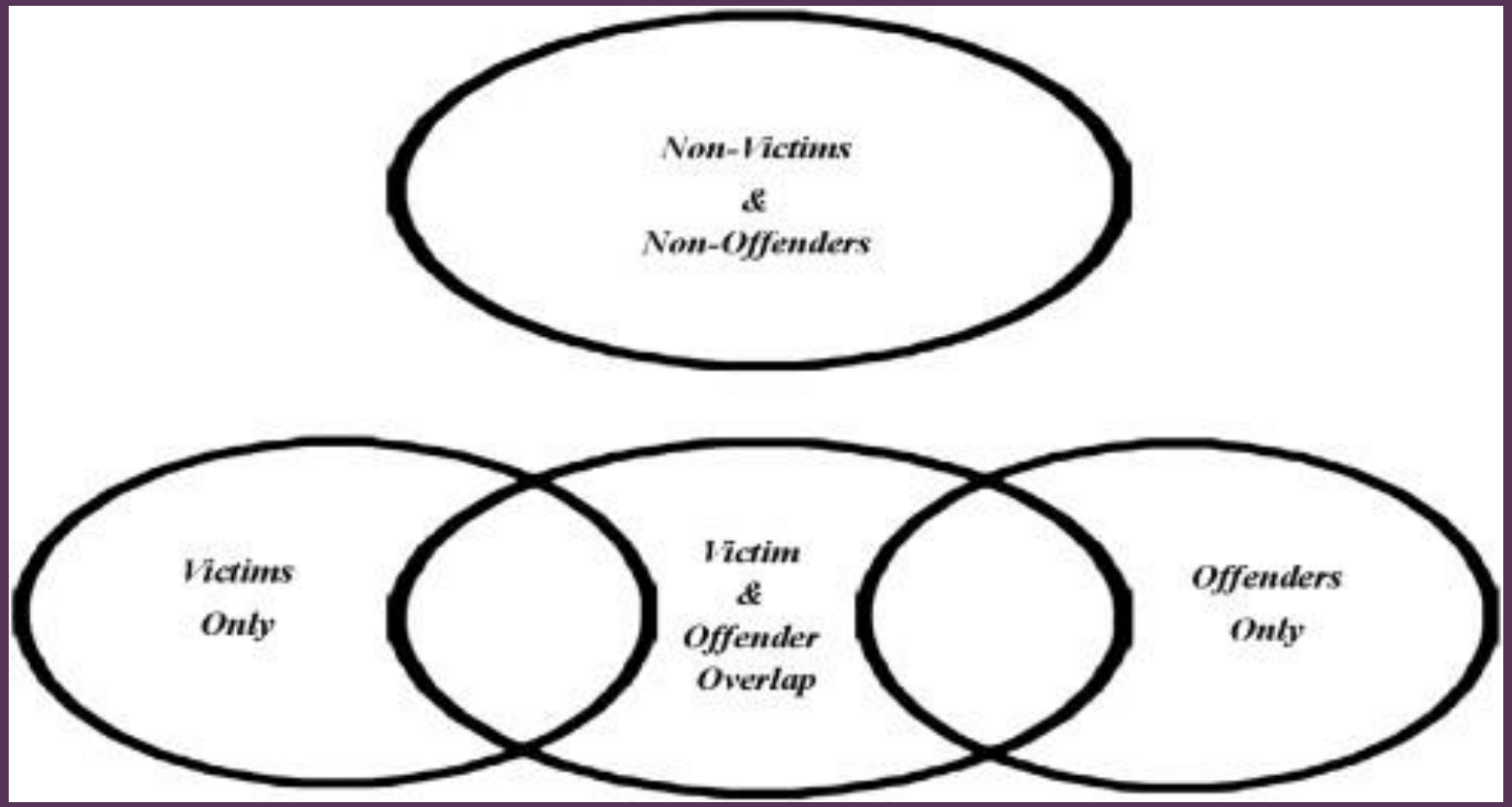
- Violence-related TBI is associated with poorer outcomes
  - Poorer community integration
  - Poorer social productivity
  - Higher rates of public sector income sources compared with survivors of nonviolent TBI
    - **(Bruns & Hauser, 2003; Schopp, et al., 2006)**
- At 1-year post-injury, unemployment and divorce rate increased more in violently injured group than any other group with TBI
  - **(Bushnik et al., 2003)**

Criminal Justice

- Gender differences disappear completely in the justice-involved population
  - Rate of TBI is 5 to 7 percentage points higher among incarcerated women compared with incarcerated men
    - **(Fishbein, et al., 2014; Shiroma, et al., 2010)**
- Women with a TBI history have a 144% higher rate of violent infractions
  - **(Shiroma, et al., 2010)**
- CHICKEN→EGG
  - Relationship between violence and criminality in women after TBI
  - Women with histories of TBI are more likely to have sustained their TBI prior to their first criminal offense
    - **(Colantonio, et al., 2014)**
  - TBIs with loss of consciousness (LOC), suicide attempts, recent physical abuse, and low cortisol levels, are correlated with conviction for violent crimes (number of TBIs with LOC was the strongest predictor)
    - **(Shiroma, et al., 2010)**

Victim/Offender Overlap

Prison wardens and health care workers estimate that 75% to 90% of incarcerated women have experienced intimate partner violence **(Zust, 2009)**



Women in the System

Wall, K. C., Gorgens, K., Dettmer, J., Davis, T. M., & Gafford, J. (2018). Violence related traumatic brain injury in justice-involved women. *Journal of Interpersonal Violence*, *45(10)*, p.1588-1605.

- Women were twice as likely as men to incur multiple TBIs of any kind and ***six times more likely*** to have multiple TBIs related to violence.
- Violence-related TBIs were associated with more reports of physical illness
- Violently-injured women had longer total incarceration times
  - Not due to more violent offenses but to rearrest
- Women were overwhelmingly more likely to have two or more violence-related injuries within close proximity to each other
  - This may increase their risk of developing neuropathological conditions as they age

Gorgens, K., Meyer, L., Dettmer, J., Lyman, H., Matson, J., Kantor, C., & Knauer, R. (In preparation). Women in Criminal Justice with Traumatic Brain Injury: Differences in Comorbidities and Criminal History.

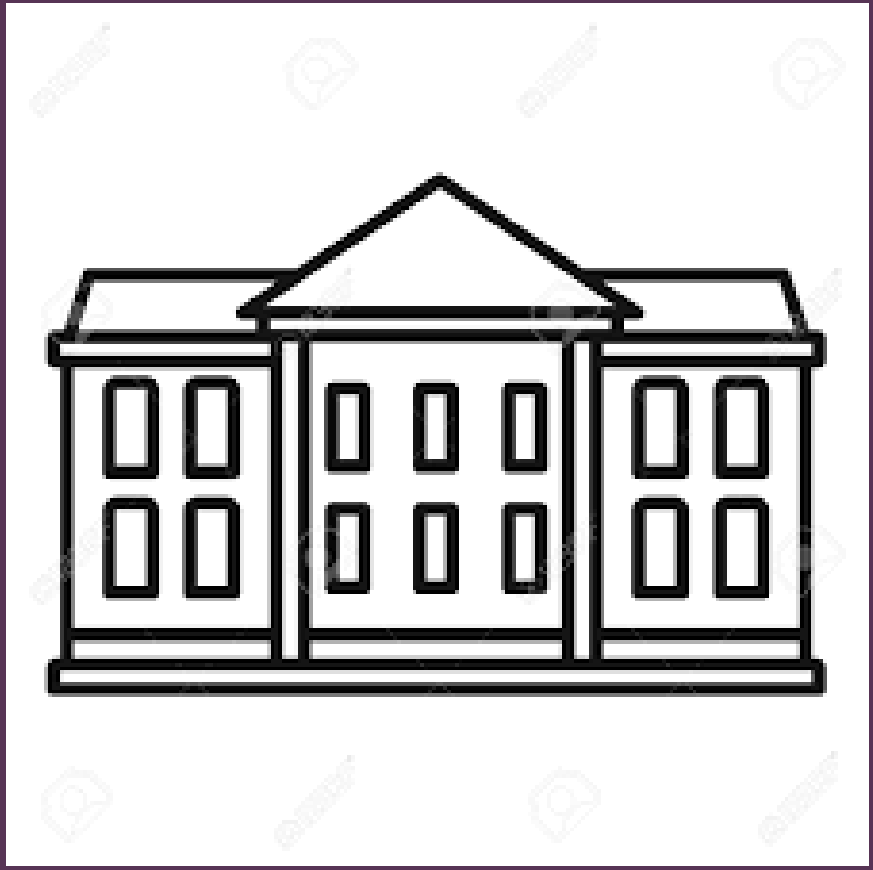
- Females were more likely than males
  - to have a physical health complaint, $\chi^2(1, n = 944) = 10.683$, $p<.005$;
  - to have a mental illness, $\chi^2(1, n = 959) = 28.238$, $p<.001$;
  - to be prescribed psychiatric medications, $\chi^2(1, n = 958) = 11.112$, $p<.005$;
  - to have made a suicide attempt, $\chi^2(1, n = 938) = 26.952)$, $p<.001$;
  - be the victim of childhood violence, $\chi^2(1, n = 940) = 9.819$, $p<.005$;
  - be the victim of adulthood violence, $\chi^2(1, n = 938) = 93.152$, $p<.001$.
- There were no gender differences in total length of time incarcerated, $t(879) = -.002$, $p = .496$ but females reported significantly fewer criminal convictions for personal crime than males, $\chi^2(1, n = 929) = 19.278$, $p<.001$, and for DUI/DWAI, $\chi^2(1, n = 895) = 9.234$, $p<.005$, and no differences in the frequency of property crime conviction, $\chi^2(1, n = 919) = 3.101$, $p=.078$; inchoate crime conviction, $\chi^2(1, n = 900) = .253$, $p=.615$; statutory offense, $\chi^2(1, n = 890) = 0$, $p=.994$; and drug-related charges, $\chi^2(1, n = 906) = 3.906$, $p=.048$.
- **Most common mechanism of injury for both genders was assault**

- Repeated TBIs have been associated with an increased risk for long-term cognitive decline, poor physical health outcomes, poor mental health outcomes, and increased risk of substance abuse
  - **(Murray et al., 2016; Valera & Berenbaum, 2003)**

Implications

…for Identifying Cases in Victim Services

Victim Advocacy



Trauma Research Notes
News from the Traumatic Stress Studies (TSS) Group

Home Blog Research News For Fun Contact

Legal, Legal, Legal: A Tool for Screening Legal Needs

"She failed to legal legal, which is legally legal, per legal." That's how a rapid fire exchange between a magistrate and lawyer sounds to Alex, the protagonist in Netflix's hit series *Maid*.

In this particular episode, Alex appears at a custody hearing wearing clothes borrowed from the woman staying one floor above her at a domestic violence shelter. As she walks into the courtroom, Alex learns that her abusive partner has a lawyer; she does not. In a few brief moments of screen time, *Maid* shows how quickly and utterly survivors can be alienated in legal systems that have tremendous power over their lives.

Victim doesn’t show for interview or to court…

Victim doesn’t show for interview or to court…

“She didn’t cooperate.”

Implications for Screening

H **Have you ever Hit your Head or been Hit on the Head?** ☐ Yes ☐ No

Note: Prompt client to think about all incidents that may have occurred at any age, even those that did not seem serious: vehicle accidents, falls, assault, abuse, sports, etc. Screen for domestic violence and child abuse, and also for service related injuries. A TBI can also occur from violent shaking of the head, such as being shaken as a baby or child.

E **Were you ever seen in the Emergency room, hospital, or by a doctor because of an injury to your head?** ☐ Yes ☐ No

Note: Many people are seen for treatment. However, there are those who cannot afford treatment, or who do not think they require medical attention.

L **Did you ever Lose consciousness or experience a period of being dazed and confused because of an injury to your head?** ☐ Yes ☐ No

Note: People with TBI may not lose consciousness but experience an "alteration of consciousness." This may include feeling dazed, confused, or disoriented at the time of the injury, or being unable to remember the events surrounding the injury.

P **Do you experience any of these Problems in your daily life since you hit your head?** ☐ Yes ☐ No

Note: Ask your client if s/he experiences any of the following problems, and ask when the problem presented. You are looking for a combination of two or more problems that were not present prior to the injury.

- ☐ headaches
- ☐ dizziness
- ☐ anxiety
- ☐ difficulty reading, writing, calculating
- ☐ poor problem solving
- ☐ difficulty performing your job/school work
- ☐ change in relationships with others
- ☐ poor judgment (being fired from job, arrests, fights)

☐ Yes ☐ No

blow to the head, but acquired brain injury may also be caused by
ingitis, West Nile virus, stroke, seizures. Also screen for instances of
ttack, carbon monoxide poisoning, near drowning, or near suffocation.

Name: DOB: Interviewer Initials: Date: ☐ ML OR ☐ Booking #: (If Applicable)

County of Residence:

OSU Brain Injury Identification Method — Interview Form

Additional table on second page, if needed

Step 1

Ask questions 1-5 below. Record the cause of each reported injury and any details provided spontaneously in the chart on the subsequent page. You do not need to ask further about loss of consciousness or other injury details during this step.

I am going to ask you about injuries to your head or neck that you may have had anytime in your life.

1. In your lifetime, have you ever been hospitalized or treated in an emergency room following an injury to your head or neck? Think about any childhood injuries you remember or were told about.
   ☐ No ☐ Yes—Record cause in chart
2. In your lifetime, have you ever injured your head or neck in a car accident or from crashing some other moving vehicle like a bicycle, motorcycle, or ATV?
   ☐ No ☐ Yes—Record cause in chart
3. In your lifetime, have you ever injured your head or neck in a fall or from being hit by something (for example: falling on ice, being hit by a rock)? Have you ever injured your head or neck playing sports or on the playground?
   ☐ No ☐ Yes—Record cause in chart
4. In your lifetime, have you ever injured your head or neck in a fight, from being hit by someone, or from being shaken violently? Have you ever been shot in the head?
   ☐ No ☐ Yes—Record cause in chart
5. In your lifetime, have you ever been nearby when an explosion or a blast occurred? If you served in the military, think about any combat or training-related incidents.
   ☐ No ☐ Yes—Record cause in chart

Interviewer instruction:
If the answers to any of the above questions are "yes," go to Step 2. If the answers to all of the above questions are "no," then proceed to Step 3.

Step 2

Interviewer instruction: If the answer is "yes" to any of the questions in Step 1 ask the following additional questions about each reported injury and add details to the chart on the subsequent page.

Were you knocked out or did you lose consciousness (LOC)?

If yes, how long?

If no, were you dazed or did you have a gap in your memory from the injury?

How old were you?

Step 1	Step 2						
	Loss of consciousness (LOC) / Knocked Out				Dazed/Memory Gap		
Cause	No LOC	<30 min	30 min – 24 hrs	>24 hrs	Yes	No	Age
	☐	☐	☐	☐	☐	☐	
	☐	☐	☐	☐	☐	☐	
	☐	☐	☐	☐	☐	☐	
	☐	☐	☐	☐	☐	☐	
	☐	☐	☐	☐	☐	☐	
	☐	☐	☐	☐	☐	☐	

Step 3

Interviewer instruction: Ask the following questions to help identify a history that may include multiple mild TBIs and complete the Step 3 table on page 2.

Have you ever had a period of time in which you experienced multiple, repeated impacts to your head (e.g. history of abuse, contact sports, military duty)?

If yes, what was the typical or usual effect?

Were you ever knocked out, and if yes, how long did you lose consciousness?

Were you ever dazed or did you have a gap in your memory from the injury?

What was the most severe effect from one of the times you had an impact to the head?

How old were you when the injuries began?

Did you get your injuries within a six month timeframe?

Step 4

Interviewer instruction: Ask the following questions to help identify a history that may include other types of brain injury (NonTBI).

Have you EVER been told by a doctor or other health professional that you have had in the past or currently have any of the following:

- ☐ unmanaged or untreated epilepsy or seizures
- ☐ a stroke, cerebral vascular disease or a transient ischemic attack
- ☐ a tumor of the brain
- ☐ swelling of the brain (edema)
- ☐ a drug overdose (e.g., stopped breathing, required resuscitation)
- ☐ toxic effects or poisoning (e.g., carbon monoxide poisoning)
- ☐ infection like meningitis or encephalitis
- ☐ a brain bleed or hemorrhage
- ☐ loss of oxygen to the brain for 2 minutes or more - like from a time when you stopped breathing, had a near drowning
- ☐ experienced a strangulation in which you lost consciousness

MINDSOURCE UPDATE: MAR 2022

Name:

Step 1	Step 2						
	Loss of consciousness (LOC) / Knocked Out				Dazed/Memory Gap		
Cause	No LOC	<30 min	30 min – 24 hrs	>24 hrs	Yes	No	Age
	☐	☐	☐	☐	☐	☐	
	☐	☐	☐	☐	☐	☐	
	☐	☐	☐	☐	☐	☐	

individual reports one moderate to severe TBI. Moderate and severe TBI indicated by report of loss of consciousness (LOC) greater than 30 minutes.

Step 3	Typical Effect		Most Severe Effect			Age	
Cause of Repeated Injury	Dazed/ Memory Gap, No LOC	LOC	Dazed/Memory Gap, No LOC	LOC<30 min	LOC 30 min – 24 hrs	Approx Age When Injuries Began	
	☐	☐	☐	☐	☐ ☐		
	☐	☐	☐	☐	☐ ☐		
	☐	☐	☐	☐	☐ ☐		
	☐	☐	☐	☐	☐ ☐		

Step 4

Cause	Typical Effect	
	Dazed/Memory Gap, No LOC	LOC
	☐	☐
	☐	☐
	☐	☐
	☐	☐

Implications

…for Support

Implications for Support

- Basic Accommodations
  - Make a point to minimize distractions
  - Incorporate short breaks
  - Check understanding
- Multiple reminders
- Write information down
  - **Balance** with safety: *What if the abuser intercepts reminders or finds written information?*

CARE Head Injury Accommodations

Staff Completing Checklist: _____

Survivor Name: _____ Date: _____

DON'T FORGET: CONNECT FIRST!

Common Brain Injury Accommodations

- [ ] Have flexible staff schedules or open hours where people can drop in without an appointment
- [ ] Put signs up in your building that point towards exits, kitchen, bathroom, etc.
- [ ] Slow down information, plan for additional time
- [ ] Do a mind map of resources (identifying sources of support, agency involvement, agencies they would like to work with, medical providers, etc.) and have a hard copy for assistance
- [ ] Repeat things frequently and have them repeat back to you, in their own words, what you talked about
- [ ] Provide written information and document conversations as much as possible, for recall
- [ ] Provide calendars, notebooks and checklists to help with memory
- [ ] Check in with survivor often, particularly in the beginning of their stay
- [ ] Identify some "go to" people that can assist with anything that comes up
- [ ] Have staff wear nametags for memory or processing challenges
- [ ] Give Invisible Injuries Booklet to survivors and review with them

https://www.odvn.org/wp-content/uploads/2021/11/Head_Injury_Accommodations.pdf

Abused & Brain Injured

brought to you by ABIResearchLab

Understanding the Intersection of Intimate Partner Violence and Traumatic Brain Injury

Survivors and their friends and families

If you are a survivor, or a survivor's friend or family member, use this toolkit to learn about:

- Traumatic Brain Injury (TBI)
- Survivor stories
- Regional service providers
- Mental health & TBI
- Communication & TBI
- Strategies to cope with TBI

Frontline workers

We want to help make your job easier. If you are a service provider, use this toolkit to learn about:

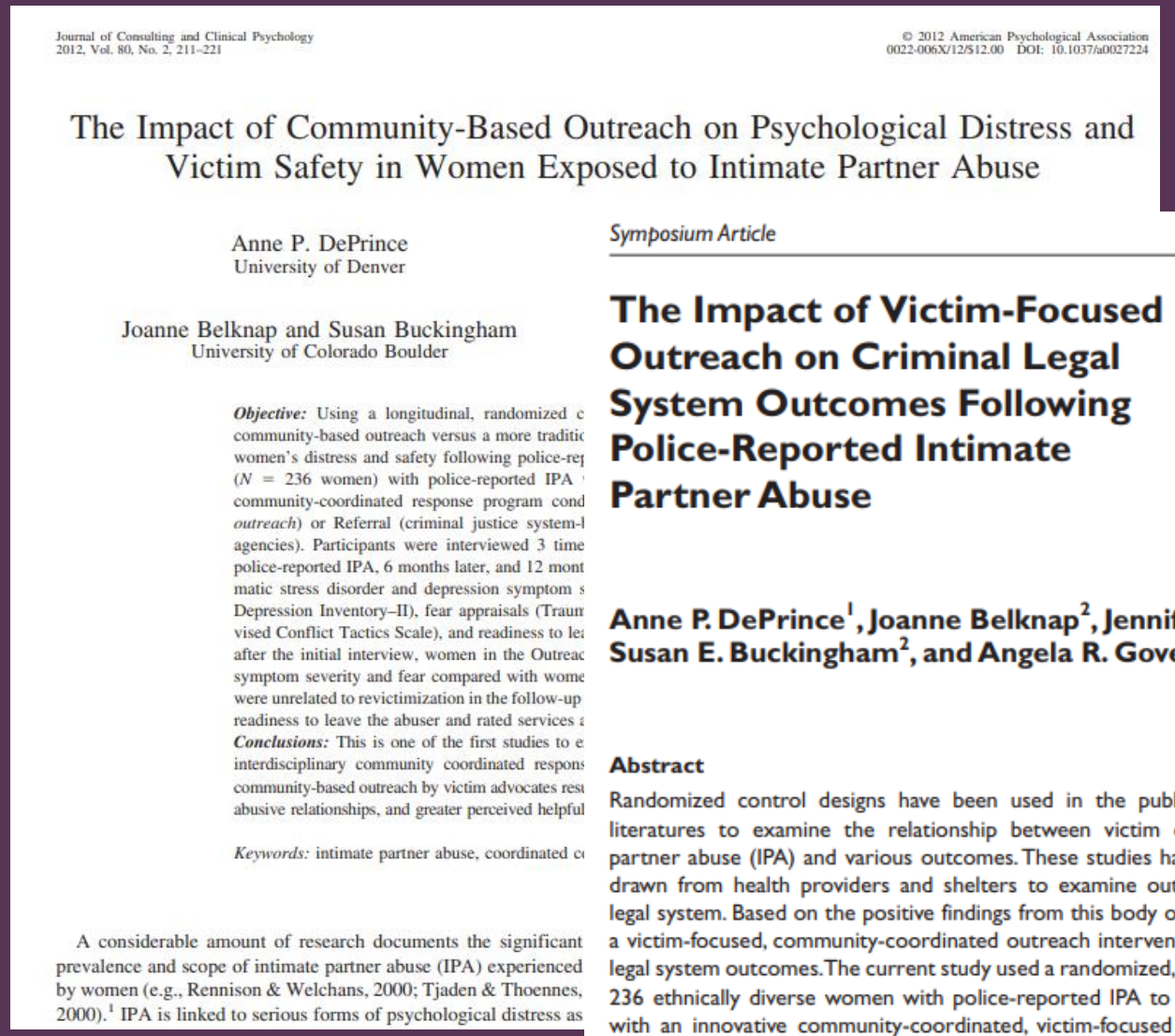
- Communication challenges & how to adapt
- Strategies for working with TBI/IPV clients
- Barriers & facilitating factors
- To screen or not to screen
- Care guidelines
- Referral resources

Implications

…for Coordinated Care

The Triage Project

Research Goal: To test the impact of a community-coordinated response to domestic violence cases on victim well-being and criminal justice outcomes.



Journal of Consulting and Clinical Psychology
2012, Vol. 80, No. 2, 211–221

0022-006X/12/$12.00 DOI: 10.1037/a0027224

The Impact of Community-Based Outreach on Psychological Distress and Victim Safety in Women Exposed to Intimate Partner Abuse

Anne P. DePrince
University of Denver

Joanne Belknap and Susan Buckingham
University of Colorado Boulder

Objective: Using a longitudinal, randomized c
community-based outreach versus a more traditic
women's distress and safety following police-rep
(*N* = 236 women) with police-reported IPA
community-coordinated response program cond
outreach) or Referral (criminal justice system-l
agencies). Participants were interviewed 3 time
police-reported IPA, 6 months later, and 12 mont
matic stress disorder and depression symptom s
Depression Inventory–II), fear appraisals (Traum
vised Conflict Tactics Scale), and readiness to lea
after the initial interview, women in the Outreac
symptom severity and fear compared with wome
were unrelated to revictimization in the follow-up
readiness to leave the abuser and rated services a
Conclusions: This is one of the first studies to e
interdisciplinary community coordinated respons
community-based outreach by victim advocates resu
abusive relationships, and greater perceived helpful

Keywords: intimate partner abuse, coordinated c

A considerable amount of research documents the significant prevalence and scope of intimate partner abuse (IPA) experienced by women (e.g., Rennison & Welchans, 2000; Tjaden & Thoennes, 2000).[1] IPA is linked to serious forms of psychological distress as

Symposium Article

The Impact of Victim-Focused Outreach on Criminal Legal System Outcomes Following Police-Reported Intimate Partner Abuse

Violence Against Women
18(8) 861–881

DOI: 10.1177/1077801212456523
http://vaw.sagepub.com
SAGE

Anne P. DePrince[1], Joanne Belknap[2], Jennifer S. Labus[3], Susan E. Buckingham[2], and Angela R. Gover[4]

Abstract

Randomized control designs have been used in the public health and psychological literatures to examine the relationship between victim outreach following intimate partner abuse (IPA) and various outcomes. These studies have largely relied on samples drawn from health providers and shelters to examine outcomes outside the criminal legal system. Based on the positive findings from this body of research, we expected that a victim-focused, community-coordinated outreach intervention would improve criminal legal system outcomes. The current study used a randomized, longitudinal design to recruit 236 ethnically diverse women with police-reported IPA to compare treatment-as-usual with an innovative community-coordinated, victim-focused outreach program. Findings indicated that the outreach program was effective in increasing women's engagement with prosecution tasks as well as likelihood of taking part in prosecution of their abusers. Results were particularly robust among women marginalized by ethnicity and class, and those still living with their abusers after the target incident.

Keywords

coordinated community response, intimate partner violence, outreach, victim cooperation

Trauma-Informed

Voices | Opinion

The Invisible Victims of Traumatic Brain Injury

Most people know it's a problem for athletes and soldiers—but it affects victims of domestic violence even more

By Anne P. DePrince, Kim Gorgens on November 13, 2019

Credit: Getty Images

Thousands of athletes returned to high school, college and professional football fields this fall, renewing discussions about the risk for and potentially devastating consequences of traumatic brain injuries (TBI) in contact sports. However, an even larger population of people affected by TBI will continue to go unrecognized and undiagnosed: women who are victims of domestic violence.

One in seven women has been injured by an intimate partner. Among women experiencing domestic violence, a handful of research teams

READ THIS NEXT

POLICY & ETHICS
NASA Soars and Others Plummet in Trump's Budget Proposal
February 11, 2020 — Alexandra Witze, Nidhi Subbaraman, Giuliana Viglione, Jeff Tollefson and Nature magazine

COGNITION
Feral Dogs Respond to Human Hand Cues
1 hour ago — Susanne Bard

POLICY & ETHICS
Climate Change Once Again Left Out of Trump's Federal Budget
1 hour ago — Jason Chemnick, Thomas Frank and E&E News

ELECTRONICS
Augmented Reality Is Getting Real
1 hour ago — Wade Roush

PUBLIC HEALTH
Disease Caused by the Novel Coronavirus Officially Has a Name: Covid-19
2 hours ago — Andrew Joseph and STAT

POLICY & ETHICS
LEGO, We Have a Problem
2 hours ago — Rosanna Hughes | Opinion

Brain Injury

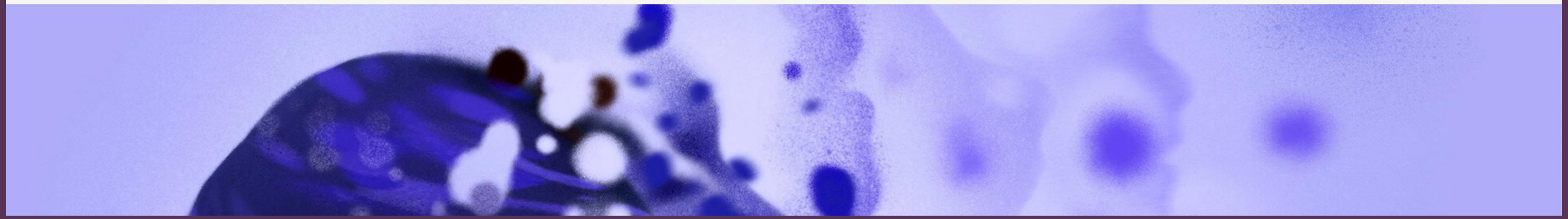
Never underestimate the transformative power of Self-Advocacy

FILED 10:00 p.m.
01.06.2022

LIFE INSIDE

The Criminal Justice Issue Nobody Talks About: Brain Injuries

I know firsthand what it's like to navigate the criminal justice system with a brain injury caused by domestic violence. I also live with the fact that an injury like mine can turn a victim into a perpetrator.



Thank you.

@apdeprince @bubblewrapbrain
traumaresearchnotes.blog

Partners: Rose Andom Center, Denver District Attorney's Office, Denver Police Department, SafeHouse Denver, Project Safeguard, Rocky Mountain Victim Law Center, The Blue Bench

TSS Group: Rebecca Babcock, Maria-Ernestina Christl, Melody Combs, Kerry Gagnon, Claire Hebenstreit, Michelle Lee, Hollis Lyman, Maria Novak, Ryan Matlow, Courtney Welton-Mitchell, Julie Olomi, Kim-Chi Pham, Rheena Pineda, Adi Rosenthal, Tejas Srinivas, Rebecca Suzuki, Kristin Weinzierl, Naomi Wright, undergraduate research assistants

Collaborators and Colleagues: Julia Dmitrieva, Joanne Belknap, Ann Chu, Susan Buckingham, Jennifer Labus

Participants

Funders: National Institute of Justice, Office of Justice Programs, US Department of Justice; MINDSOURCE, State of Colorado. Note: The opinions, findings, and conclusions or recommendations expressed in this talk are those of the author and do not necessarily reflect those of the Department of Justice or others.

Questions and Discussion

NASHIA

Other Training Events

Workshops-2023:

October 11 and 18, 2023
Trauma-Informed Meditation, Breathwork, and Psychoeducation for Brain Injury
Instructor: Kyla Pearce, MPH, PhD, CBIS

December 1, 2023
Noon – 3pm ET
Leading Groups in Virtual Spaces: Becoming a Better Facilitator: Part 2
Instructor: Amanda Tower

On Demand Training at www.nashia.org
NASHIA 2023 Webinar Series

Stay Tuned for our 2024 Webinar Series!

Thank you!