

## What We Asked:

Among survivors of IPV, do **person-centered** or **variable-oriented** methods better capture the relationship between **TBI** and **PTSD** symptoms and measures of **healthcare access and engagement**?

## Why We Asked:

- **Traumatic Brain Injury** is estimated to affect **19-75%** of IPV survivors (Haag et al., 2019).
- **31-64%** of women who are victimized in IPV develop **PTSD** (Galovski et al., 2021).
- PTSD and TBI share many **overlapping symptoms**, making it challenging to study them concurrently and distinguish them in medical care settings.
- **Healthcare access and engagement** is crucial for survivors of IPV with head injury.

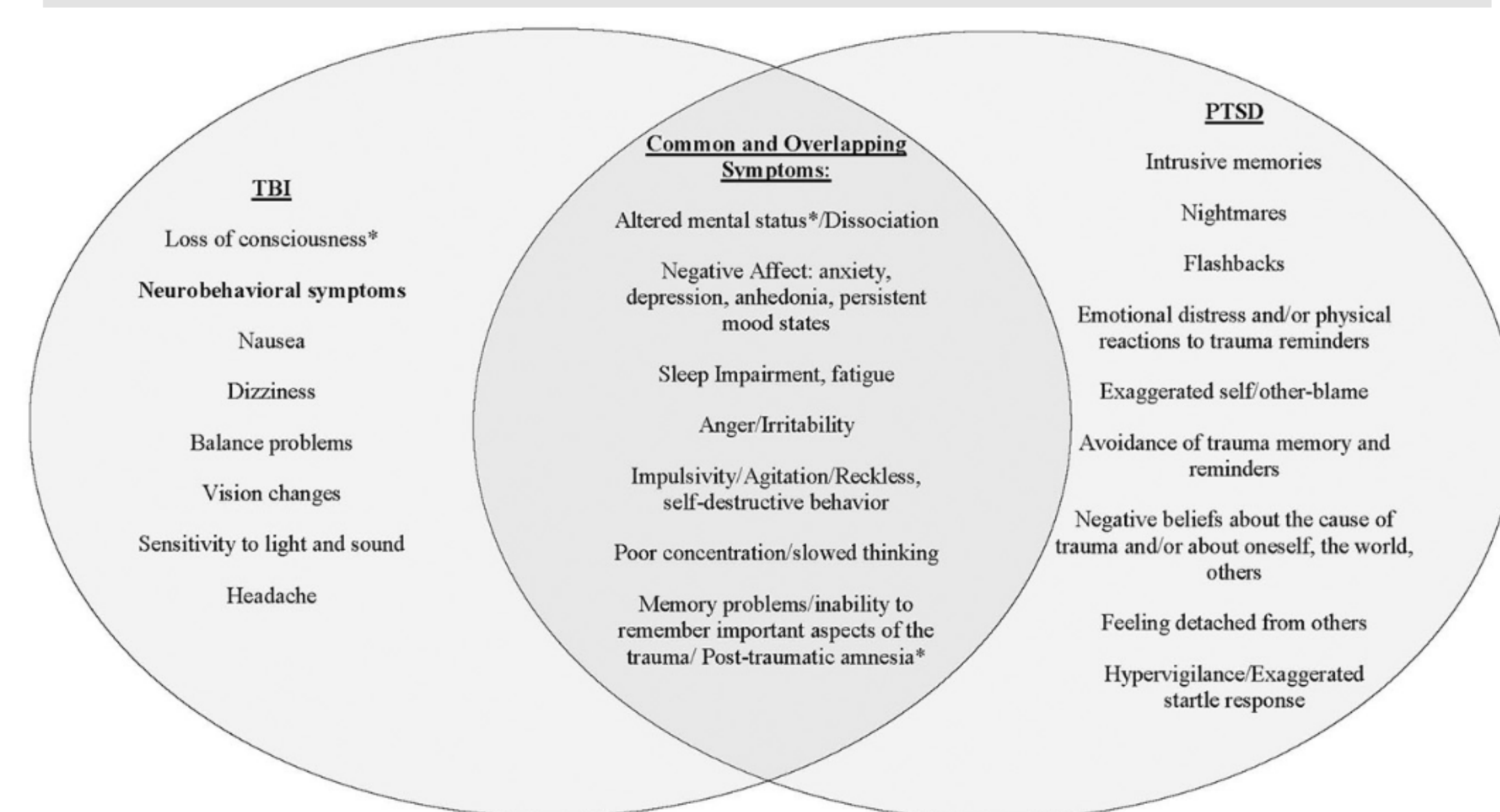


Figure from Galovski et al., 2021

## Methodology

**Person-Centered Analyses:** Latent Class Analysis with Probability Weighted Regression (n=177).

**Variable-Oriented Analyses:** Multiple Linear Regression with theory driven scales (n=86).

## What We Found:

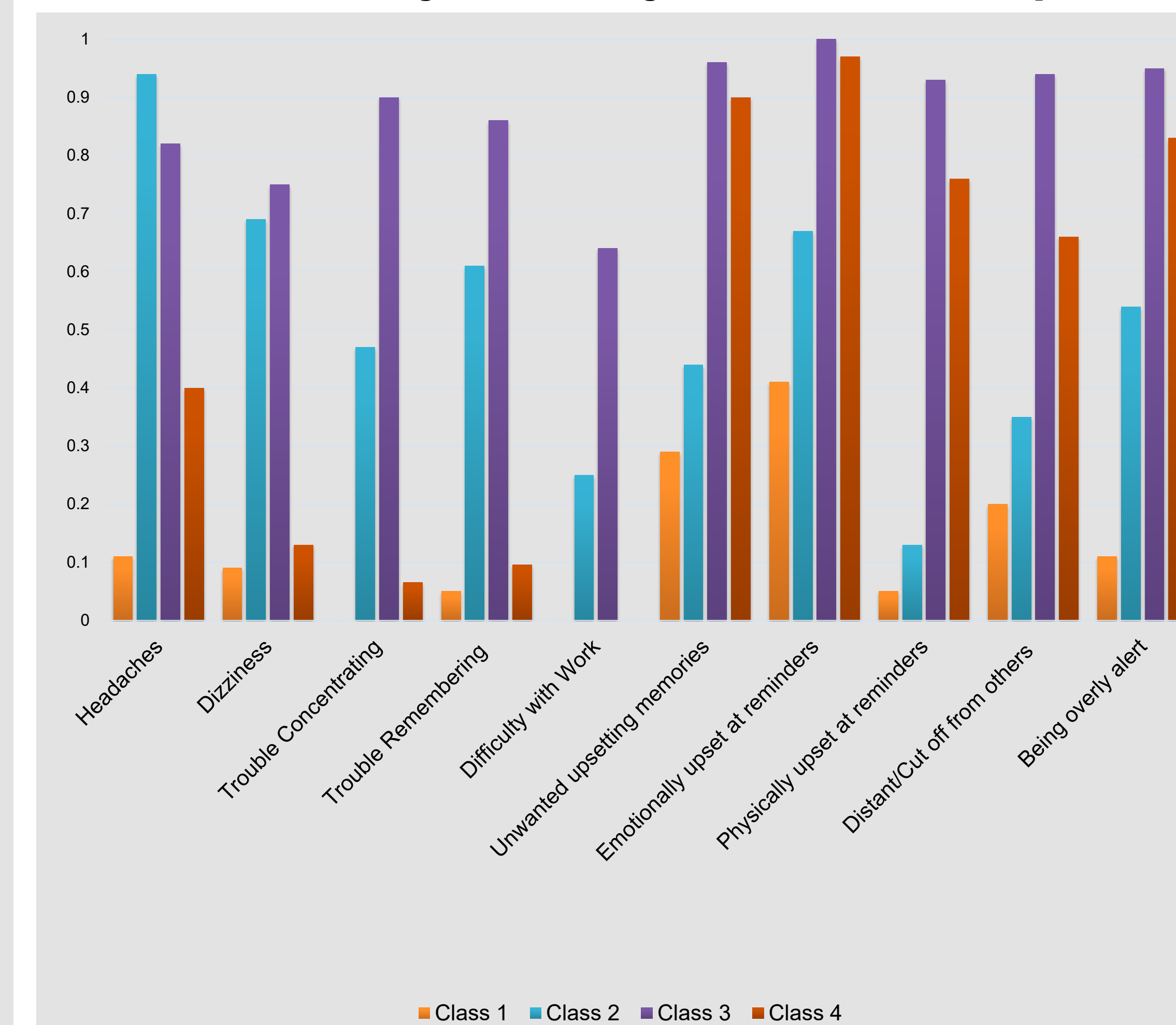
Among women who had experienced IPV, a **person-centered** approach revealed 4 classes of TBI and PTSD symptoms. However, neither those classes nor a **variable-oriented** approach were related to **healthcare access and engagement**.

## Variable-Oriented Analyses

<b>Cognitive Dysregulation</b> Cronbach's Alpha: 0.840	<ul style="list-style-type: none"> <li>- Headaches</li> <li>- Difficulty Concentrating</li> <li>- Difficulty Remembering</li> <li>- Difficulty reading, writing, and calculating</li> <li>- Dizziness</li> <li>- Having trouble concentrating</li> </ul>
<b>Higher-Order Dysregulation</b> Cronbach's Alpha: 0.759	<ul style="list-style-type: none"> <li>- Poor problem solving</li> <li>- Difficulty performing job</li> <li>- Poor judgement</li> <li>- Change in relationships</li> <li>- Taking more risks</li> <li>- Avoiding thoughts or feelings related to the event</li> <li>- Avoiding situations/places related to the event</li> </ul>
<b>Emotion Dysregulation</b> Cronbach's Alpha: 0.866	<ul style="list-style-type: none"> <li>- Anxiety</li> <li>- Depression</li> <li>- Unwanted upsetting memories about the event</li> <li>- Nightmares about event</li> <li>- Emotionally upset at reminders</li> <li>- Physically reactions to reminders</li> <li>- Blaming self or others</li> <li>- Having intense negative feelings</li> <li>- Feeling distant from others</li> <li>- Difficulty experiencing positive feelings</li> <li>- Being overly alert or on-guard</li> <li>- Reliving the event</li> <li>- Seeing self/others/world in a more negative way</li> <li>- Acting more irritable or aggressive</li> <li>- Being jumpy or easily startled</li> <li>- Having trouble falling or staying asleep</li> <li>- Losing interest in enjoyed activities</li> <li>- No memory of important parts of the event</li> </ul>

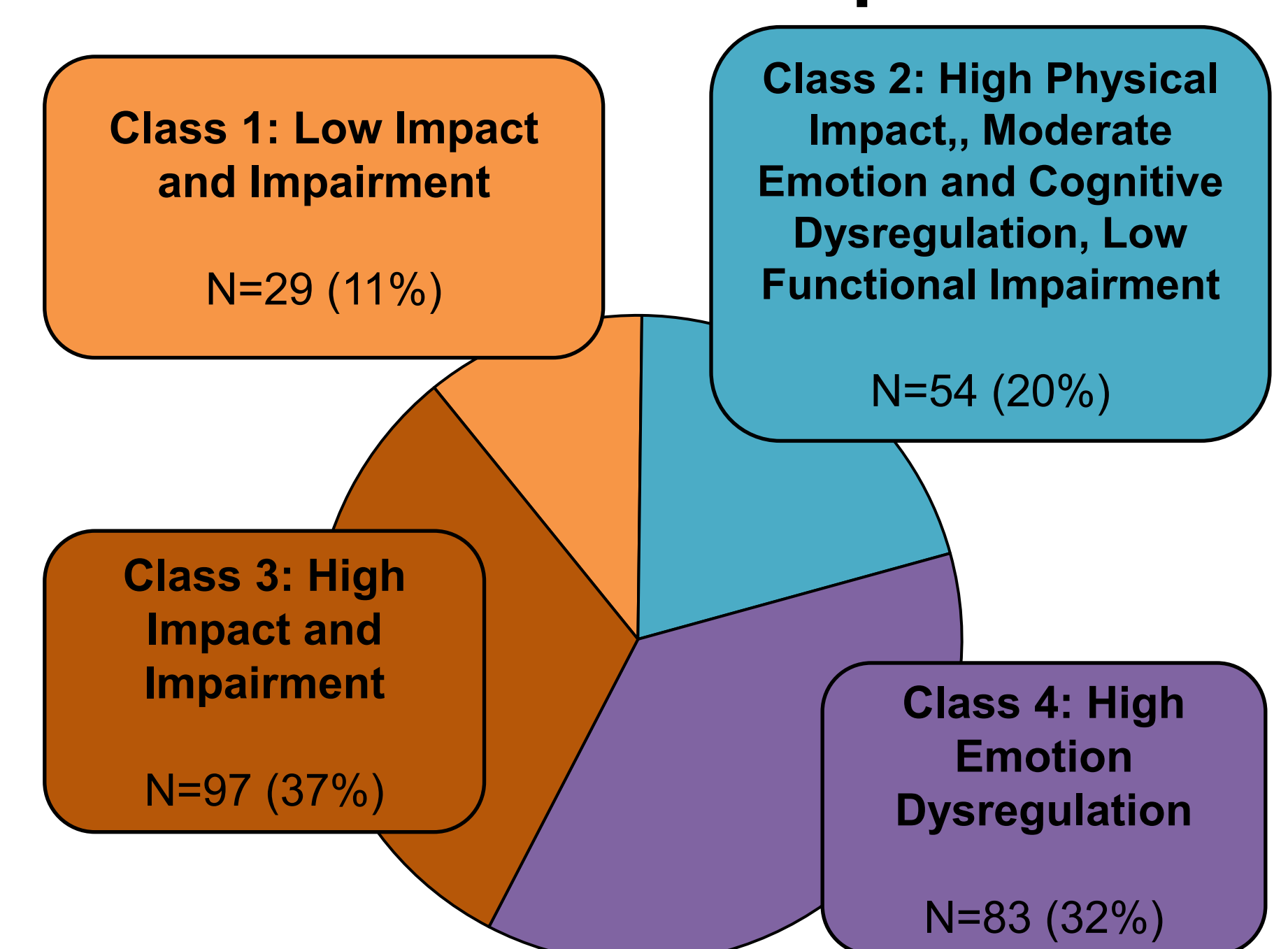
## Person-Centered Analyses

### Latent Classes by Probability of Affirmative Responses



Based on AIC, BIC, aBIC, and a likelihood ratio test, a 4-class solution was found to best represent PTSD and TBI symptoms in survivors of IPV with head injury.

### Latent Class Descriptions



## Relationship to Healthcare Outcomes

- Using probability-weighted regression analysis, **when compared to Class One**, latent classes Two, Three, and Four showed **no significant relationship** to measures of healthcare access and engagement.
- Composite scales of **Cognitive Dysregulation**, **Higher-Order Dysregulation**, and **Emotion Dysregulation** showed **no significant relationship** to measures of healthcare access and engagement.

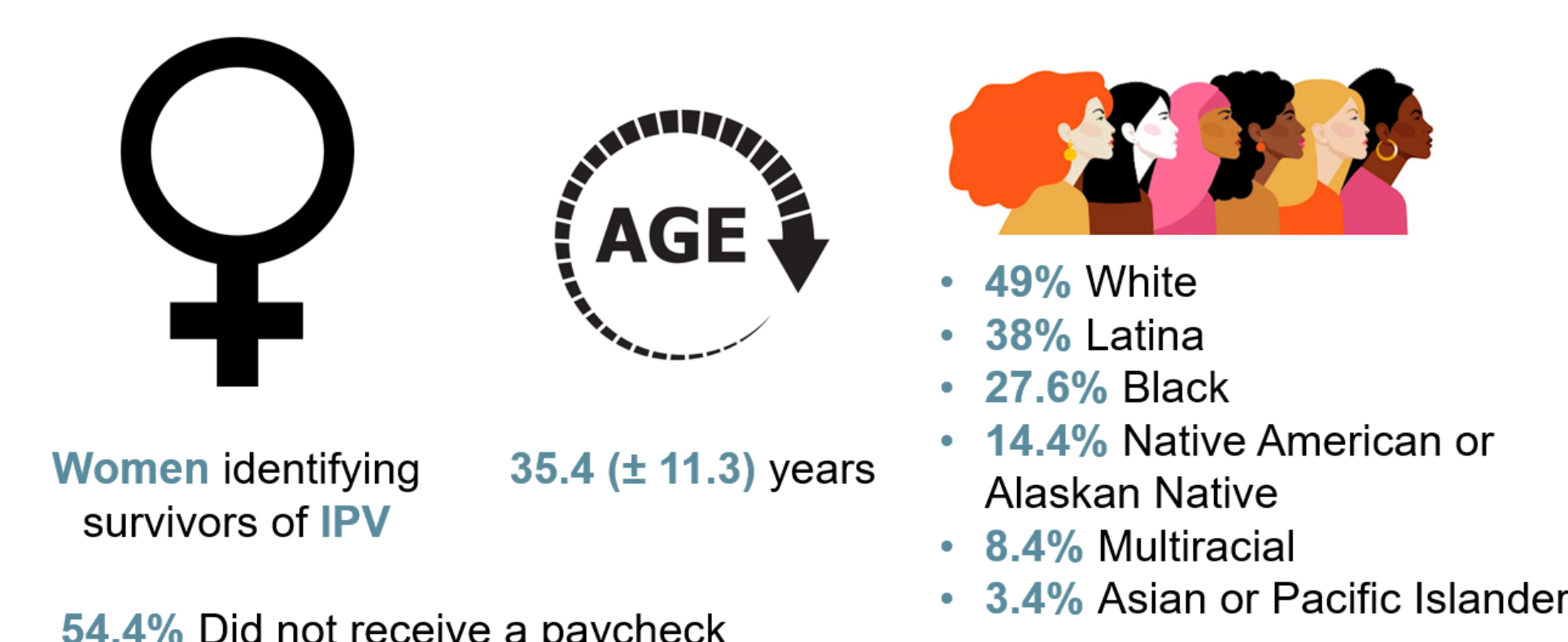
## Limitations & Future Directions

- Participants were recruited from a **Family Justice Center** and may have received **more robust support** accessing services.
- We plan to **investigate relationships among latent classes** in addition to using Class One as a reference group.
- Future work should investigate the role of **neurodivergence** in symptom presentation and engage **LGBTQIA+ survivors** of IPV.

## Measures

Construct	Measure
<b>PTSD Symptoms</b>	Post-Traumatic Diagnostic Scale (Foa et al., 1997 & 2016)
<b>TBI Symptoms</b>	HELPS Brain Injury Screener
<b>Health Literacy</b>	3 items from the Brief Health Literacy Screener (Chew et al., 2004)
<b>Trust in Physicians</b>	Trust in Physician Scale (Anderson & Dedrick, 1990)
<b>Access to Timely Medical Care</b>	'Quick Care' subscale of the Medical Expenditure Survey – Household Component (Cohen, 2000)

## Participants



## Acknowledgements

Dr. Catherine Durso offered her expertise and guidance for statistical interpretation, troubleshooting, and coding in R. Dr. Lauren McGrath, Dr. Julia Dmitrieva, and the Traumatic Stress Studies Group provided insight and direction to this project.

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## References

