# Resiliency in the context of traumatic brain injury

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### Speakers



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### Acknowledgements

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#### Partner Organizations:











A world of possibility



### Learning objectives

#### Upon completion, participants will be able to:

- Discuss different ways that resiliency is conceptualized in the literature;
- 2. Describe resiliency processes influencing individual and family adaptation following TBI;
- 3. Discuss implications for how resiliency is or could be addressed within service delivery and directions for future research in this field.

### Key concepts- what is resiliency?

"Resilience is a **dynamic process** wherein individuals display **positive adaptation**, despite experiences of significant **adversity**"

(Luthar & Cicchetti, 2000)

### Changing perspectives on resiliency

As a trait They are resilient As an outcome They bounced back As a process It unfolds over time

(Nalder et al., 2019; King et al., 2020)

### Resiliency & TBI

- Qualitative evidence in TBI illustrates multiple losses <u>but</u> <u>also</u> change processes as individuals negotiate life challenges
  - Reconstruction of identity
  - Re-establishing a place in the world
  - Returning to a sense of 'normality'
  - Changing their priorities in life
  - Developing a concept of living with TBI
- Cumulative adversity- ongoing process of adaptation to changing life circumstances

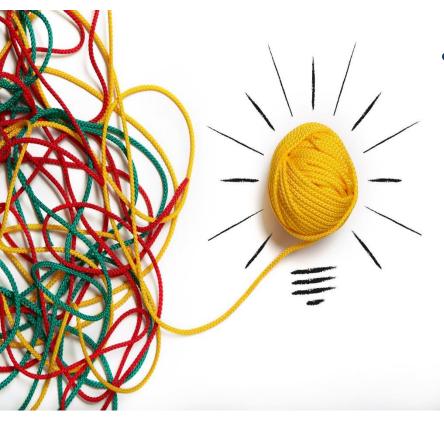
(Nalder et al., 2019; Nalder et al., 2013; Fadylt et al 2019; Levack et a;., 2010)

### Resilience linked to life outcomes

- Higher trait resilience is associated with
  - Greater life satisfaction
  - Fewer depression, anxiety, & post-concussion symptoms
  - Psychological wellbeing and adjustment

(Marwitz et al., 2018; Sullivan et al., 2020; Rapport et al., 2019)

### Conceptual models of resiliency



- Models help to
  - Make sense of complexity
  - Frame our way of thinking and talking about phenomena
  - Understand relationships between concepts
  - Developing interventions & evaluating their effects on society

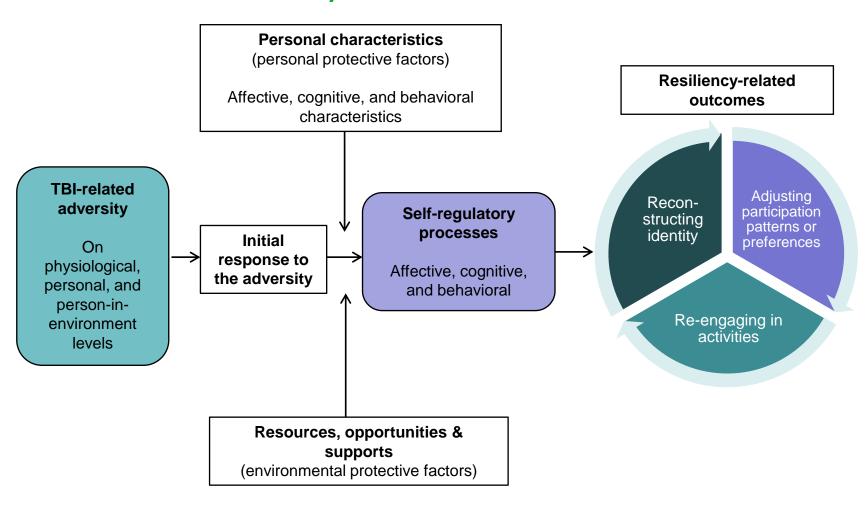
## Two conceptual models will be discussed:

- TBI-Resiliency Model (Nalder et al., 2019)
  - Umbrella model
  - Purpose: to conceptualize resiliency in the TBI context relevant adversities and outcomes, but generic processes
- Transactional resiliency framework for rehabilitation (King et al., 2020)
  - Purpose: To guide the development of a measure to capture the extent to which services may promote the development of resiliency-related adaptive capacities

### **TBI-Resiliecy Model**

- Informed by umbrella models of resiliency as a process (King & Rothstein, 2010)
- Proposes that protective factors and processes can be conceptualized in terms of affective, cognitive, and behavioral domains
  - Self-regulation of emotions
  - Beliefs or cognitive strategies that provide a sense of coherence or meaning
  - Behavioral strategies that provide a sense of personal control and self-efficacy
- Support research to determine the different factors and processes contributing to resiliency-related outcomes

#### TBI Resiliency Model



TIME

### **TBI-Resiliecy Model**

- In response to adversity experienced as a result of having a TBI, resiliency is shaped by:
  - Personal characteristics (e.g., hope, social functioning, self-awareness, memory, spirituality, coping, and selfefficacy)
  - Environmental resources/supports (e.g., services and social support)
  - Self-regulatory processes that lead to relevant resiliency-related outcomes in the TBI context, namely re-engaging in activities, adapting participation, and reconstructing identity

### Testing the models- uncovering resiliency processes & outcomes relevant to the TBI context



What is the <u>current state of the qualitative</u> <u>literature</u> with respect to <u>positive life</u> <u>outcomes</u> in individuals with TBI?

What <u>factors & processes</u> that if targeted could <u>foster resiliency</u> and help individuals experience these positive life outcomes?

### Methods

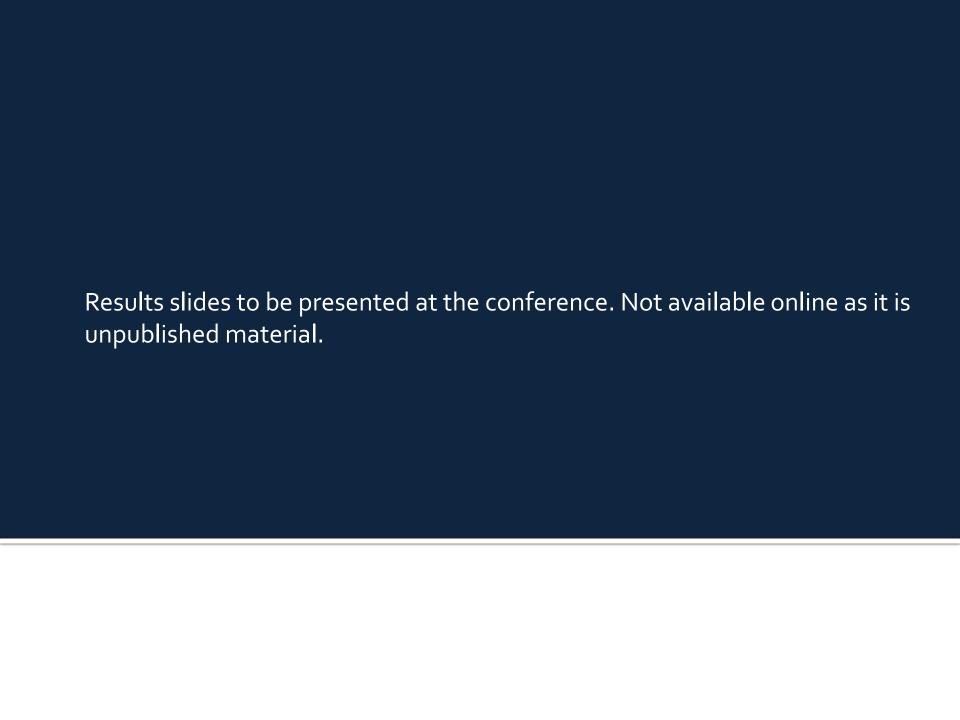
#### Select the studies

#### Inclusion criteria

- Used qualitative methodology
- Included individuals with TBI (all severity)
- Described outcomes from the perspective of individuals with TBI

#### **Exclusion** criteria

- Used quantitative methodology
- Review articles
- Participants had not had TBI
- Published abstracts
- Focused on impairment level or service related outcomes



### Take Away Messages



- The utility of conceptual models for guiding investigation and developing measures
- Various models of resiliency can be useful to how we understand and measure resiliency in the TBI field
- Key processes and outcomes influencing resiliency relate to:
  - Social relationships & interaction where one feels understood and accepted
  - Engaging in activities where one feels productive, in control and experiences accomplishment
  - Cognitive processes- coming to understand oneself & one's life in new adaptive ways
  - Hope

### Our next steps

- Arts-based study (ongoing) examining turning points in life and the meaning of resiliency to individuals with TBI and families
- Developing a measure of resiliency related adaptive self capacities
- Examining how resiliency can be addressed in service delivery

#### TURNING POINTS STUDY

#### ARE YOU AN ADULT WHO HAS EXPERIENCED A TRAUMATIC BRAIN INJURY?

Are you interested in talking about your experiences of RESILIENCY and what RESILIENCY AFTER BRAIN INJURY means to you?

#### WHAT DO I HAVE TO DO?

Participate in one or more arts-based sessions online or in person with a researcher, where you will use both words and drawing to tell us about your experiences following TBI



We will ask about different important events ("turning points") in your journey and try to understand how you became resilient.

#### WHO CAN PARTICIPATE?

- (a) be at least 18 years old;
- (b) have experienced a TBI more than 3 years ago;
- (c) feel that you demonstrate resiliency (meaning that you have shown positive growth and adaptation since the accident; you have been able to recognize and access resources and supports; and/or you have demonstrated success in any way you define it);
- (d) be able to provide informed consent to participate in the study;
- (e) be able to understand questions and provide answers in English (verbally, through an aide, or through augmentative or alternative communication methods/devices);
- (f) be able to engage in or direct the creation of a visual body map;
- (g) have adequate vision to engaged in or direct the creation of a visual body map (you can see the map); and
- (h) Have access to a computer/tablet with internet connection or live in/within driving distance of the Greater Toronto Area.



TO PARTICIPATE, CONTACT:
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Participants will receive a small token of appreciation to thank them for their time, and reimbursement for any travel/parking costs.

**Emily Nalder** 

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# Resiliency in Families with Adolescents Suffering from Traumatic Brain Injuries

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### Outline

- Background
- Aim of study and study objectives
- Methodology
- Findings
- Discussion
- Conclusion

### Background

- Effects of a health issue on the entire family.
- Specific changes and transitions triggered by adolescence.
- Impact of the traumatic brain injury (TBI) on the family dynamic.
- The family is forced to mourn several losses and has to work together to build a new future.
- Some families "bounce back" and have a positive evolution, despite the injury: resiliency.

### Background (continued)

#### Family resiliency as:

 "a complex human process that is deployed when a family is confronted with a trauma. Consequently, the family will undertake a fluctuating process of transformation, according to the meaning it ascribes to the situation. The interrelation of elements inherent to the family and its environment will influence this process, positively or negatively, to achieve a positive reconstruction of the life project."

(

Gauvin-Lepage et al., 2014, p.28

### Aim of the study

 Led to the co-construction of the building blocks for an intervention program to support family resiliency in conjunction with families with an adolescent suffering from moderate or severe TBI and rehabilitation professionals.

### Study objectives

Identify the building blocks of the intervention program in the eyes of families and rehabilitation professionals.

Prioritize the building blocks with families and rehabilitation professionals.

Validate the building blocks with families and rehabilitation professionals.

### Methodology

#### Proposal:

- Qualitative and inductive research.
- Supported by a collaborative research approach.
- Based on the development and testing of complex interventions model.

### Methodology (continued)

- Study setting:
  - Pediatric rehabilitation centre.
  - Sample comprised of families (n=6) of an adolescent with a moderate or severe TBI and rehabilitation professionals (n=5).

### Findings

**Five encompassing themes**, considered to be the building blocks of an intervention program to support family resiliency following moderate to severe TBI in adolescents:

- 1. Family characteristics and its influences
- 2. Positive family strategies
- 3. Family and social support
- 4. Management of occupational aspects
- 5. Contribution of the community and health professionals

#### Family characteristics and its Influences:

- "Fighter" personality
  - "She has a good disposition, she's a fighter, actually."
- Cultural and spiritual beliefs
  - "I pray to the God I believe in every night."
- Family's socioeconomic status
  - "Financial resources certainly make it easier. We know that it helps a family adapt and gain some stability".

#### Positive family strategies:

- Presence of hope
  - "I haven't lost hope. Neither has my family."
- Keeping a sense of humor
  - "I used to laugh about my accident because it made it easier to get over it. People stopped treating me like a victim, like a disabled person who needed help."

#### Family and social support:

- Family members' support
  - "Knowing that there are people that we can count on is really important."
- Friends' support
  - "I mean, one of the things that help me the most is my best friend. We talk a little, and then a lot, when I talk to him on the phone, and then boom!, I feel better."

#### Management of occupational aspects:

- Practice of sports and leisure activities
  - "I prefer drawing it (the anxiety). It helps calm me, because when I draw, as soon as I'm done, everything's gone."
- Back-to-school support
  - "Sometimes, we achieve good collaboration with the school and the principals. But sometimes, it's the opposite and that's very hard on the families."

- Contribution from community and health professionals:
  - Help received from professionals
    - "I asked for help from a psychologist, and it helped."
  - Feeling of being helpful to teenager
    - "It allows us to be active with our child. It's very important."
  - Role of health professionals
    - "We worked in collaboration with the parents, we accompany them in the process. We noticed that it's more effective than trying to convince them otherwise."

### Discussion

- The results of this study:
  - confirm those of previous research;
  - in addition to bringing clarifications to certain elements and;
  - new contributions to the building of knowledge.

### Conclusion

- Enabled the co-construction of the building blocks of an intervention program supporting the resiliency of families with a teenager suffering from moderate or severe TBI.
- Inductive framework which give a preeminent place to the perspective of a diverse group of participants.
- Will impact the future development of validated family intervention programs.

# Thank you! Any questions?