



Hello readers! Think of this document as a “fact sheet” where all the information that you just read is accounted for in a single file. The sections are divided just as they are in the table of contents, and the source is listed below each quotation.

1. Connecting Intimate Partner Violence (IPV) and Traumatic Brain Injuries (TBIs) a. What is a Traumatic Brain Injury (TBI)?

- i. *“Traumatic Brain Injuries (TBIs) have various gradients of severity.”*
 1. [The Center for Disease Control \(CDC\): Surveillance Report of Traumatic Brain Injury](#)
- ii. *“Mild traumatic brain injuries (mTBIs), which are the most common form.”*
 1. [Head, J. \(1993\). Definition of mild traumatic brain injury. *J Head Trauma Rehabil*, 8 \(3\), 86-87.](#)
- iii. *Definition of a mild traumatic brain injury (mTBI) with four accompanying bullet points.* 1. [Head, J. \(1993\). Definition of mild traumatic brain injury. *J Head Trauma Rehabil*, 8 \(3\), 86-87.](#)
- iv. *“A direct blow to the head is not necessary for someone to sustain a traumatic brain injury..”*
 1. [Head, J. \(1993\). Definition of mild traumatic brain injury. *J Head Trauma Rehabil*, 8 \(3\), 86-87.](#)
- v. *“Brain Injuries from intimate partner violence can also be caused via strangulation.”* 1. [Valera, E. M., & Berenbaum, H. \(2003\). Brain injury in battered women. *Journal of consulting and clinical psychology*, 71\(4\), 797.](#)

b. What is Intimate Partner Violence (IPV)?

- i. *“Violence perpetrated by a current or former romantic or sexual partner.”*
 1. [The Center for Disease Control: Violence Prevention](#)
- ii. *“These injuries can also be inflicted by parents onto children (child abuse) and other family members onto older relatives (elder abuse).”*
 1. [Sandel, E. \(2020\). *Shaken Brain: The Science, Care, and Treatment of Concussion*. Harvard University Press.](#)
- iii. *“IPV is the leading cause of homicide for women globally.”*
 1. [The Center for Disease Control: Violence Prevention](#)
- iv. *“IPV is the most common form of violence against women worldwide.”*
 1. [The Center for Disease Control: Violence Prevention](#)
- v. *“IPV has been shown to traverse all socioeconomic boundaries.”*
 1. [Bhona, F. M. D. C., Gebara, C. F. D. P., Noto, A. R., Vieira, M. D. T., & Lourenço, L. M. \(2019\). Socioeconomic factors and intimate partner violence: A household survey. *Trends in Psychology*, 27 \(1\), 205-218.](#)

2. Diagnosing the Injury

- a. Why Are Women Unaware That They Are Experiencing These Injuries?** i. *“The biological*

processes that dictate the presence of a TBI are too small to be detected by typical clinical screening devices.”

1. [Kontos, A. P., Huppert, T. J., Beluk, N. H., Elbin, R. J., Henry, L. C., French, J., & Collins, M. W. \(2014\). Brain activation during neurocognitive testing using functional near-infrared spectroscopy in patients following concussion compared to healthy controls. *Brain imaging and behavior*, 8 \(4\), 621-634.](#)
- ii. “The brains of people with mTBIs will appear normal on typical MRI or CT scans.” 1. [Kontos, A. P., Huppert, T. J., Beluk, N. H., Elbin, R. J., Henry, L. C., French, J., & Collins, M. W. \(2014\). Brain activation during neurocognitive testing using functional near-infrared spectroscopy in patients following concussion compared to healthy controls. *Brain imaging and behavior*, 8 \(4\), 621-634.](#)
- iii. “No medical professional will be able to ‘see’ the patient’s brain injury.”
 1. [Kontos, A. P., Huppert, T. J., Beluk, N. H., Elbin, R. J., Henry, L. C., French, J., & Collins, M. W. \(2014\). Brain activation during neurocognitive testing using functional near-infrared spectroscopy in patients following concussion compared to healthy controls. *Brain imaging and behavior*, 8 \(4\), 621-634.](#)
- iv. Venn diagram graphic with overlapping symptoms of IPV and a TBI.
 1. IPV: [Psych Central: Symptoms of Domestic Violence](#)
 2. TBI: [Center for Disease Control: Traumatic Brain Injury & Concussion](#)

b. How to Properly Screen for an IPV-related TBI

- i. “There are many different screening tools that are currently being recommended.” 1. [PINK Concussions Task Force Call, 05/26/20](#)
- ii. “In six states, there are conflicting recommendations for different screening tools from different state organizations.”
 1. [PINK Concussions Task Force Call, 05/26/20](#)
- iii. Bullet points describing the consensus among researchers about the elements that valid screening tools should include.
 1. [Valera, E. M., Campbell, J., Gill, J., & Iverson, K. M. \(2019\). Correlates of brain injuries in women subjected to intimate partner violence: Identifying the dangers and raising awareness. *Journal of Aggression, Maltreatment & Trauma*, 28 \(6\), 695-713.](#)
- iv. “Until further research is conducted to determine the gold standard for IPV-related TBI screening, it is important that professionals continue to use one of these recommended screening measures.”
 1. [Valera, E. M., Campbell, J., Gill, J., & Iverson, K. M. \(2019\). Correlates of brain injuries in women subjected to intimate partner violence: Identifying the dangers and raising awareness. *Journal of Aggression, Maltreatment & Trauma*, 28 \(6\), 695-713.](#)

3. Where the Research Stands & At-Risk Groups

a. What Do We Know About the Consequences of IPV-related TBIs?

- i. “In a sample of 99 women, 75% had experienced one traumatic brain injury, and 50% had experienced more than they could count.”
 1. [Valera, E. M., & Berenbaum, H. \(2003\). Brain injury in battered women. *Journal of consulting and clinical psychology*, 71 \(4\), 797.](#)
- ii. “The more brain injuries a woman sustains, the poorer she performs on measures of memory, learning, and cognitive flexibility.”
 1. [Valera, E. M., & Berenbaum, H. \(2003\). Brain injury in battered women. *Journal of consulting and clinical psychology*, 71 \(4\), 797.](#)
- iii. “This higher number of brain injuries was also correlated with higher rates of depression, anxiety, and PTSD.”
 1. [Valera, E. M., & Berenbaum, H. \(2003\). Brain injury in battered women.](#)

iv. "Neuroimaging has revealed that these women have less neural network connectivity based on the number of brain injuries sustained."

1. [Valera, E. M., Campbell, J., Gill, J., & Iverson, K. M. \(2019\). Correlates of brain injuries in women subjected to intimate partner violence: Identifying the dangers and raising awareness. *Journal of Aggression, Maltreatment & Trauma, 28 \(6\), 695-713.*](#)

v. "For 2 and 3, these findings were not accounted for by abuse severity, psychopathology, or substance abuse."

1. [Valera, E. M., & Berenbaum, H. \(2003\). Brain injury in battered women. *Journal of consulting and clinical psychology, 71 \(4\), 797.*](#)

b. What Groups Are at Particular Risk for These Consequences?

c. Veterans

i. "This group of women displays a 1.6 times higher rate of experiencing IPV than their non-military peers."

1. [Valera, E. M., Campbell, J., Gill, J., & Iverson, K. M. \(2019\). Correlates of brain injuries in women subjected to intimate partner violence: Identifying the dangers and raising awareness. *Journal of Aggression, Maltreatment & Trauma, 28 \(6\), 695-713.*](#)

ii. "Female veterans with an IPV-related TBI history had significantly higher levels of depression, PTSD, greater utilization of Veteran's Affairs (VA) healthcare, and poorer perceived physical health than women that had experienced IPV to the head region, but with no diagnosed TBI."

1. [Iverson, K. M., Dardis, C. M., & Pogoda, T. K. \(2017\). Traumatic brain injury and PTSD symptoms as a consequence of intimate partner violence. *Comprehensive Psychiatry, 74, 80-87.*](#)

d. Incarcerated Women

i. "Approximately 27% of inmates report receiving a TBI, compared to just 8.5% of women nationally."

1. [The Center for Disease Control: Traumatic Brain Injury in Prisons and Jails](#) ii.

"Female inmates convicted of violent crimes are more likely to have received a pre-crime TBI and/or physical abuse."

1. [The Center for Disease Control: Traumatic Brain Injury in Prisons and Jails](#)

iii. "Symptoms of brain injury (e.g., irritability) may be misinterpreted as insolence and punished by prison guards."

1. [The Center for Disease Control: Traumatic Brain Injury in Prisons and Jails](#) iv.

"Nearly 80% of incarcerated women are mothers, and TBI affects 50-80% of this population. These women experience poor maternal outcomes, such as postpartum depression, substance abuse disorder, anxiety, parenting behavior, and birth outcomes." 1. [PINK Concussions Task Force Call, 05/26/20](#)

e. Minority Women

i. "Racial minorities have greater difficulty reintegrating into their communities following a TBI. This includes resuming household duties, workplace responsibilities, and social activities."

1. [Sander, A. M., Pappadis, M. R., Clark, A. N., & Struchen, M. A. \(2011\). Perceptions of community integration in an ethnically diverse sample. *The Journal of head trauma rehabilitation, 26 \(2\), 158-169.*](#)

ii. "Hispanic and Black participants were found to have many misconceptions regarding TBIs, specifically about symptomology and recovery."

1. [Pappadis, M. R., Sander, A. M., Struchen, M. A., Leung, P., & Smith, D. W. \(2011\). Common misconceptions about traumatic brain injury among ethnic](#)

[minorities with TBI. *The Journal of head trauma rehabilitation*, 26 \(4\), 301-311.](#)

iii. *"Promisingly, Dr. Pappadis found that these misconceptions could be corrected via educational interventions."*

1. [Pappadis, M. R., Sander, A. M., Lukaszewska, B., Struchen, M. A., Leung, P., & Smith, D. W. \(2017\). Effectiveness of an educational intervention on reducing misconceptions among ethnic minorities with complicated mild to severe traumatic brain injury. *Archives of physical medicine and rehabilitation*, 98 \(4\), 751-758.](#)

f. Mothers

i. *"Battered mothers had adverse pregnancy outcomes, including low birth weight, preterm delivery, infant mortality, and maternal mortality."*

1. [Boy, A., & Salihu, H. M. \(2004\). Intimate partner violence and birth outcomes: a systematic review. *International journal of fertility and women's medicine*, 49 \(4\), 159-164.](#)

ii. *"However, even after delivery, the effects of repetitive TBIs can create erratic behavior in these women that causes difficulty with completing household tasks."*

1. [Van Vliet-Ruissen, C., McKinlay, A., & Taylor, A. \(2014\). Adult functioning of mothers with traumatic brain injury at high risk of child abuse: A pilot study. *NeuroRehabilitation*, 34 \(2\), 373-380.](#)

iii. *"In addition, the presence of children can increase a woman's inability to escape from an abusive relationship."*

1. [Van Vliet-Ruissen, C., McKinlay, A., & Taylor, A. \(2014\). Adult functioning of mothers with traumatic brain injury at high risk of child abuse: A pilot study. *NeuroRehabilitation*, 34 \(2\), 373-380.](#)

g. What about IPV-related TBIs in Men?

i. *"Estimates show that about 4% of men in the United States, or 2.5 million men, are victims of severe IPV from their partners each year."*

1. [National Center for Biotechnology Information: Domestic Violence](#)

ii. *"These male victims display higher levels of stress, depression, PTSD, and substance abuse."*

1. [Shuler, C. A. \(2010\). Male Victims of Intimate Partner Violence in the United States: An Examination of the Review of Literature through the Critical Theoretical Perspective. *International Journal of Criminal Justice Sciences*, 5 \(1\).](#)

iii. *"The criminal justice system in America often does not support men as victims in these situations."*

1. [Shuler, C. A. \(2010\). Male Victims of Intimate Partner Violence in the United States: An Examination of the Review of Literature through the Critical Theoretical Perspective. *International Journal of Criminal Justice Sciences*, 5 \(1\).](#)

iv. *"Many men hesitate to seek treatment due to fears that they will be ridiculed or embarrassed."*

1. [Shuler, C. A. \(2010\). Male Victims of Intimate Partner Violence in the United States: An Examination of the Review of Literature through the Critical Theoretical Perspective. *International Journal of Criminal Justice Sciences*, 5 \(1\).](#)

v. *"Male victims attest that the police will fail to respond, take a report, and in some cases, will even arrest the man as the violent perpetrator even when there is no evidence of injury to the female partner."*

1. [Shuler, C. A. \(2010\). Male Victims of Intimate Partner Violence in the United](#)

- vi. *“Domestic violence support resources such as hotlines will assume the man is the perpetrator and even direct them to batterers’ programs when they are the victim.”*
 - 1. [Shuler, C. A. \(2010\). Male Victims of Intimate Partner Violence in the United States: An Examination of the Review of Literature through the Critical Theoretical Perspective. *International Journal of Criminal Justice Sciences*, 5 \(1\).](#)

4. What Work is Being Done

a. PINK Concussions

- i. *“Organize international conferences for brain-injury researchers to share their work and promote further investigation in the field.”*
 - 1. [PINK Concussions: Pink Summits](#)
- ii. *“Inspires research into TBIs in women, specifically neuroimaging studies, via various award opportunities in different sub-fields of research that focus on female traumatic brain injuries.”*
 - 1. [PINK Concussions: Pink Awards](#)
- iii. *“Promote current research regarding gender differences in the female experience with TBIs in all forms of local, state, national, and international media and via a strong social media presence.”*
 - 1. [PINK Concussions: In the news](#)
- iv. *“Foster online support groups for women, girls, caregivers, parents, and medical professionals affected by TBIs.”*
 - 1. [PINK Concussions: Support Groups](#)
- v. *“Develop opportunities to get involved in advocating for women experiencing TBIs through the internationally-recognized, online PINK Internship program.”*
 - 1. [PINK Concussions: How You Can Help](#)

b. SOAR Project

- i. *“Explore the prevalence and severity of partner-inflicted brain injuries among these women via 1:1 interviews or lab-based assessments.”*
 - 1. [SOAR Project: What Are We Doing](#)
- ii. *“Educate the professionals working with survivors of intimate partner violence by designing training tools that provide the knowledge and skills needed to support those with a TBI.”*
 - 1. [SOAR Project: What Are We Doing](#)
- iii. *“Empower a community-based support system by bringing together service providers in health care, brain injury support, and gender-based violence sectors through their organization.”*
 - 1. [SOAR Project: What Are We Doing](#)

c. The Cridge Centre for the Family

- i. *“Providing childcare to children of struggling parents with supervised, structured programs that encourage the child’s personal development.”*
 - 1. [The Cridge Centre for the Family: Childcare Services](#)
- ii. *“Assist women and children who have experienced domestic violence via transitional housing, counseling, and support groups.”*
 - 1. [The Cridge Centre for the Family: Providing Shelter to Women](#)
- iii. *“Relieve poverty by supplying low or moderate-income families with affordable housing and additional programs to support them with other life necessities.”*
 - 1. [The Cridge Centre for the Family: Supportive Transitional Housing](#)

iv. "Promote health and well-being among survivors of brain injuries with assistance in daily tasks, health management, skills training, employment opportunities, and community involvement."

1. [The Cridge Centre for the Family: Brain Injury Services](#)

d. What about COVID-19?

i. "There has been an increase in gender-based violence in the Palestinian territories." 1.

[COVID-19 in Women: A Rapid Gender Analysis](#)

ii. "Mexico and Brazil have seen a spike in calls to domestic violence hotlines." 1. [Another Pandemic: In Latin America, Domestic Abuse Rises Amid Lockdown](#) iii. "Police officers in the city of Jingzhou, China report receiving three times as many domestic violence calls during this past February compared to the same month in 2019." 1. [Domestic Violence Cases Surge During COVID-19 Epidemic](#)

iv. "Economic insecurity and resulting poverty-related stress as a result of the economic crisis, the closing of many businesses, and the loss of jobs."

1. [Peterman, A., Potts, A., O'Donnell, M., Thompson, K., Shah, N., Oertelt-Prigione, S., & van Gelder, N. \(2020\). Pandemics and violence against women and children. Center for Global Development working paper, 528.](#)

v. "Forced-time with partners via quarantine protocols that isolate women with potentially abusive family members."

1. [Peterman, A., Potts, A., O'Donnell, M., Thompson, K., Shah, N., Oertelt-Prigione, S., & van Gelder, N. \(2020\). Pandemics and violence against women and children. Center for Global Development working paper, 528.](#)

vi. "Disaster-related unrest and instability that can instigate conflicts among partners or families."

1. [Peterman, A., Potts, A., O'Donnell, M., Thompson, K., Shah, N., Oertelt-Prigione, S., & van Gelder, N. \(2020\). Pandemics and violence against women and children. Center for Global Development working paper, 528.](#)

vii. "Reduced health-service availability and access to first responders due to the preoccupation with COVID-19."

1. [Peterman, A., Potts, A., O'Donnell, M., Thompson, K., Shah, N., Oertelt-Prigione, S., & van Gelder, N. \(2020\). Pandemics and violence against women and children. Center for Global Development working paper, 528.](#) viii. "Inability to temporarily escape abusive partners either by economic instability or the shutdown of many shelters or other resources."

1. [Peterman, A., Potts, A., O'Donnell, M., Thompson, K., Shah, N., Oertelt-Prigione, S., & van Gelder, N. \(2020\). Pandemics and violence against women and children. Center for Global Development working paper, 528.](#)