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Alyssa Hope Waters

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**Professional Doctoral Capstone on Occupation-Based Intervention for Individuals Who  
Have Experienced TBI and IPV: Role of OTs and Neurological Assessments**

By

Alyssa Waters

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A Capstone Project Presented to the  
FACULTY OF OCCUPATIONAL THERAPY  
GEORGIA STATE UNIVERSITY

In Partial Fulfillment of the  
Requirements for the Degree  
OCCUPATIONAL THERAPY DOCTORATE  
April 2024

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This proposal is a collective effort, and I am truly grateful for the generosity, guidance, and encouragement I have received from each of you.

Thank you from the very bottom of my heart,

Alyssa Waters

**Approval Forms**

**Approval Forms**

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<b>Degree Sought</b>	<b>Doctorate of Occupational Therapy</b>
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<b>Program</b>	<b>Georgia State University, OTD Program</b>

We, the undersigned, recommend that the Capstone Final Paper completed by the student listed above, in partial fulfillment of the degree requirements, be accepted by the Georgia State University.

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January 22, 2024

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Key Personnel: Holloway, Jade E; Waters, Alyssa H

Study Department: Georgia State University, Department of Occupational Therapy

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### **Abstract**

**Background:** This capstone project examines the intersection of intimate partner violence (IPV) and traumatic brain injuries (TBIs) within the framework of occupational therapy (OT). It aims to develop targeted OT interventions to address the complex needs of individuals impacted by these intertwined challenges.

**Purpose:** The purpose of this capstone project is to describe the role of occupational therapists in implementing an occupation-based course focused on building self-efficacy in various occupational performance areas (as defined by AOTA) for individuals who have experienced traumatic brain injury (TBI) as a result of intimate partner violence (IPV). Additionally, this project will explain a five-step neurological examination related to promoting the early identification of signs and symptoms of TBI to minimize occupational dysfunction and better address the health of this population.

**Methods:** By conducting a thorough review of the existing literature, needs assessment, and program development process, two programs were developed and implemented: an occupation-based group intervention for individuals who have experienced IPV-related TBIs and an educational program for shelter staff focused on identifying symptoms of TBI.

**Outcomes:** Although no data was gathered, details about the two programs are described in this paper. The results suggest the potential effectiveness of the two programs in addressing the unique needs of individuals affected by IPV-related TBIs.

**Discussion/Impact:** To advance progress, it is crucial to expand research efforts to better understand the impact of IPV-related TBIs, encourage interdisciplinary collaboration and continue the implementation of these programs. These actions can contribute to developing individualized approaches that promote independence and self-efficacy for individuals impacted by IPV-related TBIs.

**Conclusion:** This capstone project demonstrates the versatility of OT interventions in addressing the complex challenges of IPV-related TBIs. By focusing on self-efficacy, occupational performance and collaboration, meaningful progress can be made towards independence.

**KEY WORDS:** Traumatic brain injury, intimate partner violence, head trauma, occupational performance, occupational participation, increasing self-efficacy, occupational therapy

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## Summary

### *Background*

As an occupational therapy (OT) student, I am committed to making a meaningful, profound impact, specifically, working with individuals who have experienced trauma and hardship. Thus, the passion behind my desire to develop two community-based programs for individuals who have experienced traumatic brain injuries (TBIs) due to intimate partner violence (IPV) is intensely personal, serving as an impactful influence. Having witnessed the far-reaching effects of IPV in my own life, I carry a burning sentiment to advance the field of OT in a way that addresses the unique needs of this population.

This journey has been shaped by the realization that existing healthcare interventions, specifically in the realm of OT, often fall short of providing an all-encompassing solution for those navigating the complex intersection of IPV-related TBIs. This realization, combined with a desire to bridge the gaps in current practices and aid those who have experienced their own personal trauma, propels me toward developing two programs. One is a program that goes beyond acknowledging individuals' challenges in this context by actively working to empower them, fostering self-efficacy and independence, and promoting occupational performance. The latter is a program aimed at increasing shelter staff's knowledge of identifying the signs and symptoms of TBIs to facilitate early intervention and decrease occupational dysfunction.

The literature review within this paper serves as a scholarly exploration and a validation of the pressing need for both programs that aim to holistically integrate the elements of self-efficacy and occupational performance within this population. My overarching aim is to contribute to the literature and to create a tangible, real-world solution that can significantly enhance the lives of those who have experienced the effects of IPV-related TBIs.

This capstone project is not just an academic requirement; it is a manifestation of my desire to improve the well-being and independence of individuals who often find themselves at the intersection of trauma and recovery. The methods employed, from a key informant interview to a SWOT analysis, are not just research tools but strategic steps in understanding the needs of those within the shelter and developing a program that genuinely serves them. Overall, my interest in

this project is a personal commitment focused on creating programs that not only address the challenges faced by individuals with IPV-related TBIs but also empower them to reclaim control over their lives.

### ***Existing Problem***

Current interventions often fall short in addressing the comprehensive needs of those at the complex intersection of IPV-related TBIs. The literature review reveals gaps in integrating self-efficacy and occupational performance, emphasizing the need for targeted community-based programs in collaboration with OTs and IPV specialists.

### ***Purpose Statement***

The purpose of this capstone project is to describe the role of occupational therapists in implementing an occupation-based course focused on building self-efficacy in various occupational performance areas (as defined by AOTA) for individuals who have experienced traumatic brain injury (TBI) as a result of intimate partner violence (IPV). Additionally, this project will explain a five-step neurological examination related to promoting the early identification of signs and symptoms of TBI to minimize occupational dysfunction and better address the health of this population.

### ***Specific Aims***

1. To develop, implement, evaluate, and sustain a program that builds self-efficacy and occupational performance for individuals with IPV-related TBIs.
2. To develop, implement, evaluate, and sustain an additional program for shelter staff aimed at recognizing the signs and symptoms of IPV-related TBIs, fostering early intervention, and minimizing occupational dysfunction.

Upon achieving the above aims, this capstone project will contribute to OTs' knowledge, versatility, and implementation in delivering client-centered care to individuals with IPV-related TBIs to improve their occupational performance, roles, independence, self-efficacy, and overall quality of life.

### ***Outputs***

The capstone project outlines a structured plan for program development, implementation, evaluation, and sustainability. Educational tools and resources were created and disseminated throughout this process. A sustainable partnership with the capstone site was also established to ensure sustained impact.

### ***Significance and Impact***

This capstone project contributes to the field and advancements of OT and its interventions as it addresses the unique intersection of trauma and rehabilitation. Precisely, by targeting IPV-related TBIs, this project fills a discernible gap in current OT practice while simultaneously working to empower individuals by building self-efficacy and autonomy. This project demonstrates the versatility of OT and proves that the use and potential of OT interventions remain invaluable in helping individuals within this population become more independent and self-assured in their daily lives. Overall, this project takes a unique, holistic approach to OT and offers practical and meaningful solutions to those with IPV-related TBIs.

## **Chapter 1: Literature Review**

### ***The Prevalence of IPV and TBI***

Intimate Partner Violence (IPV) is a pervasive public health concern and a stark violation of women's human rights as recognized by the World Health Organization (WHO). The WHO predicts that one in three women across the globe will experience IPV in their lifetime, with IPV taking various forms, such as physical assaults, sexual violence, emotional manipulation, and controlling behaviors by an intimate partner (World Health Organization [WHO], 2017). Beyond immediate harm, IPV inflicts long-term health consequences. Over a third of women (36.4%) who endure IPV also experience psychological aggression, and 41% of women sustain physical injuries (Karakurt et al., 2022). Among these injuries, traumatic brain injuries (TBIs) are particularly concerning, with women who have experienced IPV being seven times more likely to suffer TBIs compared to those who have not experienced IPV (St. Ivany et al., 2018a).

Violence against women is not only a pressing health issue but also a pattern of behavior that infringes on the health, rights, and overall well-being of women and girls. This recognition is not ground-breaking; however, it is crucial to acknowledge that acts of violence form a continuum that affects women's physical, social, mental, occupational, and reproductive autonomy and health. While IPV affects both men and women in various capacities, the prevalence and impact on women is significantly higher. This disproportion explains why most research on screening and interventions for IPV is focused on female individuals who have experienced IPV (Condino et al., 2016).

As reported by the WHO in 2013, current global estimates indicate that around 35% of women have experienced "either physical and/or sexual IPV or non-partner sexual violence" at some point in their lives. Additionally, almost one-third (30%) of women who have been in an intimate relationship report "experiencing some form of physical and/or sexual aggression by their intimate partner" (WHO, 2013). These statistics highlight the urgent and comprehensive need for targeted interventions to address the complex challenges of TBIs and other health consequences due to IPV. The imperative to develop effective responses to IPV is grounded in the need to ultimately improve health outcomes and the fundamental aim to uphold women's human rights.

### ***The Intersection Between OT, IPV, and TBI in Improving Occupational Performance and Self-Efficacy***

IPV has long-term, multifaceted impacts on women's health following exposure to IPV experiences. These lasting impacts manifest in the mental and physical health of the individuals who have experienced it. Ford-Gilboe and colleagues (2009) have documented the detrimental health effects of IPV; despite this evidence, there is insufficient knowledge about the specific consequences of health outcomes post-separation from abusive partners. The past literature indicates that women report dealing with the consequences of IPV up to 20 months post-separation, with an extreme lack of personal and social resources such as self-efficacy and resilience, integral in the case of positive health outcomes (Ford-Gilboe et al., 2009).

Current evidence demonstrates that routine treatment, such as counseling and therapy, can reduce symptoms of PTSD and depression among individuals who have experienced IPV. However, OT is rarely adopted as part of the treatment protocol. Interventions cover a mosaic of factors that

span the facets of IPV, including safety, lifestyle, immediate consequences, and long-term trauma recovery (Smith & Holmes, 2018). Medical approaches often focus on safety behaviors and utilizing resources such as shelters and counseling services, while others provide vital information and referrals to healthcare services. Other treatments may be more comprehensive and may encompass education on stress management, exposure therapy, safety planning, PTSD symptom management, quality of life improvement, and post-shelter integration goals (Smith & Holmes, 2018). Various interventions have been explored, from culturally informed empowerment group therapy to social support groups, feminist-oriented counseling, and grief resolution counseling (Smith & Holmes, 2018). Shelters often adopt a model that promotes positive gender mirroring, recognizing the skills and worth of women and providing support against the sense of powerlessness that can arise in abusive contexts (Smith & Holmes, 2018). Furthermore, post-shelter community advocacy programs have effectively improved well-being and quality of life, underpinning the rationale for a program designed to provide continuous support over time, not just during the shelter stay but also after departure (Condino et al., 2016). Therapy advocacy services within shelters serve as a vital resource, channeling support, aiding individuals in accessing community resources, and enhancing their overall life satisfaction (Karakurt et al., 2022). This advocacy approach meets the broad spectrum of needs for those who have experienced IPV, stressing not only the importance of their health and quality of life but also their independence to provide for themselves and for the needs of their loved ones and their ability to participate in society in a self-assured manner. Additionally, Smith and Holmes (2018) presented a scoping review on therapeutic approaches to IPV, emphasizing the effectiveness of cognitive-behavioral therapy interventions in working with TBI. While the article acknowledged the challenges faced by individuals who have experienced IPV, it did not directly relate to OT and focused more on counseling services (Smith & Holmes, 2018).

Delving further into the literature on IPV and its repercussions on individuals who have experienced TBIs, it becomes evident that while there is ample discussion on self-efficacy and occupations, there is an absence of research integrating these essential facets. Studies have examined self-efficacy among healthcare professionals (Ambuel et al., 2013; Benight & Bandura, 2004) and TBI comorbidities (Cimino et al., 2019). However, they stop short of linking these elements to the occupational performance of those affected by IPV. Furthermore,

interventions that enhance self-efficacy by fostering supportive environments have shown promising improvements in health outcomes (Karakurt et al., 2022). IPV is known to erode self-esteem and self-efficacy, leading to diminished confidence in one's ability to achieve goals, with emotional abuse compounding these issues by devaluing self-worth. Enhancing self-efficacy is thus a central goal for interventions. Munoz and colleagues (2017) investigated the relationship between hope, self-efficacy, and life satisfaction among individuals who have experienced IPV. While the study emphasized the importance of hope, it did not delve into self-efficacy therapy, and its relevance to occupational therapy and performance was not adequately addressed. The need for hope-based interventions was recognized, but the study missed the opportunity to connect these interventions with self-efficacy. The study also did not specifically relate to brain injury, a crucial aspect of IPV (Munoz et al., 2017).

Current literature emphasizes the urgent requirement to utilize OT knowledge for a community program to boost self-efficacy and improve occupational performance in those with IPV-related TBIs. This involves the critical roles of OTs and other specialists. To grasp the effects of IPV-related TBIs, understanding the signs and symptoms is vital. This uncovers a gap in the current literature, highlighting an additional urgent need for research. These studies, collectively analyzed, offer insights into various aspects of the need for such programs. Each study contributes to the understanding of the problem. There is a gap in understanding the precise role of OTs in implementing occupation-based courses for self-efficacy and improved performance in individuals with IPV-related TBIs. An additional gap exists relating to the need to identify IPV-related TBI to promote early intervention and minimize occupational dysfunction. Ultimately, the key takeaway is the necessity for targeted community-based programs, emphasizing the collaboration of OTs and IPV specialists, to address the complexities this specific population faces to increase their independence within their daily occupations.

In the sphere of occupational therapy, the impact of IPV on daily life and occupations is starkly evident. A significant portion of women have had to temporarily cease their daily activities due to violent incidents (42.1% in one study), with sleep disturbances so severe that they necessitated medication use, particularly among those with activity limitations (Forte et al., 2005). While not in the context of OT, multifaceted programs that utilize mindfulness and expressive writing,

alongside the provision of psychoeducation materials, have been shown to elevate mood, decrease symptoms of depression, and bolster social support networks (Karakurt et al., 2022). Diving further into the occupational aspect of parenting, Jiwani and colleagues (2022) explored the interconnection between adverse childhood experiences (ACEs), intimate partner violence, and maternal self-efficacy in rural India. While the study provided valuable insights into the link between ACEs and lower maternal self-efficacy, it had limitations, including a focus only on mothers with children aged 0-24 months. This limited scope hinders the generalizability of the findings to mothers with children of higher ages, impacting the broader understanding of self-efficacy in parenting as an occupation. Moreover, since the study was conducted in rural India, it may not generalize to the cultural differences in IPV experience in the U.S., emphasizing the need for additional studies across cultures (Jiwani et al., 2022).

In the context of occupations, social support is a critical occupational performance factor, influencing overall well-being. Adequate social support systems have indicated a positive correlation with general health status, a reduction in symptoms of distress, and lower levels of depression post-shelter (Ford-Gilboe et al., 2009). Additionally, participating in occupations that may lead to economic independence and self-reliance is often compromised in abusive relationships; the abuser may hinder employment opportunities and limit income, which is essential for post-separation self-sufficiency (Ford-Gilboe et al., 2009). The constraints imposed by managing health issues, economic challenges, and social upheaval further exacerbate the difficulties faced by women in regaining control of their lives and fulfilling their societal roles in a self-assured way, particularly in parenting and economic contribution (Ford-Gilboe et al., 2009).

A few community-based OT initiatives have shown promise in contributing evidence-based interventions to persons with a history of IPV (Iverson et al., 2021; Jiwani et al., 2022; Munoz et al., 2017; Smith & Holmes, 2018). Iverson and colleagues (2021) displayed a critical example of such initiatives by conducting a randomized controlled trial focused on empowering women post-IPV. This trial was titled "Recovering through Strengths and Empowerment" (RISE) program. The development of this program significantly increased empowerment and self-efficacy among women who had previously experienced IPV. However, the study had

limitations; it excluded women with bipolar disorder and those with suicidal ideation, thus discounting a significant percentage of those affected by IPV. Additionally, the RISE program did not explicitly target increasing activities of daily living (ADLs), health management, or instrumental activities of daily living (IADLs), leaving a notable gap in addressing holistic occupational performance (Iverson et al., 2021; Jiwani et al., 2022).

While not explicitly centered around OT interventions, advocacy and community-based programs have effectively increased women's access to necessary resources, improving their quality of life and diminishing the chances of re-victimization (Ford-Gilboe et al., 2009). However, a significant gap remains in the literature on the exact role of OTs and the effectiveness of their interventions within this population. Occupational therapists are needed to aid in the implementation of occupation-based programs that are targeted to improve the self-efficacy and daily occupational performance of women who have experienced IPV.

While multiple studies seek to fill this gap by examining the challenges faced by those affected by IPV, the research conducted to date needs to explore the unique roles and benefits of OTs. This means that additional research is required to examine the roles and benefits of OTs and how these aspects of their varied interventions affect this specific population. In other words, there is a critical need to specifically examine the roles of OTs in executing an occupation-based program that fosters self-efficacy, increases independence, and promotes occupational performance within this population (Ballan & Freyer, 2020; Helfrich et al., 2008; Matheson et al., 2015; Ngyuen et al., 2018).

### ***The Need for TBI Screening to Address Increased Occupational Performance***

Currently, around 60–92% of women with a history of IPV experience IPV-related head, neck, and facial injuries. This translates to roughly 23 million women in the United States alone who are living with IPV-related head trauma (Esopenko et al., 2021). Despite the ample amount of research outlining the long-term, incapacitating effects of IPV-related TBIs, there remains a notable lack of knowledge on how to effectively detect the symptoms of TBI in those affected by IPV. Current practices lack standardized screening protocols for IPV-related TBI, and IPV professionals have neither the abilities nor the understanding to distinguish TBI or effectively



react to the needs of those with such injuries (Haag et al., 2022). The presence of IPV-related TBI can severely impair an individual's independence and is frequently mistaken for other physical, social, and mental health issues, leading to a shortfall in receiving proper interventions from health and community professionals (Haag et al., 2022). OTs are positioned to significantly mitigate the long-term disability associated with TBI by enabling these individuals to participate in daily activities and fulfill various occupational and social roles, which are integral to their recovery and reintegration (Powell et al., 2016).

The need for TBI screening is paramount. The commitment of healthcare practitioners to routine IPV-related TBI screening is the strongest predictor of whether individuals will be screened and referred for further services. Improving the healthcare response to those affected by IPV requires efforts from both shelter services and medical professionals. If applied, such an improvement will aid in the direct care of individuals within this population and the broader healthcare system, ensuring that individuals receive holistic care that addresses both the short and long-term consequences of IPV and TBI (Chapin et al., 2011).

Fortunately, one TBI screening tool has been identified as influential within the IPV population. This screening tool is recognized as the *HELPS* screening tool and has been proven to be an effective instrument in assessing the prevalence of TBI in an array of environments, including mental health, IPV, and criminal justice. This tool is uniquely tailored to address the complexities often associated with TBI evaluation, offering valuable insights into individuals' experiences with head, face, and neck injuries. Moreover, the screening instrument has been used by both healthcare and non-healthcare providers, proving to be an easy-to-understand instrument. The *HELPS* tool is associated with the New York State Office for the Prevention of Domestic Violence. The tool uses a questionnaire represented by the acronym "HELPS." Following the acronym, questions are asked to understand the person's history of head injuries (H), visits to the emergency room (E), experiences of losing consciousness (L), daily life problems after an injury (P), and any significant illnesses since the injury (S). In 2012, the Iowa Department of Public Health conducted a pilot project to understand the prevalence of individuals with IPV-related TBIs using the *HELPS* tool. Brain injury screenings were conducted in 10 shelters in Iowa. Shelter staff received expert training and were equipped to use the *HELPS* screening tool to aid

in the investigation. Among the 148 people screened, 60% (89 individuals) tested positive for TBI (Boel, 2018). This research demonstrates the successful application of the *HELPS* tool for identifying TBIs in individuals who have experienced IPV.

### ***Conclusion and Summary***

In conclusion, these studies have aided in developing two community-based programs for individuals within a shelter and shelter staff; these programs will address the occupational challenges faced by individuals who have experienced IPV-related TBIs, aiming to improve self-efficacy and independence in their daily lives. While the current literature has exposed challenges in several domains within the scope of IPV-related TBIs, there is an urgent need for additional research to support the benefits of these programs in enhancing occupational engagement within this population. Integrating OT interventions into a holistic community-based program can promote self-efficacy and occupational performance in this population. Addressing gaps in screening practices, emphasizing multidisciplinary approaches, and recognizing client-centered approaches can mitigate the unique challenges women face in this context.

Comprehensive OT interventions can play a significant role in improving the overall well-being and independence of individuals who have experienced IPV-related TBIs (Ambuel et al., 2013; Benight & Bandura, 2004; Cimino et al., 2019; Haag et al., 2022; Murray, 2016; Powell et al., 2016; St. Ivany et al., 2018b; Ziemann, 2017; Iverson et al., 2021; Jiwani et al., 2022; Munoz et al., 2017; Smith & Holmes, 2018). Further research is warranted to fill existing gaps and solidify the effectiveness of OT practice in this critical area.

Thus, this capstone project aims to describe occupational therapists' role in implementing an occupation-based course focused on building self-efficacy in various occupational performance areas (as defined by AOTA) for individuals who have experienced TBI due to IPV. Furthermore, this project will explain a simplified neurological examination related to promoting the early identification of signs and symptoms of TBI to prevent occupational dysfunction and better address the health of this population.

## **Chapter 2: Needs Assessment**

### ***Needs Assessment Goal, Objective, and Outcomes***

The needs assessment aimed to gather information concerning programming needs to enhance independence in women who have experienced IPV and TBI at the Women's Resource Center to End Domestic Violence (WRCDV). This assessment was pivotal in understanding the specific challenges faced by these individuals and identifying areas where intervention could be most effective. Two methods of information collection were employed, as outlined below. The anticipated outcome of this assessment was to provide essential insights for implementing two programs as part of the Occupational Therapy's Doctoral (OTD) Capstone Experience in the spring of 2024, thereby contributing to the advancement of tailored support and rehabilitation strategies for individuals who have experienced IPV-related TBIs.

### ***Data Collection Methods***

Data collection methods encompassing occupational performance, self-efficacy, and IPV-related TBIs were sourced from peer-reviewed journals, providing a foundation of empirical evidence. Additionally, information was gathered through a key informant interview. Both methods led to the formulation of a SWOT analysis. The methodologies for each are elaborated upon below.

- **Peer-Reviewed Journals Method:** Data related to occupational performance, self-efficacy, and IPV-related TBIs were acquired through a thorough review of peer-reviewed journals. Utilizing reputable databases such as PubMed, AJOT, and Sage, among others, ensured access to a comprehensive array of scholarly literature. This method enabled the synthesis of existing research findings and insights about the role of occupational therapists in addressing the needs of individuals with TBI resulting from IPV, as well as the demand and feasibility of implementing occupation-based interventions to enhance self-efficacy. Furthermore, it facilitated an examination of the potential benefits, challenges, and evidence-based practices associated with such interventions.
- **Key Informant Interview Method:** A key informant interview was conducted to elucidate further the programming needs and contextual nuances specific to WRCDV. This method involved a single online face-to-face interview via Zoom with the Housing

Services Director at WRCDV. An interview outline was developed to guide the conversation and ensure a comprehensive exploration of pertinent topics. Pre-written questions within the outline focused on the key informant's knowledge of the role of occupational therapists in addressing the needs of individuals with IPV-related TBIs, assessing the demand and interest within the shelter for occupation-based interventions aimed at enhancing self-efficacy, and evaluating the feasibility of introducing a neurological examination protocol for early TBI detection to shelter staff. Before initiating the interview, institutional review board (IRB) approval was obtained to ensure ethical compliance. The expert interviewee was selected through a convenience sampling approach. The expert participant met the inclusion criterion of being a staff member at WRCDV for at least one year. Confidentiality protocols were strictly adhered to, with no personal identifiers about the expert interviewee collected or reported. The interview process, conducted within 30 minutes, was focused on prioritizing participant comfort and transparency. Permission to transcribe the interview responses was verbally secured following the interview to ensure the information was documented accurately and reliably. Information collection methods for the needs assessment involved the capstone student serving as the primary source of information collection, ensuring confidentiality, and seeking informed consent from the contributing expert.

### ***Data Analysis***

Expert information provided by the key informant, the Housing Services Director at WRCDV, was transcribed and analyzed by the capstone student, Alyssa Waters. This occurred during the online, face-to-face interview, described in detail below. The information was reviewed with the key informant to ensure factuality related to current and past programming at WRCDV. The transcription process was completed to identify potential themes within the information provided. Simultaneously, a thorough review of peer-reviewed journals was synthesized to include information on occupational performance, self-efficacy, and IPV-related TBIs. Completing both methods of information analysis at the same time enabled a comprehensive synthesis of existing research findings and insights centered around the role of OTs in addressing the needs of individuals with IPV-related TBIs. It also allowed for the examination of the demand and feasibility of implementing occupation-based intervention programs to enhance self-

efficacy. The information analysis facilitated an examination of the potential strengths, weaknesses, opportunities, and threats among the evidence-based practices associated with occupation-based interventions. The collected information from both methods assisted in the planning and implementation phases of the spring 2024 OTD Capstone Experience, which contributed to a foundation for program development.

### ***Reporting***

A summary report outlining the findings of the needs assessment was prepared via a key informant interview and a SWOT analysis. This report served as a basis for decision-making regarding further project development.

### ***Project Oversight***

A Memorandum of Understanding (MOU) was established with the Women's Resource Center to End Domestic Violence, where the needs assessment was conducted. The MOU is in Appendix A.

Note that this needs assessment was not classified as human subjects research and was not intended to be a systematic investigation. Its findings were not meant to be generalizable. The primary focus was on gathering context-specific information to inform the planning and implementation of the Doctoral Capstone Experience project. IRB approval for the key informant interview can be found on pages 2 and 3 before the beginning of this literature review. The analysis results have led to the development of two variations of a needs assessment: a key informant interview (Table 1) and a SWOT analysis (Table 2).

*Table 1. Key Informant Interview Results:*

<b>Stakeholder</b>	<b>Questions</b>	<b>Answers</b>
A. Housing Services Director of Women's Resource Center to End Domestic Violence (WRCDV)	1. What specific programs are currently in place to enhance life skills or foster independence for individuals who have encountered IPV?	We offer a number of programs including peer support to set and act on intentions, counseling, self-compassion practice, yoga, financial assistance, planning and counseling, referral and resource connection, housing counseling, parent education/support, legal advocacy, and individual advocacy.
	2. What training or knowledge do staff members possess regarding traumatic brain injury (TBI) in the context of IPV?	We have very little formal knowledge of TBI and IPV.
	3. Which specific daily activities do women at WRCDV describe facing challenges with?	One of the biggest challenges we see is around structure – establishing and maintaining the shape of each day.
	4. What existing resources are available for women to access factual information on TBI, medical care or enhancing independence in their daily lives?	We ask about needs (physical, mental, dental health) when women begin the safehouse program and make connections to supports as needed. We do not specifically talk about or ask about TBI. We do talk about the impact of IPV on physical/mental health. Part of the goal in that conversation is to normalize some of the ways trauma shows up in thoughts, actions and

		behaviors so survivors have less shame and more compassion for themselves.
	5. Have women at WRCDV experienced head, neck, brain or spinal trauma as a result of IPV? If so, what is the factual count of women who received medical care afterwards?	I am aware of one woman who experienced significant head and spinal trauma. She was referred to us for safehouse services from the hospital where she received care after the IPV.

*Table 2. SWOT Analysis:*

<b>Strengths</b>	<b>Weaknesses</b>	<b>Opportunities</b>	<b>Threats</b>
Holistic Approach: OT’s can utilize and train others in taking a holistic approach to therapy and care interventions, recognizing that building self-efficacy and independence requires addressing physical, emotional, and cognitive aspects. With this program, integration of various therapeutic modalities and strategies	Limited Resources: There may be limitations in terms of funding, staffing, and physical resources. These limitations could potentially impact the ability to provide services to a larger number of clients or offer specialized equipment and facilities.  Emotional and Psychological Challenges: Working with clients who	Partnerships and Collaborations: This capstone project may be conducive to additional partnerships with organizations, shelters, and agencies who offer support services for those who have suffered from IPV and TBI. More shelters and organizations can be targeted with the program information, which enables a comprehensive perception	Limited Access to Services: Some individuals may not have access to the group sessions due to limited financial resources, the lack of transport, or distance from the location. Ways to make the group programs more accessible can be considered – for

<p>can be used to provide comprehensive care to the clients.</p> <p>Client-Centered Care: Developing a self-efficacy group for individuals who have experienced both IPV and TBI will provide access to and increased practice of client-centered care. Clients will take an active approach through the goal setting and treatment planning process. By considering clients' individual strengths, interests, and goals, The OT intervention will also be tailored to the unique needs of the client, instilling them more autonomy in their recovery.</p> <p>Increased Interdisciplinary Work: By working with</p>	<p>have experienced IPV and TBI can be emotionally demanding and challenging for all individuals involved, including therapists and administration who have experienced IPV in the past or present. Measures need to be taken to ensure that group leaders receive adequate support, supervision, and self-care to prevent burnout and maintain their own well-being.</p>	<p>of clients' needs and offers. This will, in turn, facilitate the future of occupational therapy for IPV and TBI-affected patients.</p> <p>Community Outreach and Education: The project may result in the development of an outreach program that fosters awareness of OT interventions for IPV and TBI participants. It is possible to consider community education courses to inform people and other professionals about holistic options available.</p>	<p>example, develop teletherapy services.</p> <p>Stigma and Disclosure: Individuals who have experienced both IPV and TBI are more sensitive to stigmatization. Clients may be afraid to disclose their experiences or ask for help. The group needs to find ways to make clients feel more comfortable and create a safe environment.</p> <p>Changing Regulatory and Legal Landscape.: Regulations and policies can be amended or changed. Modified laws on IPV, TBI, or funding may affect the group performance. Thus, it is necessary for the group to track the policy changes and</p>
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<p>professionals outside of OT who are specialized in IPV and/or TBI knowledge, we can increase interdisciplinary knowledge by working to exchange knowledge and subsequently, increase our skillset. This diverse team of professionals can include OTs, psychologists, social workers, counselors, shelter administration, and IPV/TBI self-advocates. This would allow for comprehensive assessment and intervention planning, leading to holistic client support.</p>			<p>suggestions to maintain efficiency.</p>
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### **Chapter 3: Capstone Experience Protocol**

#### ***Program Development***

This capstone project's program development was based on its' two-fold purpose. First, it aimed to explore the role of OTs in implementing an occupation-based course that builds self-efficacy in various occupational performance areas determined by the AOTA for clients who have encountered TBI due to IPV. Second, the project included a component focused on teaching shelter staff a specific, essential neurological examination for early identification of TBI to prevent occupational dysfunction. This project was in collaboration with WRCDV. The following is a detailed description of the development, implementation, evaluation and sustainability of both programs.

#### ***Site Description***

WRCDV is an adaptable, versatile organization committed to tackling the intricate needs of individuals who have experienced IPV and domestic violence. Guided by a mission to create a world free from IPV and domestic violence, WRCDV offers an array of services that extend beyond the ideas of a traditional shelter. In addition to providing a safe house for individuals and families who have experienced IPV, the organization operates a 24/7 hotline, offering immediate support to those in crisis. Notably, the WRCDV has a podcast, which serves as an additional platform for education and outreach, amplifying their commitment to advocacy. Their community-based advocacy extends support beyond the safe house and podcast, emphasizing individualized assistance to help families achieve self-determined goals. Child and youth advocacy programs, including peace education initiatives and Camp PEACE, address the unique needs of children exposed to IPV, fostering healing and healthy coping.

WRCDV offers legal advocacy, consultations with volunteer attorneys, and support groups to create a safe space for individuals to navigate complicated legal processes. Additionally, WRCDV's elder abuse prevention work, supervised visitation, and secure exchanges ensure the safety and well-being of vulnerable populations, such as older adults and children. The organization's dating violence prevention workshops facilitate community education programs and actively engage with schools, universities, law enforcement, and various community groups

to promote healthy relationship skills, relationship equality, and respect. WRCDV's holistic approach, coupled with a diverse array of programs, reflects its dedication to empowering individuals, fostering compassion, and ultimately working toward eradicating IPV and domestic violence in the Atlanta community.

In collaboration with the Housing Services Director of WRCDV, the implementation of this capstone project is poised to make a meaningful impact. The Housing Services Director's expertise in IPV and leadership in housing services brings a valuable perspective to the initiative. Together, the student and the Housing Services Director worked towards seamlessly integrating this occupational therapy program within the WRCDV framework, ensuring alignment with the organization's mission and objectives. Through the Housing Services Director, insights were instrumental in facilitating participant recruitment, securing necessary approvals, and navigating the dynamics of the IPV shelter setting. This collaborative effort aimed to enhance the program's reach and effectiveness, fostering a supportive environment for individuals who have experienced TBI due to IPV.

### ***Methods and Evidence for Programs***

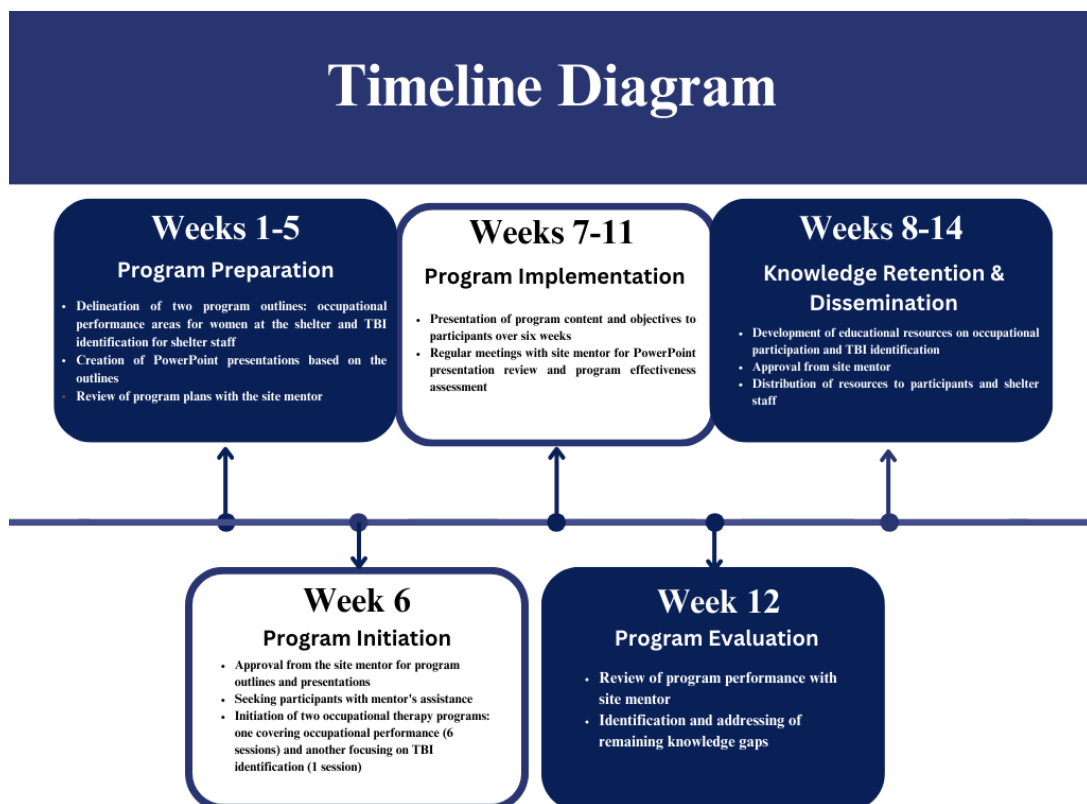
It is essential to address the methodological framework and provide a rationale for including specific program features to encapsulate the process and the foundational research surrounding the intersection of IPV and TBI upon which the programs are based.

The methods for developing the two programs involved a structured approach spanning several weeks, outlined in Figure 1 below. Specifically, program preparation began from week one to week five of the Doctoral Clinical Experience (DCE). This included outlining the two programs: one covering topics pertinent to occupational performance areas as defined by the AOTA for women at the shelter and another focusing on TBI identification the same population for shelter staff. These outlines formed the basis that helped create multiple PowerPoint presentations, with six presentations designed for the occupational performance program and one for the TBI identification program. Each of the presentations had clear program objectives. The target audience was the population of individuals who experienced TBI due to IPV and the shelter staff

for that same population. Additionally, the student reviewed the program plans with the site mentor to address knowledge gaps.

Moving into week six, program initiation commenced, involving obtaining approval from the site mentor for program outlines and presentations and seeking participants with the mentor's assistance. Two occupational therapy programs were initiated—one lasting six sessions covering occupational performance and another lasting one session focusing on TBI identification. Weeks six through 14 constituted the program implementation phase, during which the program's content and objectives were presented to participants over eight weeks, with regular meetings with the site mentor for PowerPoint presentation review and program effectiveness assessment. However, due to site time constraints, many presentations were pre-recorded and given to the site mentor for future use. By week 14, program evaluation occurred, involving reviewing program performance with the site mentor and identifying and addressing any remaining knowledge gaps.

Figure 1: Timeline.



Knowledge retention and dissemination procedures were enacted following the DCE, spanning weeks eight through 14. This included the development of educational resources highlighting occupational participation and TBI identification of signs and symptoms, seeking approval from the site mentor, and distributing resources to participants and shelter staff. A sample of the educational materials disseminated can be found in Appendix B, following the program informational flyers. The process was completed with a sustainability assessment, where the capstone student worked collaboratively with the site mentor to assess the resources' effectiveness and determine if the resources were appropriate for continued use over time. Regular meetings were held between the student and the site mentor to ensure continuous progress, address inquiries, and maintain the project's momentum. The site mentor's role included guidance, approval, participant recruitment, and project oversight.

Several elements of the programs specifically support the effectiveness of the program's methodology and execution. First, the programs foundation was built upon dedicated, detailed program planning and implementation, spanning several weeks, ensuring the success of both programs during the DCE. A structured foundation for such program design implies a structurally sound premise for planning and organization, ensuring the program's effectiveness (Corrigan et al., 2018). This perspective supports Corrigan and colleagues' (2018) work, which provides evidence that structured foundational approaches in rehabilitation settings contribute to positive patient outcomes, particularly in complex conditions such as TBI. Additionally, the programs utilized AOTA guidelines during development, ensuring both programs were created and implemented per established professional practice guidelines. Therefore, the program's effectiveness in IPV and TBI cases were validated by professional practice standards developed by the AOTA. The use of the AOTA's Practice Framework (4th Edition) illustrates the effectiveness and standardization of the programs (American Occupational Therapy Association [AOTA], 2020).

Furthermore, the programs' content was designed with clear objectives, as evidenced by creating six PowerPoint presentations covering relevant topics in occupational performance areas for women at the shelter and an additional presentation focusing on TBI identification for shelter staff. Both presentations were tailored particularly for individuals who have experienced IPV-

related TBIs and shelter staff, ensuring a focused and client-centered approach to the intervention. Valera and Berenbaum (2003) claimed that client-centered, focused interventions improved the awareness of shelter staff and individuals' abilities to cope with TBI symptoms.

The program's implementation process included regular meetings with the site and faculty mentor to ensure continuous review, feedback, and assessment of the program's implementation procedures. This aspect is another critical component of successful implementation, as the review, refinement, and adjustment of the program during the implementation phase are critical points in improving and adapting the program, considering the complexity of the issues (Stachura & Garven, 2007). Stachura and Garven (2007) emphasize that mentoring in clinical programs is associated with enhanced practitioner development and program outcomes.

The post-program phase included knowledge retention and dissemination procedures, demonstrating a more proactive implementation towards the long-term effectiveness of the programs. The presentation, development, and supply of educational resources for program participants and shelter staff significantly expand the programs reach and impact potential over time. According to Baker and colleagues (2021), effective dissemination of educational materials substantially contributes to the sustainability of health programs and the retention of crucial knowledge among participants.

During the final weeks of the DCE, the sustainability assessment conducted with the site mentor underscored a commitment to evaluating the adequacy and appropriateness of the programs and addressing any emerging challenges or gaps in resources or implementation. The continued evaluation and partnership contribute to the program's long-term sustainability, ensuring that it remains impactful in addressing the intersection of IPV and TBI over time. A study by Tops and colleagues (2024) on program sustainability strategies supported continued evaluation and adaptation to help ensure the programs relevance and effectiveness over time (Tops et al., 2024). In summary, the programs credibility is expressed in the structured methodology, commitment to professional standards, clear objectives, continuous review and adaptation, active knowledge retention and dissemination efforts, and dedication to continued evaluation and adaptation. These

elements collectively offer the program credibility and relevance to adequately and meaningfully address IPV and TBI challenges.

### ***Summary of Resources Used for Program Development***

The development of both programs was grounded in a comprehensive literature review, focusing on the existing programs and the position of AOTA on the role of occupational therapy in treating TBI outcomes and IPV. The reviewed literature stressed the importance of a holistic, structured, evidence-based approach suitable for each individual due to the uniqueness of every affected individual. Sources such as Corrigan and colleagues (2018) explained the importance of structured rehabilitation programs in improving TBI outcomes. Other sources outlined the specific educational needs of individuals who have experienced IPV-related TBIs within the shelter (Valera & Berenbaum, 2003).

### ***Justification for Program Features***

The rationale for incorporating specific elements within the program, such as repetition, mental health components, self-efficacy components, and a focus on the AOTA Practice Framework categories of occupations (ADLs, IADLs, Rest and Sleep, Work, and Education) was integral. These elements hinged on a combination of best practices in OT and budding research in evidence-based interventions for individuals who have experienced IPV-related TBIs.

- **Repetition** was a reoccurring theme throughout the program as it has been proven to help with learning and memory; this is particularly vital in individuals who have experienced a TBI (Cicerone et al., 2011).
- **Mental health elements**, such as building self-concept, promoting positive thinking, decreasing unhelpful thinking styles, increasing self-efficacy, and fostering social support, are integrated based on literature that supports the efficacy of these interventions in occupational engagement and self-efficacy for individuals who have experienced IPV and TBI (St Ivany & Schminkey, 2016).
- Bandura's **self-efficacy components**, which aim to strengthen individuals' belief in their ability to overcome barriers to engage in meaningful occupations, guided the development of the program. By introducing repetition, each participant can practice continuously and succeed in various activities, contributing to their mastery experience

and reinforcing their self-efficacy in completing a task successfully. Additionally, the integration of vicarious learning allows participants to observe others successfully performing similar tasks, further strengthening their belief that they can achieve similar outcomes. Verbal persuasion is actively embedded in the programs through positive feedback, encouragement, and support from facilitators and other group members, which helps enhance their self-efficacy beliefs. Moreover, the program addresses physiological and emotional states by incorporating grounding and OT strategies to manage stress and anxiety, promoting a positive mindset conducive to developing self-efficacy. Through these four components, participants are empowered to confront challenges with resilience and determination, fostering a greater belief in their self-efficacy to navigate their daily lives and increase their occupational performance despite the adversities they may face (Bandura & Wessels, 1994).

- Alignment with **AOTA occupation categories** ensures that the program comprehensively addresses the broad spectrum of occupational performance areas impacted by IPV and TBI, facilitating a holistic approach to recovery and rehabilitation (AOTA, 2020).

### ***Implementation and Evaluation***

Following an evidence-based approach, the evaluation and sustainability measures reflected a attentiveness to learning and improvement. Regular meetings with the site mentor were held to uphold the iterative process of review and refinement. Regular review signals a modifiable approach to the program's overall implementation, ensuring flexibility to participant needs and updated evidence. Following practice guidelines in program development and implementation, this proactive approach allowed for enhanced knowledge retention and dissemination, allowing for a commitment to evaluate the long-term impact (Baker et al., 2021; Tops et al., 2024).

### ***Conclusion***

The evidence informs the structured methodology, adherence to professional practice guidelines and standards, clear learning objectives, and comprehensive approach to program development, implementation, and evaluation. These elements collectively ensure the program was adequately developed to make a meaningful impact in addressing the complex intersection of IPV and TBI, offering an effective model for sustained intervention.



***Non-Human Subjects Research IRB approval***

The approval process for non-human subjects research through Georgia State University's Institutional Review Board (IRB) was completed. The IRB validated the expert interview, the research protocol, the program outlines, the PowerPoint presentations, and educational materials centered on IPV-related TBIs, ensuring the ethical framework of this project's process.

The IRB played a crucial role in ensuring that the study adhered to ethical standards, legal requirements, and institutional guidelines, thereby safeguarding the rights and well-being of participants, even in non-human subjects research scenarios. This approved status provides a solid ethical foundation for the capstone project's execution, reinforcing its commitment to upholding the highest standards in research practices. The IRB non-human subjects approval forms are found at the beginning of this capstone paper under the "Approval Forms."

**Chapter 4: Results for Program Development*****Program Descriptions***

Consistent with the capstone project's overarching goal to expand and explain the essential role of OTs in providing occupation-based interventions for individuals with a history of TBI due to IPV, this section introduces the proposed programs and outlines. The purpose of the first program was to address the diverse needs of this population by focusing on occupational performance areas defined by the AOTA. These performance areas include Activities of Daily Living (ADLs), Instrumental Activities of Daily Living (IADLs), Sleep, Work, and Education. This program was designed to be delivered across six sessions, each lasting thirty minutes to one hour. Due to the need for knowledge regarding occupational performance and occupational dysfunction in this context, prior and current knowledge of OT was required to implement this program.

Similar to the first program, the second program also required prior OT knowledge to implement. This program aimed to train shelter staff on the importance of identifying signs and symptoms of IPV-related TBI. Through careful consideration and collaboration with the Housing Services Director of WRCDV, this program sought to provide a framework for early identification of TBI

signs and symptoms within this population. This program was designed to be held in a singular, one-hour session.

The ensuing information described the specifics of both programs in greater detail, outlining the key components and learning objectives developed to meet the unique challenges faced by individuals after IPV-related TBI.

***Empower You: A Program for Individuals to Increase their Independence and Self-Efficacy:***

The six-session course, "Empower You! A Program for Individuals who have experienced IPV-related TBI to Increase Independence and Self-Efficacy," was carefully divided into distinct lessons, each focusing on essential components of OT. Each session covered significant areas that contribute to improved daily activities and self-efficacy.

The course began with an introductory session on OT and OT strategies, which helped to establish a foundation for understanding the role of occupations in an individual's healing, health, and daily life. The following sessions were then dedicated to specific occupation domains, including Activities of Daily Living (ADLs), Instrumental Activities of Daily Living (IADLs), Rest and Sleep, Work, and Education. Every session was designed to address the unique challenges faced by individuals who have experienced IPV-related TBI, integrating evidence-based OT strategies. While the session topic differed for each meeting, the learning objectives across sessions were designed to be the same: a repetitive flow to ensure increased repetition, which is crucial when increasing occupational performance in the role of TBI.

The course was implemented on the Zoom online platform, ensuring accessibility for all participants. WRCDV provided tools, including technological equipment and support, to help participants access such a platform. The first session was presented in a live, face-to-face format, while the subsequent sessions were available in a pre-recorded format designed to ensure continuous use over time. All recordings were exclusively recorded for internal use by the WRCDV, maintaining participant confidentiality and privacy.

Accompanying each session, every participant received a follow-along handout, depending on the topic, designed to reinforce learning objectives and provide OT tools for immediate and future application. These handouts served as valuable resources, empowering participants to implement OT strategies in their daily lives beyond the course duration.

Furthermore, this course fostered opportunities for skill practice, questions, and discussions, promoting active participation and knowledge retention. This program aimed to enhance self-efficacy and foster greater independence among individuals navigating the aftermath of IPV-related TBIs by equipping both participants and shelter staff with knowledge and resources. The program's learning objectives are listed below. The program's timeline and outline information can be found in Appendix B.

*Learning Objectives for Empower You! A Program for Individuals who have experienced IPV-related TBI to Increase Independence and Self Efficacy:*

1. **Enhancing Self-Concept:** By the end of the six sessions, participants will understand the concept of self-concept and its significance in daily life, identify their strengths and areas for growth to enhance self-awareness, and develop strategies throughout the course for continued use to cultivate a positive self-image for increased self-efficacy.
2. **Promoting Positive Thinking:** By the end of the six sessions, participants will recognize the impact of positive thinking on mental well-being and daily functioning, learn techniques to challenge negative thought patterns, promote optimism, and practice strategies that will foster a positive mindset to increase their independence with their daily occupations.
3. **Decreasing Unhelpful Thinking Styles:** By the end of the six-session course, participants will be able to identify common unhelpful thinking styles, understand the relationship between unhelpful thinking styles and emotional distress, and develop and implement cognitive restructuring techniques to challenge and replace negative thoughts amongst their occupations.
4. **Increasing Self-Efficacy:** By the end of the six sessions, participants will understand the concept of self-efficacy and its role in achieving their goals, explore strategies to build

confidence and belief in their abilities, and practice setting realistic goals and taking steps towards their achievement within their daily occupations.

5. **Fostering Social Support:** By the end of the six-session course, participants will be able to recognize the importance of social support networks in times of stress and adversity, learn practical communication skills for seeking and maintaining social support, and be able to identify sources of social support and develop strategies for building and nurturing relationships to increase their independence and self-efficacy with their daily occupations.

***Empower Them! A TBI-Informative Program on Identifying Signs and Symptoms for Shelter Staff:***

The second program focused on teaching shelter staff how to identify the signs and symptoms of IPV-related TBI in order to decrease occupational deprivation within this population. This program was delivered through the face-to-face online Zoom platform and was designed as a single-session course that lasted one hour. While the program was recorded, identifiable information was not collected or reported on throughout this program. Moreover, shelter staff received comprehensive packets containing the TBI PowerPoint and infographics related to the signs and symptoms of TBI as their copy of the HELPS tool. These resources were developed and disseminated on the basis that they enable ongoing support for individuals who have experienced IPV-related TBIs within the shelter. This program's learning objectives are listed below. This program's timeline and outline information can be found in Appendix B.

***Learning Objectives for Empower Them! A TBI-Informative Program on Identifying Signs and Symptoms for Shelter Staff, Understanding Traumatic Brain Injury in the Context of IPV:***

1. Participants will gain foundational knowledge about Traumatic Brain Injury (TBI) and its relevance in the context of Intimate Partner Violence (IPV).
2. Participants will be able to identify the signs and symptoms of TBI in individuals who have experienced IPV.
3. Participants will develop an awareness of TBI's potential impact on individuals who have experienced IPV regarding their independence and self-efficacy. In this sense, participants will recognize the potential impact of trauma on occupational performance

and gain insights into fostering independence and self-efficacy in individuals who have experienced IPV-related TBIs.

4. Participants will acquire knowledge about trauma-informed occupational therapy assessment techniques, emphasizing their importance in working with individuals who have experienced both IPV and TBI.
5. Participants will be equipped with resources and information to make appropriate referrals for further support, fostering a comprehensive approach to client care.

### ***Participants***

The participants for both programs were either actively housed or involved with WRCDV or previously housed or involved with the organization. The participants for the first program were all women from WRCDV as well as shelter staff and the participants for the second program were solely shelter staff. The inclusion criteria for participation in both programs were individuals who had experienced IPV, whether current or active, or those who had worked with this population for some time. All participants were included regardless of whether they had a formal diagnosis of TBI. Doing so improved accessibility of the programs. In the same sense, the exclusion criteria were kept to a minimum, focusing on ensuring the participants' safety and health. Therefore, the individuals who did not give their consent or were unable to participate in the activities for personal reasons were not included in the programs.

The choice to avoid the requirement to have a formal diagnosis of TBI was deliberate, given the complexity and underdiagnosis of TBI in the IPV population. This selection of participants ensured that the programs could offer support and services to all individuals affected by IPV, regardless of their diagnostic status. Hence, the programs were designed to allow diversity among the participants and to support their empowerment and self-efficacy in handling life after experiencing IPV.

### ***Recruitment***

The program participants were recruited to participate in the curriculum sessions through convenience sampling. This approach was selected due to its convenient and accessible nature, allowing recruiting individuals based on availability and willingness to become the programs' participants. Therefore, the Housing Services Director of WRCDV helped identify the potential

participants meeting the program's inclusion criteria. The recruitment process involved introducing potential participants to the program's objective, ensuring transparency and verbal informed consent. The scope of the program sessions, the covered topics, and the intended time commitment were outlined to the potential participants. Participation in the programs was ensured to be voluntary and non-coercive, protecting the participants' autonomy. The confidentiality of the program participation and the sensitive nature of the covered topics were also considered while communicating with the participants. Overall, the recruitment process aimed to ensure the participants were recruited respectfully and safely, protecting their privacy and well-being and ensuring access to relevant resources and support.

### **Chapter 5: Discussion and Impact**

This capstone project was designed to illustrate OT's versatility and unique position to generate community-based programs tailored to the needs of individuals with TBIs related to IPV. The drive behind the development of this capstone project was deeply personal, driven by firsthand knowledge of the broad and enduring repercussions of IPV. Essentially, these programs were developed as a result that all existing efforts failed to deliver a holistic approach to self-efficacy and occupational performance for persons with IPV-triggered TBI.

The current literature review aligned with the capstone project aimed to provide a scholarly background for the effort. The review validated the crucial need for a program that combines self-efficacy and occupational performance and a program aimed to teach the shelter staff about the signs of TBI for early intervention. The reviewed studies failed to combine and address self-efficacy and occupational performance. This underscores the circumstance and, consequently, the need for community-based programs that include OTs and IPV experts in the targeted effort to manage the combination of challenges related to occupational dysfunction that often accompanies IPV and TBI.

The needs assessment based on a key informant interview and SWOT analysis validated the project's viability. The key informant interview with the chosen site mentor identified the existing programs, knowledge gaps, daily challenges faced by the women, and available

resources. At the same time, the SWOT analysis uncovered vital strengths, weaknesses, opportunities, and threats of deploying the proposed project. This analysis determined that in the current WRCDV shelter, the formal knowledge about TBI and IPV patient staff and volunteers needs to be improved.

Two programs were implemented at the WRCDV shelter under the proposed plan outlined above and included: program development, implementation, evaluation, and sustainability. By outlining clear learning objectives, developing educational resources, and seeking ongoing collaboration with the site mentor, the project was intended to respond to the immediate needs of individuals who have experienced IPV and/or TBI while laying the foundation for long-term success.

To summarize, this capstone project contributes to advancing the field of occupational therapy in a manner that directly and positively impacts the real-life concerns and needs of those navigating the intricate intersection of trauma and rehabilitation. The project is unique due to its holistic focus on IPV-related TBIs as well as its attempt to address self-efficacy and occupational performance in OT practice. Namely, the project expands the boundaries, addresses community needs, and demonstrates the versatility of OT interventions in addressing the challenges regarding IPV and TBIs.

### ***Impact on Occupational Therapists***

This capstone project has broad ramifications for occupational therapy. Introducing these community-based programs emphasizes the role of OTs in aiding those at the complex intersection of trauma and recovery. The project also introduces OTs as key players in holistic interventions, bridging gaps in existing practices by integrating self-efficacy and occupational performance components.

By prioritizing OT collaboration with IPV specialists, the future of the OT profession is reflected as one that recognizes that the ultimate solution calls for a synergistic approach. OTs are in a unique position and possess the professional ability to respond to and aid in the resolution of the occupational challenge faced by individuals experiencing TBI as a result of IPV. In this regard, the programs developed set an example of the way OTs can collaborate in community programs

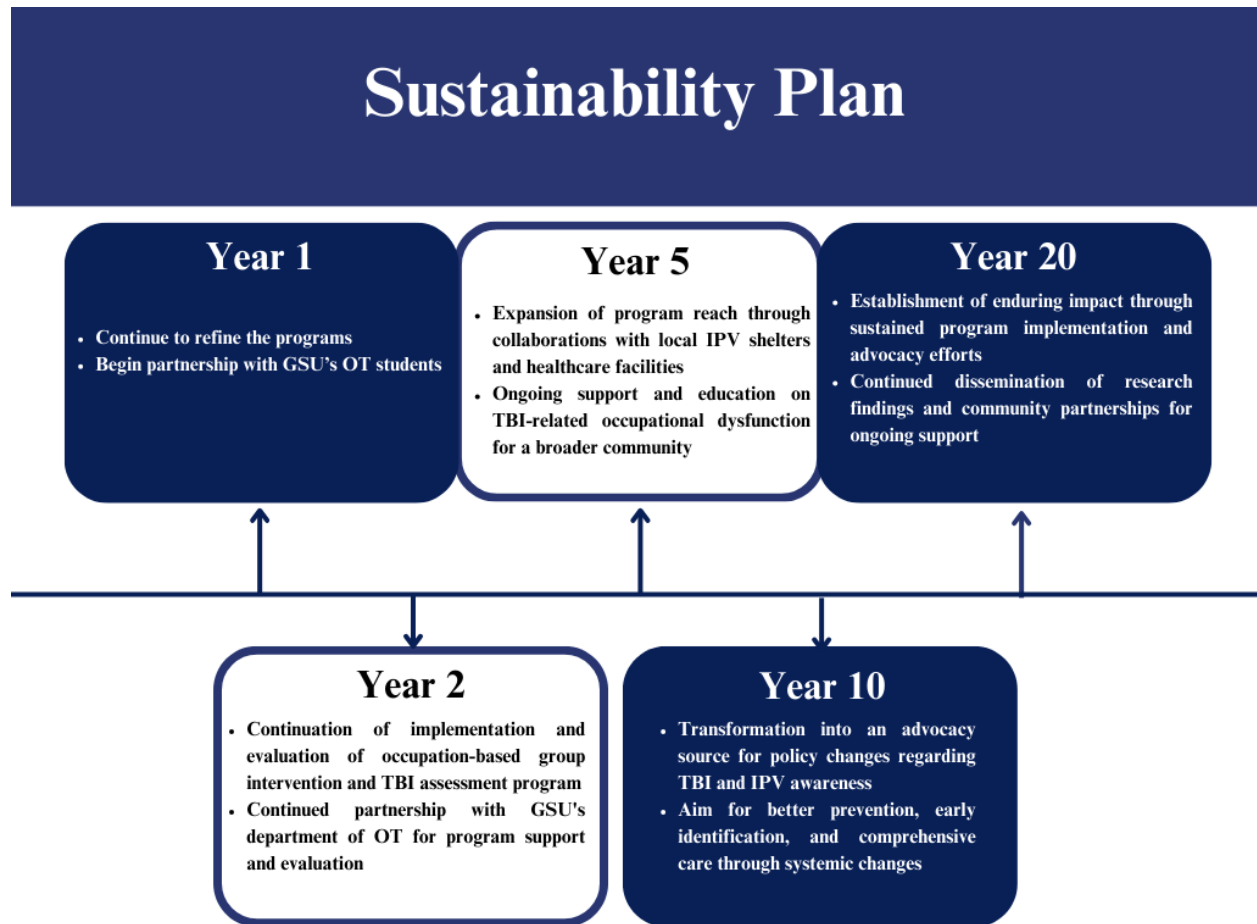
within this population, calling on the need for OTs to be in the conversation to address independence, self-efficacy and occupational performance in this area.

Additionally, the occupation-based intervention validates the strength and versatility of OT interventions within this population. Overall, this program reflects the true essence of OT, given that it is founded on the belief that health and well-being can be sustained within meaningful and purpose-based occupations. Utilizing the occupational psycho-educational approach in which shelter staff and participants are actively engaged creates a supportive environment that recognizes the need for both trauma-informed care and rehabilitation.

### ***Sustainability Plan***

The program's sustainability efforts for the next two, five, ten, and 20 years establish measurable goals, OT training, projects, and interprofessional partnerships, underscoring OT as a long-term solution provider within this population. As seen in Figure 2 below, in the first year, the focus is refining and evaluating the occupation-based group intervention and TBI assessment program and establishing a partnership with Georgia State University's (GSU's) OT students. Within the next two years, a continuous partnership with GSU's OT department for continued implementation and evaluation of the program will be sought. Over the next five years, the goal is to expand the program's reach by fostering collaborations with local IPV shelters and healthcare facilities. The aspiration is for the program to evolve into an advocacy source, influencing policy changes that enhance awareness regarding the link between TBI and IPV, ultimately leading to improved prevention, early identification, and comprehensive care. Lastly, in twenty years, the program will continue its' dissemination efforts with its' community partnerships and ongoing support, affecting positive change.



*Figure 2. Sustainability Plan:*

Implementing the occupation-based group intervention is central to program priorities. It strengthens self-efficacy and treats occupational performance areas affected by IPV-related TBI. Also, it addresses early identification of signs and symptoms of TBI through a neurological examination of five steps to prevent occupational dysfunction.

The program's success relies on a dedicated shelter staff, perhaps including an occupational therapist with expertise in TBI and IPV, trauma-informed counselors or social workers, or other healthcare-related assistants. The implementation of the occupation-based group intervention and the educational program focused on identifying TBI signs and symptoms is supported by educational resources, PowerPoints, and online accessibility.

The collaborative, sustainable partnership between WRCDV and Georgia State University's (GSU's) OT program form a crucial aspect of the program's foundation. In this regard, WRCDV is a primary partner that provides access to the target population, collaborates in program implementation and evaluation, and disseminates resources for participant recruitment and support. On the other hand, GSU's OT program contributes to information analysis and transcription, program development, implementation guidance, expert knowledge, and dissemination of findings through publications.

In two years, the capstone student aims to continue to implement and evaluate the effectiveness of the occupation-based group and TBI assessment programs. The program will continue adhering to evidence-based, current practices and honor participant feedback. In five years, the program will look to other local IPV shelters' and seek to adapt its interventions based on shelter needs and other pertinent information to expand the program locally.

The program aims to expand its reach in five years by collaborating with other local IPV shelters and healthcare facilities. This partnership extension aims to provide a broader community with ongoing support and education on TBI-related occupational dysfunction.

In ten years, the program aspires to transform into an advocacy source for policy changes, increasing awareness surrounding the intersection of TBI and IPV. The goal is to ensure better prevention, early identification, and comprehensive care for affected individuals, solidifying the program's position as a catalyst for systemic change.

The sustainability plan has been crafted to ensure the enduring success and impact of the capstone project, laying out specific goals, timelines, and strategies. These goals center on enhancing participant outcomes, disseminating research findings, and building the capacity for sustained program implementation. The first objective is to achieve a 20% increase in self-efficacy and a 15% improvement in occupational performance among participants over the 14-week capstone project. To realize this, a comprehensive occupation-based group intervention will be implemented, with regular evaluations and qualitative feedback to measure changes. Another goal is to publish project findings in at least one peer-reviewed journal by the end of the

Spring 2024 semester. This entails developing a robust research plan, promptly analyzing data, and collaborating with academic partners for timely manuscript preparation and submission. Moreover, the plan will address that the professionals in the field of OT will continue to run the programs at the WRCDV site. The approaches to the ongoing sustainability of the project will involve comprehensive staff training, continued infrastructure development, collaboration with the community, and focusing on the perceived value of occupations, independence, and self-efficacy through personal stories and testimonies.

Altogether, the initiatives describe a dynamic and proactive plan of action designed to secure the life of the capstone project, supporting immediate needs and creating space for positive change in TBI intervention following IPV impact. In conclusion, the capstone project is introduced as a lively initiative with a clear future vision based on access, community value, and activism toward the sustainable and effective response to adult individuals sustaining a TBI following IPV. In the future, the project promises strides in the response to the challenges presented in the intersection of the two concepts: trauma and rehabilitation.

### *Limitations*

Despite the comprehensive nature of the capstone project, some limitations should be acknowledged. First, convenience sampling was used to recruit participants from the WRCDV shelter, which might imply selection bias. This means that the volunteering participants might represent a small percentage of people with IPV-related TBI.

Additionally, using a key informant interview and the SWOT analysis for the needs assessment may imply some subjectivity. The interview with the key informant could be affected by personal perspective because the informant has been an active worker at WRCDV for at least one year. Due to this subjectivity, the SWOT analysis might offer a limited understanding of the situation.

Lastly, the success of the capstone project during and after its completion depends heavily on the shelter staff and the participants' availability, which poses an additional limitation. WRCDV currently needs an on-site OT, posing a significant threat, as both projects require an OT level of

knowledge to be completed adequately. It is assumed that WRCDV's foundation will be the only way to disseminate information, which is limiting as it is hard to gather relevant materials and information in case of high staff turnover. While these limitations could be addressed through regular evaluations and revisions, they still pose significant challenges to the overall success and sustainability of the capstone project. Further research should be conducted to minimize these limitations in the future, promoting a broader scope of self-efficacy within this population.

### ***Conclusion***

This capstone project attempts to change the environment of occupational therapy by addressing the complex issues of individuals who have experienced IPV-related TBIs. Combining the integral components of self-efficacy, occupational performance, and early TBI identification, this project offers a novel approach to address the current deficiencies in IPV-related TBI response. This project could change the environment for the stakeholders by providing a self-sustainability system. The collaboration of occupational therapists, IPV specialists, and community partners, notably the Women's Resource Center for Domestic Violence and Georgia State University's Occupational Therapy Program, underlines the comprehensive nature of this initiative. Looking ahead, the trajectory spans two, five, and ten years, envisioning continued implementation, expansion, and advocacy. The sustainability plan solidifies the commitment to lasting impact and positive change with measurable goals, clear timelines, and strategic means. Through this dynamic and collaborative endeavor, this capstone project aspires not just to meet immediate needs but to catalyze enduring improvements in the lives of those navigating the complex intersection of trauma and rehabilitation.

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**Appendix A: Memorandum of Understanding (MOU)**

DEPARTMENT OF OCCUPATIONAL THERAPY  
Byrdine F. Lewis College of Nursing and Health Professions

**Mailing Address**  
P.O. Box 3995  
Atlanta, GA 30302-3995

Phone 404-413-1446  
Fax 404-413-1450

**OTD Capstone MOU Addendum**

This addendum is being added to the current MOU between the Occupational Therapy program at Georgia State university and Barbara Gibson. In addition to the standard agreement including the purpose of the MOU, general understandings, facility responsibilities, university responsibilities, mutual responsibilities, and a signature page, this addendum adds the following requirements:

This agreement is for Alyssa Waters who will be completing his/her/their 14-week Doctoral Capstone Experiences at Women's Resource Center to End Domestic Violence and will be supervised by Barbara Gibson starting on January 2024 and finishing on April 2024 for a minimum of 560 hours.

All parties have agreed upon, and approved the following addendum items :

1. The following roles and responsibilities have been assigned. The student bears the responsibility of completing the educational courses and materials punctually, maintaining effective communication with the site mentor, engaging in regular meetings with the site mentor to monitor project progress and ensuring the timely distribution of educational materials to program participants. The site mentor plays a crucial role in overseeing and endorsing the educational courses, actively recruiting individuals to participate in the educational programs, and engaging in regular meetings with the student to monitor project progress. The faculty mentor provides valuable insight and guidance on the project, offering ongoing support to the student and approving educational materials when necessary. The capstone coordinator assumes the duty of ensuring the project's effective execution until it's end date, coordinating various aspects to ensure a successful outcome for the educational initiatives.
2. The purpose of this capstone project is to describe the role of occupational therapists in implementing an occupation-based course focused on building self-efficacy in six occupational performance areas (as defined by AOTA) for individuals who have experienced traumatic brain injury (TBI) as a result of intimate partner violence (IPV). Furthermore, this project will explain a five-step neurological examination related to promoting the early identification of signs and symptoms of TBI to prevent occupational dysfunction and better address the health of this population.
3. The student's individualized specific objectives include:
  - By week 11 of the DCE, the student will complete a 6-session community-based occupational therapy program, serving individuals who have experienced IPV and TBI, on the importance of/how to enhance occupational performance.
  - By week 8 of the DCE, the student will collaborate with a licensed OT in order to determine, identify and disseminate a TBI screening tool that can be used by IPV shelter staff.
  - At the end of the 14-week DCE, the student will clearly articulate and disseminate the

strategies and resources needed for individuals who have experienced IPV and TBI to continue to increase their occupational performance and engage in their preferred and necessary activities of daily living.

- 4. Specific plans for supervision include: Meetings with site mentor and student weekly to review progress; all parties will ensure student meets all deadlines; site mentor and faculty mentor will approve educational materials created by student; site mentor will attend educational courses to qualitatively provide recommendations to the student on ways to improve knowledge retention within courses.

This addendum is good through the ending date of the student's doctoral capstone experience.

**Signatures:**

Capstone coordinator: Carolee Podolski Date: 12/5/2023  
Site mentor: [Signature] Date: 11/22/2023  
OTD student: [Signature] Date: 09/18/2023  
Faculty mentor: [Signature] Jade Holloway Date: 9-19-23

***Appendix B: Program Informational Flyers and Educational Materials***

Link to All Educational Materials & Programs Developed: [Capstone Resources](#)

# Empower You!

A virtual occupational-therapy course designed to increase your self-efficacy & independence in everyday life after experience with intimate partner violence and/or traumatic brain injury.

When & Where?	Course Description
April 15th, 2024 6:00PM Via Zoom	<b>Week 1: Intro to OT</b> <ul style="list-style-type: none"> <li>• Understanding &amp; establishing the role of OT in IPV</li> <li>• Tackling OT strategies to use throughout the course</li> <li>• Understanding the signs &amp; symptoms of TBI in relation to IPV</li> </ul>
Via Zoom Recording	<b>Week 2: ADLs - Navigating Activities of Daily Living</b> <ul style="list-style-type: none"> <li>• Practical sessions on personal care routines</li> <li>• Adaptive strategies for enhanced independence</li> <li>• Group discussions on overcoming challenges</li> </ul>
Via Zoom Recording	<b>Week 3: IADLs - Gaining Control of Instrumental Life Skills</b> <ul style="list-style-type: none"> <li>• Skill-building in managing finances, transportation, and communication</li> <li>• Community resources and support systems</li> <li>• Role-playing scenarios for real-world application</li> </ul>
Via Zoom Recording	<b>Week 4: Rest &amp; Sleep - Strategies for Quality Rest</b> <ul style="list-style-type: none"> <li>• Understanding the importance of rest and sleep</li> <li>• Sleep hygiene practices</li> <li>• Creating a conducive sleep environment</li> </ul>
Via Zoom Recording	<b>Weeks 5 &amp; 6: Work &amp; Education - Navigating Professional &amp; Educational Spaces</b> <ul style="list-style-type: none"> <li>• Exploring vocational interests and skills</li> <li>• Strategies for pursuing employment &amp; education</li> <li>• Resume building and job-seeking skills</li> </ul>

**Interested? Contact:**  
 Barbara Gibson, *WRCDV Housing Services Director* @ barbara@wrcdv.org  
 OR  
 Alyssa Waters, *OTS* @ awaters26@student.gsu.edu

## Trauma-Informed Care for TBI Identification

This training program is designed to equip WRCDV staff with the knowledge & skills to identify signs & symptoms of traumatic brain injury (TBI) in women who have experienced IPV. The training emphasizes a trauma-informed approach from an occupational therapy perspective.

When & Where?	Course Description
April 11th, 2024 6:00pm WRCDV, Via Zoom	<p><b>Session 1: Understanding Traumatic Brain Injury in the Context of IPV</b></p> <ul style="list-style-type: none"> <li>• Introduction to Traumatic Brain Injury (TBI)</li> <li>• Understanding the intersection of TBI and IPV</li> <li>• Recognizing signs and symptoms of TBI in individuals who have experienced IPV through the HELPS screening tool</li> <li>• Communication strategies when working with individuals who may have experienced TBI</li> <li>• Resources and referrals for further support</li> </ul>




**Interested? Contact:**


Barbara Gibson, *WRCDV Housing Services Director* @ [barbara@wrcdv.org](mailto:barbara@wrcdv.org)

OR

Alyssa Waters, *OTS* @ [awaters26@student.gsu.edu](mailto:awaters26@student.gsu.edu)

## THE INTERSECTION OF TRAUMATIC BRAIN INJURY & INTIMATE PARTNER VIOLENCE





**1 IN 3**


**1 IN 3 WOMEN** will experience sexual, physical, psychological or emotional violence from an intimate partner in their lifetime.

**92%** of violent encounters include hits to the head, face or neck and/or include strangulation

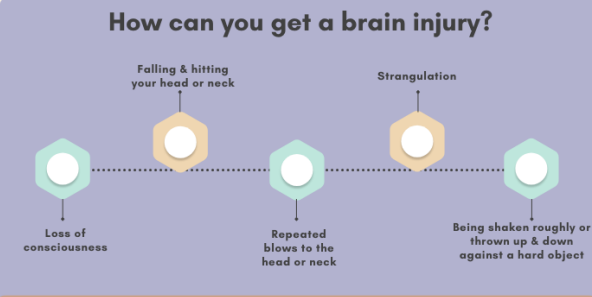
**75%** of individuals who have experienced IPV have suspected brain injuries

**7x more likely**

Women who have experienced IPV are 7x more likely to acquire a TBI than those who have not experienced IPV.



### How can you get a brain injury?



### What a brain injury may look like:

- Not being able to listen or feeling easily distracted
- Difficulty remembering
- Headaches  
Dizziness  
Nausea  
Ringing in the ears
- Depression  
Anxiety
- Difficulty performing your job/school work
- Being unable to follow instructions
- Severe changes to your menstrual cycle
- Difficulty concentrating
- Poor problem solving & judgement
- Difficulty speaking or swallowing
- Feeling unable to adapt to a new environment
- Changes in relationships with others
- Trouble seeing  
Blurry vision  
Sensitivity to light
- Sleep disruptions
- Unexplained anger or changes in mood & personality
- Becoming easily overwhelmed

### Who can help you if you think you have a TBI?

**Occupational therapist**  
Helps to increase your independence with daily activities

**Social worker**  
Provides counseling & assistance with information gathering & problem-solving

**Physical therapist**  
Helps to increase strength & mobility in your physical abilities

**Speech language pathologist**  
Helps with communication & cognitive skills


**Neurologist**  
Diagnosis & prescribes medication & referrals to other specialists

If you or someone you know has a suspected traumatic brain injury (TBI), seeking medical care immediately (when it is safe to do so) is crucial.

Tell a doctor about the signs & symptoms you are experiencing.

This resource is for information purposes only and does not replace medical attention. For more information, visit: [www.abitoolkit.ca](http://www.abitoolkit.ca) or <https://dph.georgia.gov/health-topics/injury-prevention-program/cdc-core/traumatic-brain-injury>

## THE INTERSECTION OF TRAUMATIC BRAIN INJURY & INTIMATE PARTNER VIOLENCE



**TBI is often confused with post-traumatic stress disorder (PTSD), depression or anxiety. While TBI and PTSD often coexist, here's the difference:**

**PTSD**

- Flashbacks
- Avoidance
- Frequent nightmares
- Hyper-vigilance

**TBI**

- Nausea/dizziness
- Vision loss
- Headaches
- Ringing in the ears
- Light or sound sensitivity
- Balance/mobility issues

**Intersection:**

- Irritability
- Depression
- Anxiety
- Difficulty concentrating
- Difficulty with memory
- Fatigue/sleep problems
- Mood swings/personality changes


**The relationship between mental health & TBI:**

TBI can make existing mental health concerns worse

↔












Mental health concerns can make TBI symptoms worse

**50%-75%** of individuals who have experienced IPV also experience mental health concerns




50%75%

### Seek Immediate Medical Attention if you Experience Any of the Following:

- 
Neck pain
- 
Loss of consciousness or in/out of consciousness
- 
Severe or worsening headache
- 
Unusual changes in behavior
- 
Seizures
- 
Double vision
- 
Increased confusion or unexplained irritability
- 
Weakness, tingling or a burning sensation in the arms or legs
- 
Repeated vomiting
- 
Uncontrolled urination and/or defecation
- 
Bleeding through the nose, eyes mouth or ears

Scan the QR Code for resources related to TBI:



©2014 Adapted from NIH Research Lab, L. J. SZOKAL, M.D.  
 This resource is for information purposes only and does not replace medical attention. For more information, visit: [wvdc.org](http://wvdc.org), <https://www.abifoolii.ca> or <https://dph.georgia.gov/health-topics/injury-prevention-program/cdc-care/traumatic-brain-injury>

## THE INTERSECTION OF TRAUMATIC BRAIN INJURY & INTIMATE PARTNER VIOLENCE

How to identify TBI in a shelter population using the HELPS tool:

Ask the individual the following questions and circle or record the answers:

<b>H:</b>	<p>Have you ever <b>hit</b> your <b>head</b> or been <b>hit</b> on the <b>head</b>?</p> <p style="font-size: small;">Include answers from childhood, intimate partner violence and from being shaken as a baby or child.</p> <p style="text-align: center;"> <input type="button" value="NO"/> <input type="button" value="YES"/> </p>		
<b>E:</b>	<p>Were you ever seen in the <b>emergency</b> room, hospital or by a doctor because of an injury to your head?</p> <p style="text-align: center;"> <input type="button" value="NO"/> <input type="button" value="YES"/> </p>		
<b>L:</b>	<p>Did you ever <b>lose</b> consciousness or experience a period of being dazed and confused because of an injury to your head?</p> <p style="text-align: center;"> <input type="button" value="NO"/> <input type="button" value="YES"/> </p>		
<b>P:</b>	<p>Do you experience any of these <b>problems</b> in your daily life since you hit your head?</p> <table style="width: 100%; font-size: small;"> <tr> <td style="width: 50%; vertical-align: top;"> <input type="checkbox"/> Headaches  <input type="checkbox"/> Dizziness  <input type="checkbox"/> Anxiety  <input type="checkbox"/> Depression  <input type="checkbox"/> Difficulty concentrating  <input type="checkbox"/> Difficulty remembering                 </td> <td style="width: 50%; vertical-align: top;"> <input type="checkbox"/> Difficulty reading, writing, calculating  <input type="checkbox"/> Poor problem solving  <input type="checkbox"/> Difficulty performing your job/school work  <input type="checkbox"/> Changes in relationships with others  <input type="checkbox"/> Poor judgment (being fired from jobs, arrests, fights)                 </td> </tr> </table>	<input type="checkbox"/> Headaches <input type="checkbox"/> Dizziness <input type="checkbox"/> Anxiety <input type="checkbox"/> Depression <input type="checkbox"/> Difficulty concentrating <input type="checkbox"/> Difficulty remembering	<input type="checkbox"/> Difficulty reading, writing, calculating <input type="checkbox"/> Poor problem solving <input type="checkbox"/> Difficulty performing your job/school work <input type="checkbox"/> Changes in relationships with others <input type="checkbox"/> Poor judgment (being fired from jobs, arrests, fights)
<input type="checkbox"/> Headaches <input type="checkbox"/> Dizziness <input type="checkbox"/> Anxiety <input type="checkbox"/> Depression <input type="checkbox"/> Difficulty concentrating <input type="checkbox"/> Difficulty remembering	<input type="checkbox"/> Difficulty reading, writing, calculating <input type="checkbox"/> Poor problem solving <input type="checkbox"/> Difficulty performing your job/school work <input type="checkbox"/> Changes in relationships with others <input type="checkbox"/> Poor judgment (being fired from jobs, arrests, fights)		
<b>S:</b>	<p>Any <b>significant</b> <b>sicknesses</b>?</p> <p style="text-align: center;"> <input type="button" value="NO"/> <input type="button" value="YES"/> </p>		

### Scoring:

A score is considered positive for a *possible* TBI when the following 3 items have ALL been identified:

1. **Yes to "H" or "S"** (meaning an event occurred that could have caused a brain injury) **AND**
2. **Yes to "L" or "E"** (indicating a period of a loss of consciousness or altered consciousness after the injury or another indication that the injury was severe) **AND**
3. The presence of **two or more** chronic **problems listed under "P"** that were not present before injury

Note:

- A positive score is **NOT sufficient for a TBI diagnosis**. Please refer to a doctor or specialist after screening. Use the QR code below for a referral list.
- Some individuals could present exceptions to the results.

