

Understanding How Trauma Impacts Behavior and Memory: Implications for Victim Interviewing



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Learning Objectives

1. Explore the accuracy and resilience of memory.
2. Explain how behavior and memory processes can be impacted by trauma.
3. Describe how memory **retrieval** and **disclosure** can be facilitated during victim interviews.
4. Examine research identifying best practices for interviewing victims and suspects.

Question

Have you already had training on trauma and the effects on victim behaviors and memories?

Yes

No

Maybe

Importance of Victim Interview

- Purpose of interview is to help victims (a) retrieve memories, and (b) share them.
- Investigator documents information and evaluates in context of entire investigation.
- Not unlike a **crime scene...**



Traditional Approach: *What Doesn't Work*

Question

What does “trauma informed interviewing” mean to you?

What techniques, strategies and approaches, would you include in that description ?

“Trauma Informed” Interviewing

- Establish safety, trust, rapport, comfort
- Encourage disclosure, as much as possible
- Use non-leading, open-ended prompts
- Encourage free recall, active generation
- No need for sequential, chronological order
- Allow pauses, silence to gather thoughts
- Not rushing, interrupting responses
- Focus on thoughts, feelings in experience

“Trauma Informed” Interviewing

- Express patience, empathy, understanding
- Advise not to guess, say “I don’t know”
- Avoid “why” questions
- May recall more information in the future

Part I: Resilience of Memory

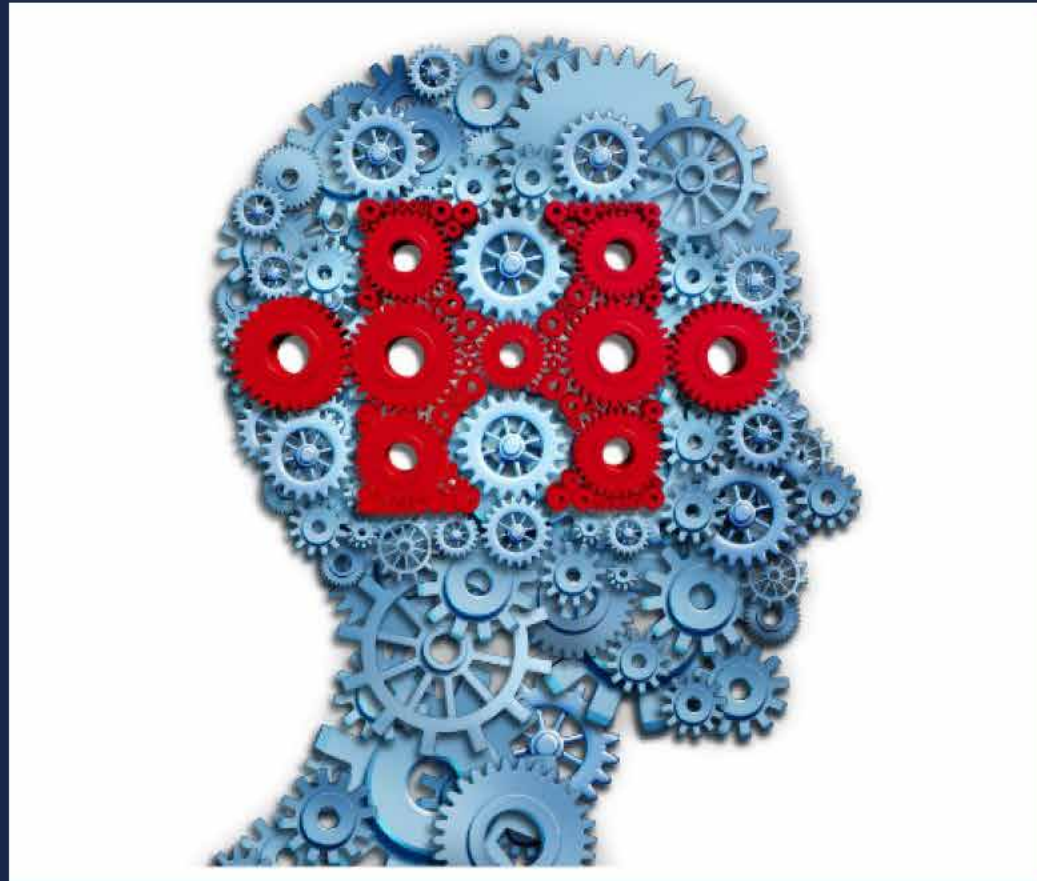


Photo Credit: wildpixel from Getty Images

REVIEW ARTICLE



Is the study of memory unduly preoccupied with its sins?

Alan D. Baddeley

Department of Psychology, University of York, York, United Kingdom

ABSTRACT

A broad functional approach is taken to the analysis of human memory. The overall importance of episodic memory, the capacity to remember specific events, is illustrated by the devastating effect that loss of this aspect of memory has on the capacity to cope in the case of densely amnesic patients. Recent applied research has however focussed heavily on factors compromising the reliability of eyewitness testimony in the forensic field and on the creation of false memories. While acknowledging the progress made on this issue, it presents two dangers. The first is practical, the danger of generalising too readily from laboratory-influenced simulations that differ in important ways from the context to which they are applied. This suggests a need for fewer but more realistically representative studies. The second is a broad theoretical issue, that of extending the findings from this important but limited applied area, within which precise detail may be crucial, to the whole of memory, consequently failing to appreciate its many strengths.

ARTICLE HISTORY

Received 12 January 2021
Accepted 23 February 2021

KEYWORDS

Amnesia; false memory;
eyewitness testimony;
everyday memory; retrieval

A healthy **30-year old** adult attends an audio-guided museum tour as part of a memory experiment. Memory for the tour is tested using **free recall** (i.e., the person says everything they can remember about the event) **48 hours later**.

What proportion of freely recalled details would be accurate **after 48 hours**?

What proportion of these freely recalled details would be accurate after 48 hours?

0-10%

40-50%

80-90%

10-20%

50-60%

90-100%

20-30%

60-70%

30-40%

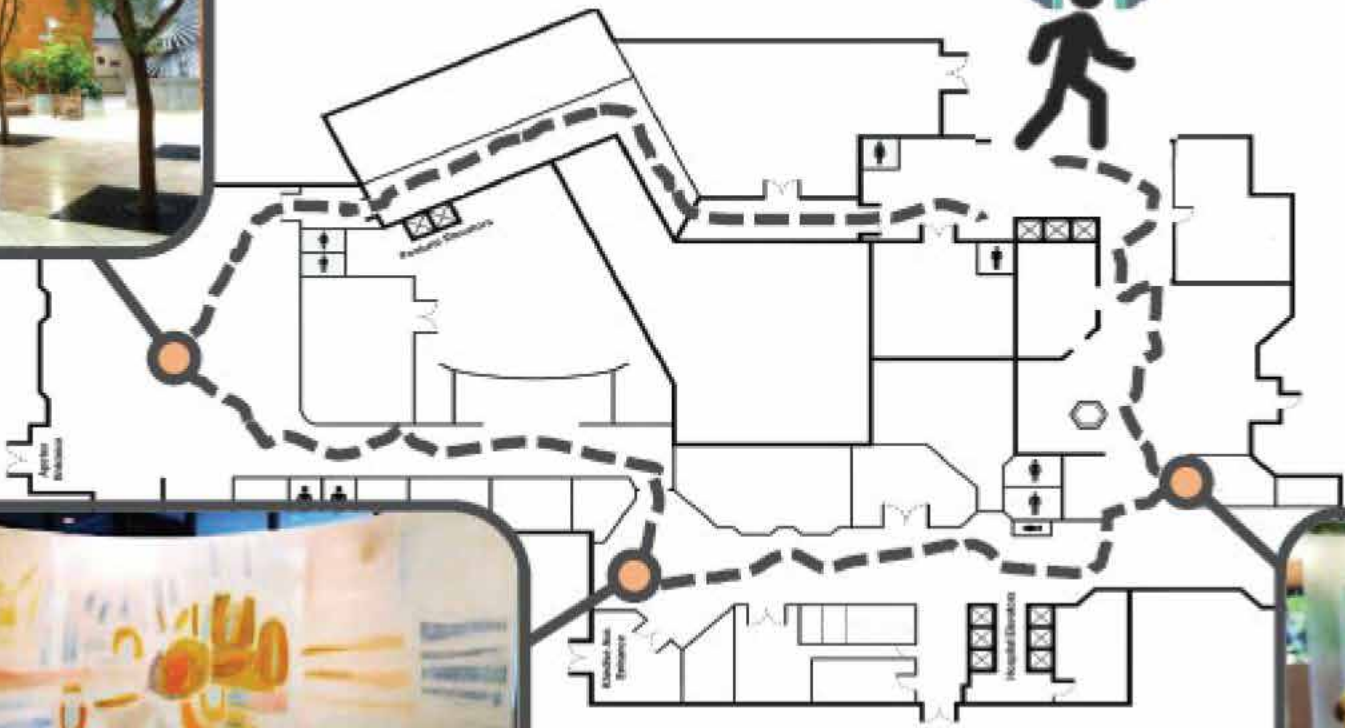
70-80%

Estimates of Accuracy

- 418 researchers and academics
 - 68 studying memory
 - 350 in other fields
- Estimated **30-40%** accuracy
 - Higher for 30-year old, and 48 hours later
 - In other words ,thought 60-70% would be wrong
 - No difference for memory researchers, others

Diamond, N.B., Armson, M.J. & Levine, B. (2020). The truth is out there: Accuracy in recall of verifiable real-world events. *Psychological Science*, 31 (12), 1544-1556 (quote is on p. 1552).

Diamond, N.B., Armson, M.J. & Levine, B. (2020). The truth is out there: Accuracy in recall of verifiable real-world events. *Psychological Science*, 31 (12), 1544-1556 (image is on p. 1548).



Int – event – accurate

Int – event – accurate

Int – event – accurate

“...I was **told to look at the piano** and then **walk further** and look at the **market** that was

Int – perceptual – **inaccurate**³

Int – event – accurate

Int – perceptual – accurate

going on **at the left**... I **looked around the gift shop** and then **on the shelf** at the **back**

Int – perceptual – accurate

Int – perceptual – accurate

Int – event – accurate

left – not the very last one, **but the second or third last**, was a **cookie jar** or a **ceramic**

Int – perceptual – accurate

Int – perceptual – accurate x3

Int – perceptual – accurate

figure of a, uh, large chef with a **hat** and an **apron, both white**, holding a **cake** I believe

Int – perceptual – **inaccurate**⁴

Int – event – accurate

Ext - other

with a cake lift in the other hand...I **walked down the hallway**...I **don't remember this**

Int – thought – **unconfirmable**

chunk of the tour. I was still thinking about the Andy Warhol portraits”

How many details do you think people recalled 48 hours after the hospital tour?

0-10

40-50

80-90

10-20

50-60

90-100

20-30

60-70

30-40

70-80

Accuracy of Recall

- Number of details recalled, on average:
 - 80 for younger people (19-35)
 - 52 for older people (65-75)
 - Many recalled more than 100
- Accuracy of recall, on average:
 - **93-95%** across age groups

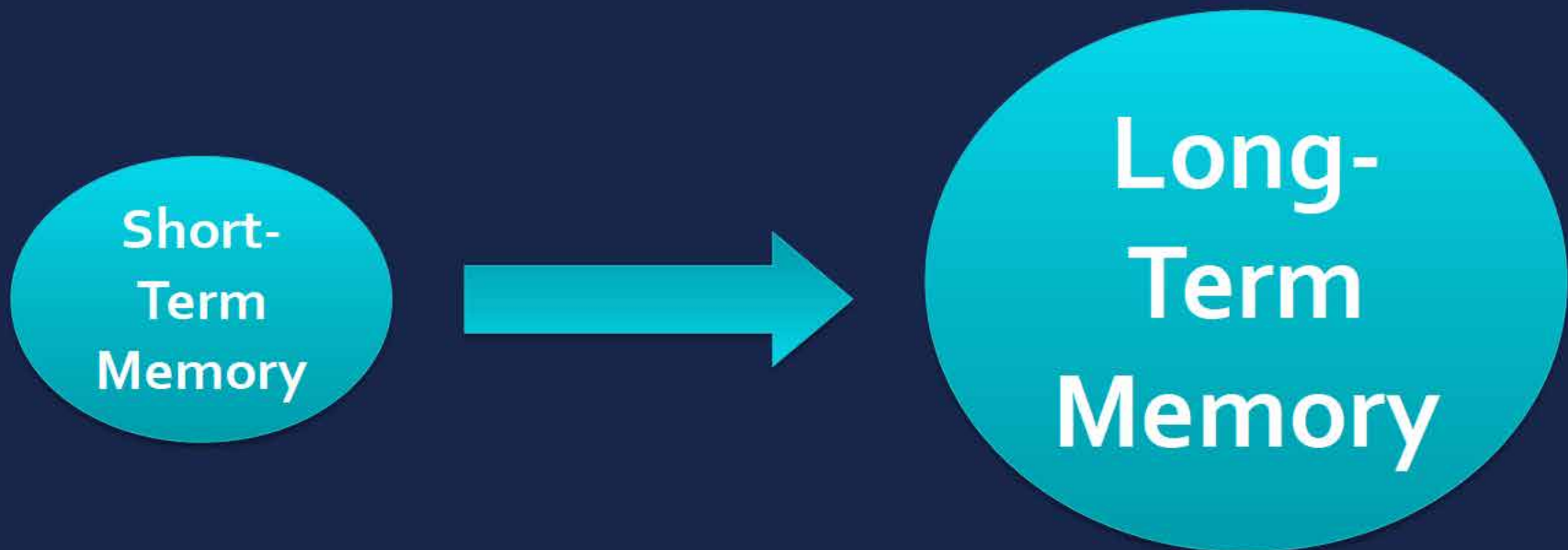
Diamond, N.B., Armson, M.J. & Levine, B. (2020). The truth is out there: Accuracy in recall of verifiable real-world events. *Psychological Science*, 31 (12), 1544-1556 (quote is on p. 1552).

“Memory for remote (days to years old) real-world episodes is more accurate than expected.”

Diamond, N.B., Armson, M.J. & Levine, B. (2020). The truth is out there: Accuracy in recall of verifiable real-world events. *Psychological Science*, 31 (12), 1544-1556 (quote is on p. 1552).

3-Stage Memory Process

- **Encoding:** Into short-term memory
- **Storage:** Transfer to long-term memory
- **Recall:** Retrieval and sharing with others



Central vs. Peripheral Details

- **Central details:** Parts of experience given attention / emotional significance by the brain
- **Peripheral details:** Parts of experiences that receive little or no attention by the brain



Memory Errors

- At least one error in most people's recollections

Diamond, N.B., Armson, M.J. & Levine, B. (2020). The truth is out there: Accuracy in recall of verifiable real-world events. *Psychological Science*, 31 (12), 1544-1556 (quote is on p. 1552).

Part II: Trauma and the Brain



What is Trauma?

“Traumatic events are shocking and emotionally overwhelming situations that may involve actual or threatened death, serious injury, or threat to physical integrity.”

- International Society for Traumatic Stress Studies

What is Trauma?

- Traumatic events often include actual or perceived loss of control (helplessness)
 - Used to only have experiential definition
 - Now have neuroscience to explain what happens
 - However still subjective event, varies by person

What Else is Going On?

- Dynamics of sexual assault / partner violence
 - **Internal Influence:** Victims may feel ashamed...
 - **External Influence:** Victims may feel pressure...
 - **System Influence:** Victims may not feel supported...
 - **Socio-cultural Influence:** Victims may be reluctant...

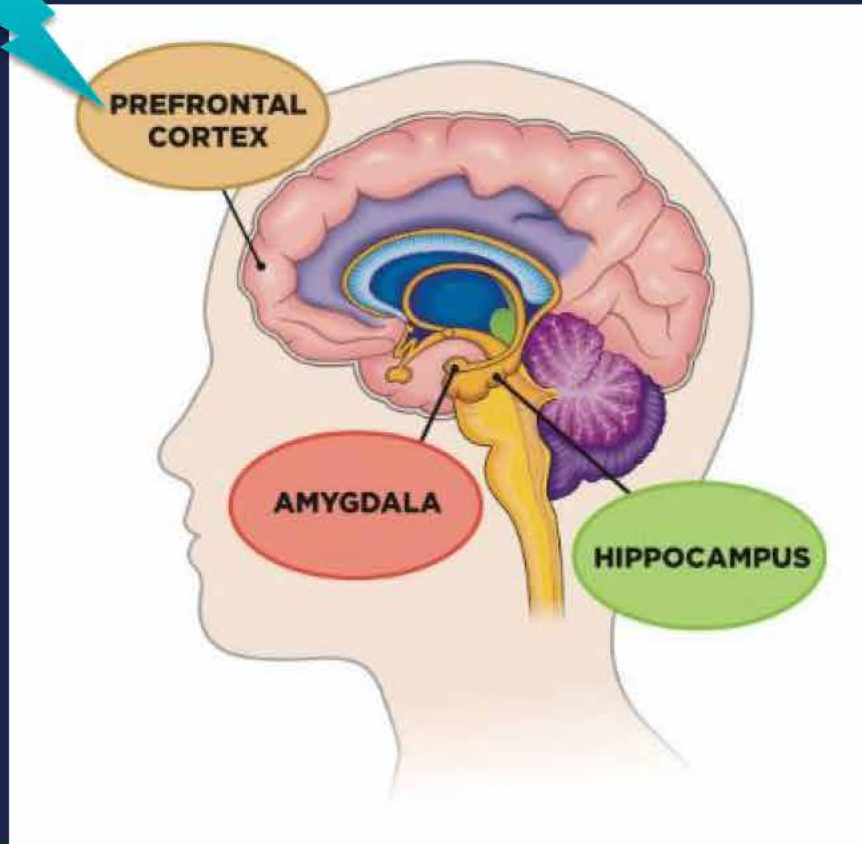


Photo Credit: Life's Random Bits



Photo Credit: REACHOUT.COM

Prefrontal Cortex

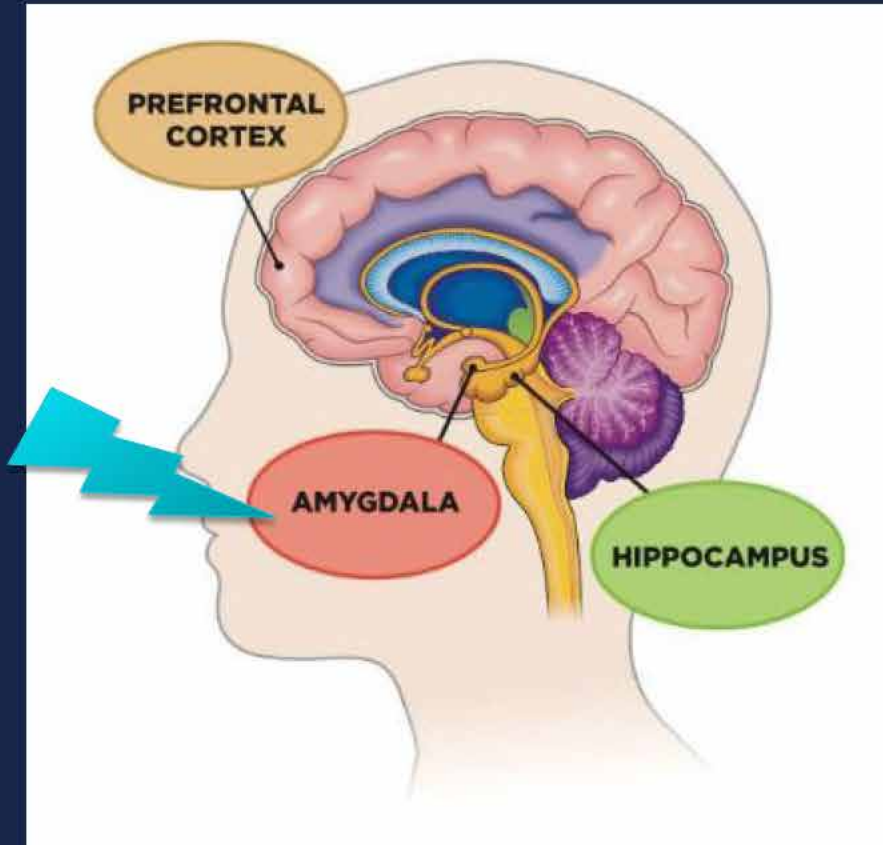


- Logical thinking and planning
- Controlling attention
- Integrating memories into "stories"

***Impaired during stress
or trauma***

<https://medium.com/@rohanpoosala/build-that-prefrontal-lobe-up-c72434186dfd> "Build that Prefrontal Lobe up", Neuro4Kidz

Defense Circuitry

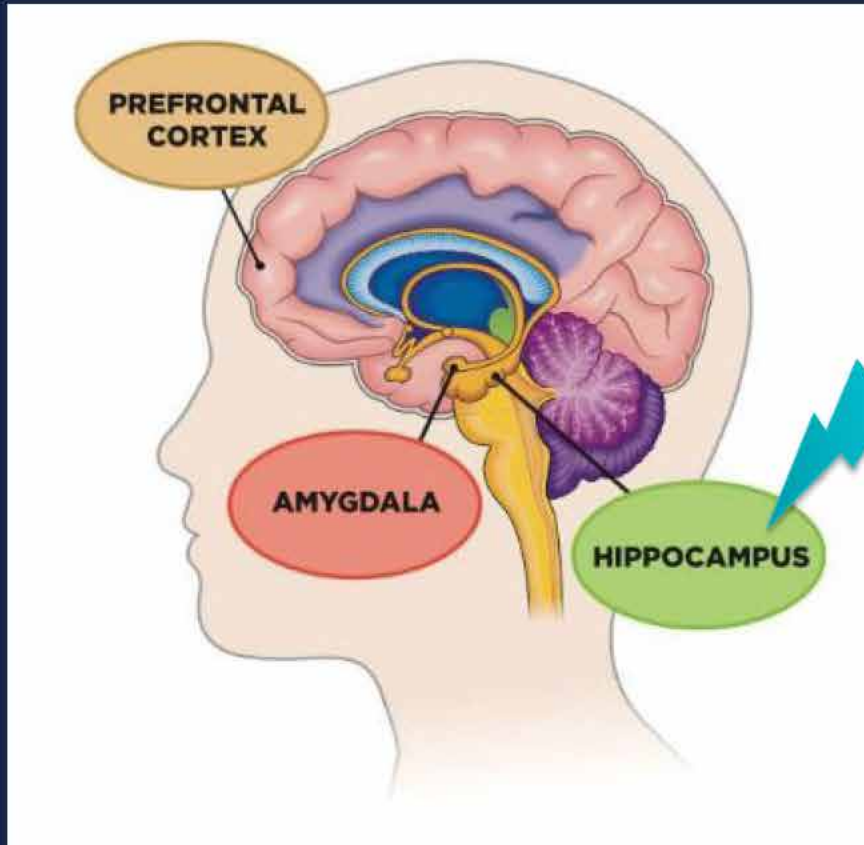


- Monitors for threat
- Activates survival reflexes
- Mostly automatic

Takes control when prefrontal cortex is impaired

<https://medium.com/@rohanpoosala/build-that-prefrontal-lobe-up-c72434186dfd> "Build that Prefrontal Lobe up", Neuro4Kidz

Hippocampus



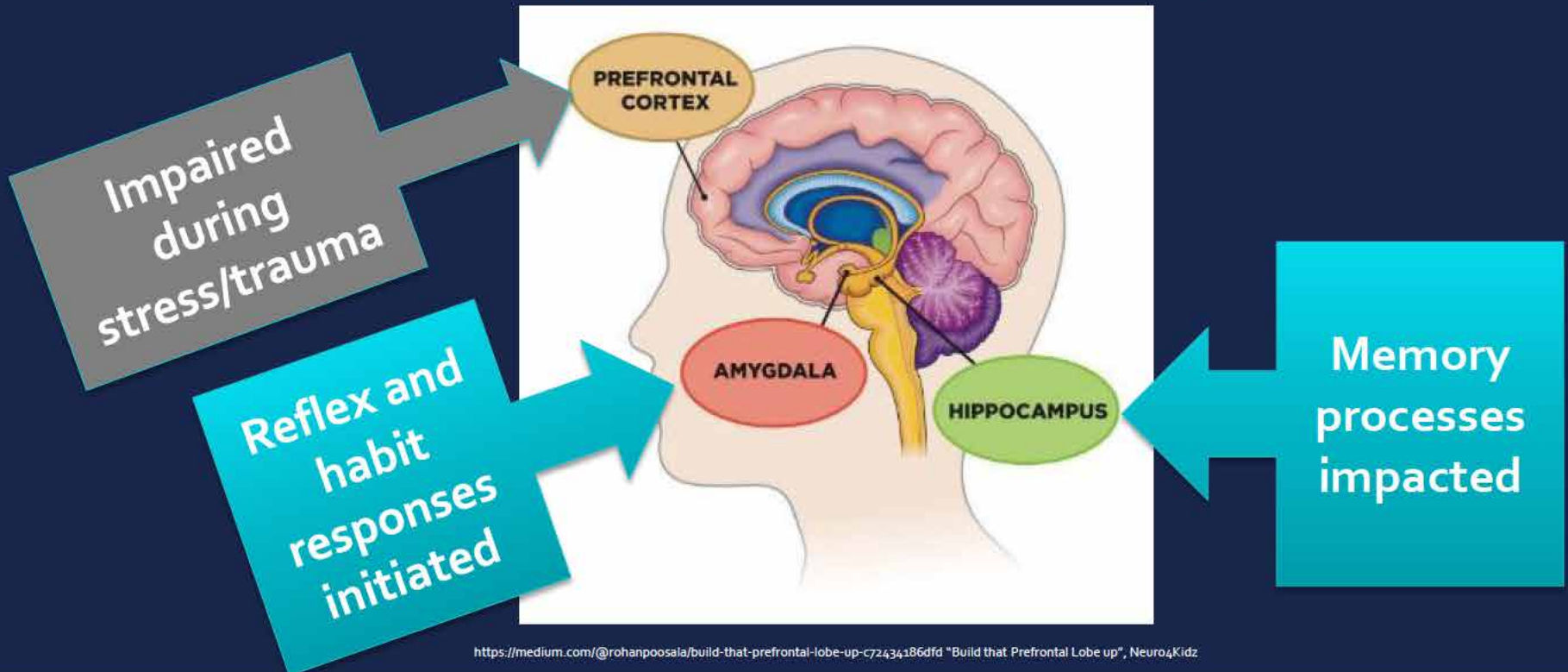
- Where memories of experiences and their details are processed
- Encodes memory data with context and time

Can produce "flashbulb memories" of event

<https://medium.com/@rohanpoosala/build-that-prefrontal-lobe-up-c72434186dfd> "Build that Prefrontal Lobe up", Neuro4Kidz

Summary

During a traumatic event: Rational part of the brain is impaired; Memory processes are significantly impacted; Reflex and habit responses are automatically initiated.



<https://medium.com/@rohanpoosala/build-that-prefrontal-lobe-up-c72434186dfd> "Build that Prefrontal Lobe up", Neuro4Kidz

Survival Reflexes

- **Brief freeze response:** Threat is detected, both physical movement and thought stops

Habit Behaviors

- **Social conditioning:** Including how girls/women respond differently than boys/men
- **Learned responses:** Including responses to dominance/aggression and past abuse

**Automatic responses do not
“go away”**

Survival Reflexes

- **Tonic immobility:** Body goes rigid, not able to move or speak
- **Collapsed immobility:** Body goes limp, may faint or pass out
- **Dissociation:** Disconnection from physical and emotional experience, may be on “autopilot”

Survival Reflexes

*Don't Label or
Diagnose – Just
Document*



Image: <https://fr.depositphotos.com/stock-photos/embossed-question-mark.html>

What Can This Look Like?

What Can This Look Like?

“Reflexes and Habits”

*Not “Fight
or Flight”*



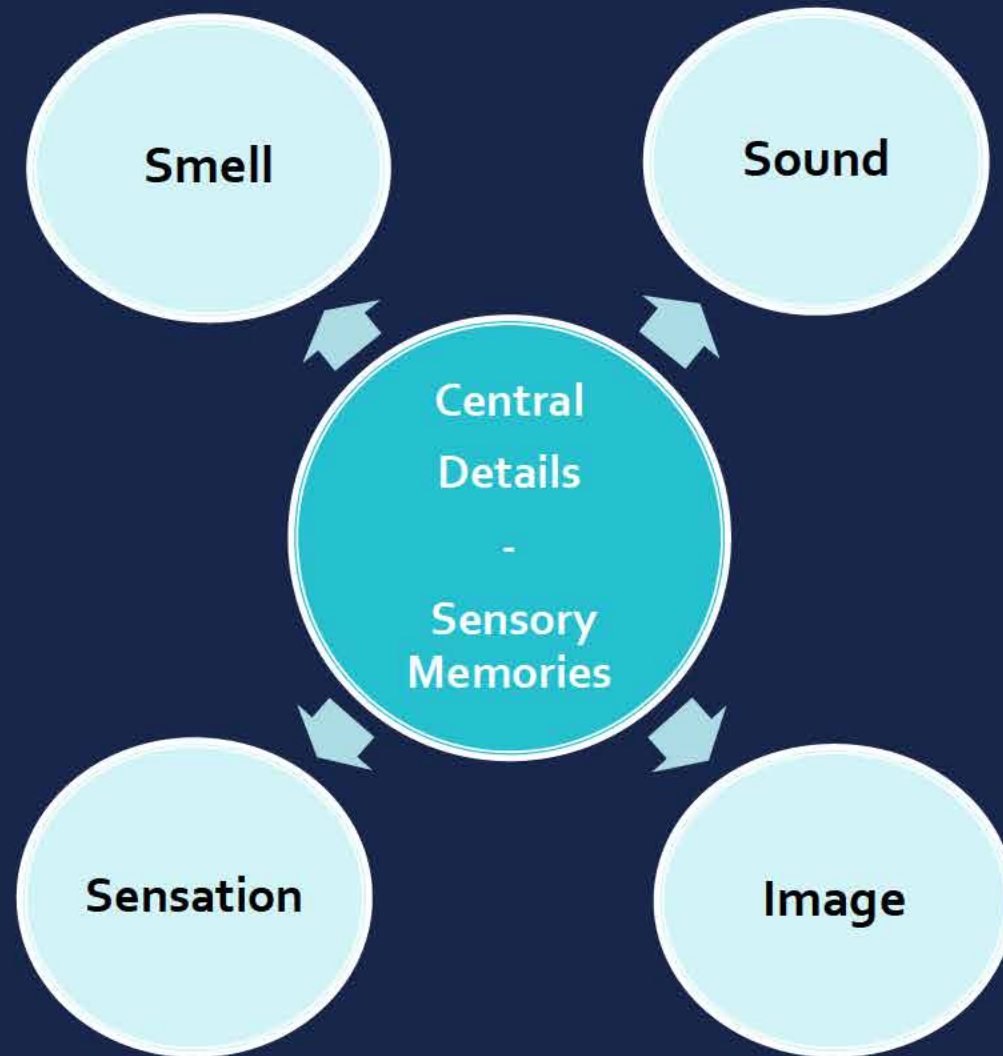
Image: <https://fr.depositphotos.com/stock-photos/embossed-question-mark.html>

Central vs. Peripheral Details

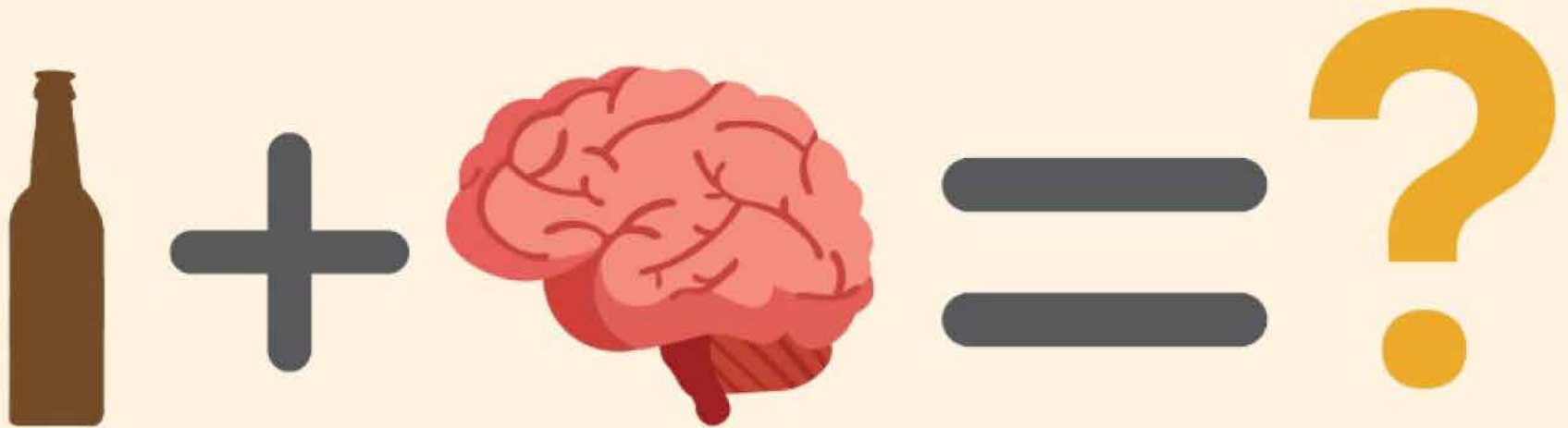
- **Central details:** Parts of experience given attention / emotional significance by the brain
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Central Details: Often Sensory Memories



Impact of Alcohol or Drugs



Alcohol and Memory

- At higher levels of intoxication, may prevent storage of most or all details of experience
- But central details that DO get into long-term memory storage can be very accurate

Part III: Interviewing Research



Photo Credit: Atstock Productions from Getty Images

Rapport

“A positive and productive affect between people that facilitates mutuality of attention and harmony”

Bernieri, F.J. & Gillis, J.S. (2001). Judging rapport: Employing Brunswik's Lens Model to study interpersonal sensitivity. In J.A. Hall & F.J. Bernieri (Eds.), *Interpersonal Sensitivity: Theory and Measurement* (pp. 67–88). Mahwah, NJ: Erlbaum (p. 69).

Or:

“The heart of an interview”

Rapport

Communicate respect

Personalizing

Address concerns

Acknowledge autonomy

Humanizing

Instill calm

Show real interest

Attentiveness

Establish common ground

Express genuine empathy

Friendliness

Permit "I don't know"

Avoid judgment

Openness

Collaborative,
not

Drawing out

Explain the process

confrontational

Elements of Rapport

1. Positivity
 - Pleasant, encouraging, smiling, avoid judgments
2. Mutual attention
 - Involvement, immediacy, active listening
3. Coordination
 - Reciprocal responses, matching, “in sync”

Rapport Works!

- Cognitive Interviewing (Fisher & Geiselman)
 - Elicits 35-50% more information than typical police interviews, rapport is key element
- Holmberg & Christianson (2002)
 - 83 sexual offenders more likely to give full confessions with “empathic and humanitarian” approach, not “judgmental and dominant”

Rapport Works!

- Kelly et al. (2015)
 - Suspect interviews with “rapport and relationship tactics,” greater cooperation, more confessions
- Alison et al (2013, 2014)
 - 418 interviews with 29 terrorism suspects in UK
 - Investigators with “conversational rapport and adaptative interpersonal skills,” reduced resistance and increased information provided

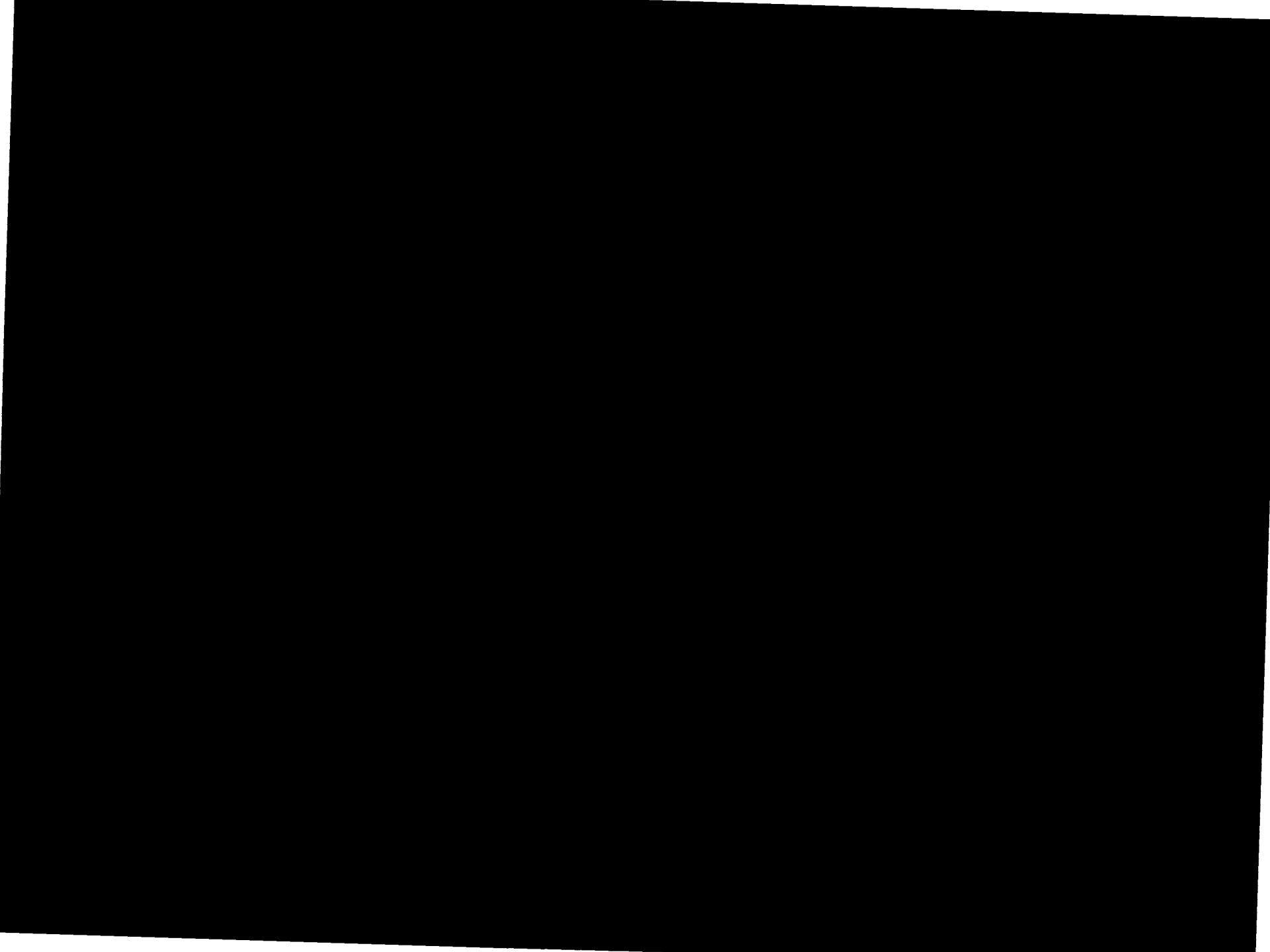
Elements of Good Interview

- No matter who is being interviewed!
 - Establish rapport
 - Clear description of rules, expectations
 - Start the conversation, and then LISTEN
 - Open-ended questioning style
 - Encourage future disclosures

Central vs. Peripheral Details

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Example: Bringing Together Trauma Impacts on Behavior and Memory

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- Automatic **reflex** responses?
- Responses based in **habit** or **learning**?
- Simplistic **language** (words or phrases)?

Example: Bringing Together Trauma Impacts on Behavior and Memory

- What would her narrative sound like?
- What details could she provide?

Example: Bringing Together Trauma Impacts on Behavior and Memory

- Would we question her story?

Summary: Theory to Practice

- How can understanding the neurobiology of trauma improve our interviewing skills?
 - More realistic expectations
 - More perceptive listening
 - More effective information-gathering

Support Memory Retrieval and Disclosure

Takeaways: **Memory**

- Recalled memories are typically accurate
 - Some things impair memory encoding / storage
 - But these factors don't typically affect accuracy
 - If detail DOES get encoded , it is likely accurate
 - We can maintain accuracy over time by deciding whether to report detail, and adjusting "grain size"
- Interviews can facilitate accurate recall by encouraging active generation / free recall of details without interruptions

Takeaways: Trauma

- Stress and trauma affect brains and behaviors
 - Responses best summarized as “reflexes and habits”
 - Understanding helps set realistic expectations
 - Listen and document, don’t label or diagnose
- Interviews can facilitate accurate recall by focusing on central details, not peripheral
 - These will often be sensory and emotional details

Takeaways: Interviewing

- Traditional strategies are often ineffective
- Research documents effectiveness of many techniques often described as “trauma-informed”
 - Rapport, autonomy, open-ended prompts, etc.
- Same techniques work for suspects AND victims

EVAWI Resources



Annual Conference



Comprehensive
Victim Interviewing



Advanced Training
Institute



Start by Believing



Webinars



Online Training
Institute



SAMFE Virtual
Practicum



Resource Library



Event Calendar



Save the Date!

2025

April 22-24

Anaheim, CA

**International Conference
on Sexual Assault,
Domestic Violence,
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End Violence Against Women International

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Training Bulletins

The screenshot shows a web interface for a "Resource Library". At the top, a blue banner contains the text "Resource Library". Below this, there are navigation and search elements. On the left, a search bar is labeled "Search...". Below it are three filter sections: "TOPIC" with a dropdown menu set to "All Resources"; "ORGANIZATION" with a dropdown menu set to "All Organizations"; and "RESOURCE TYPE" with a list of checkboxes including "Articles or Reports", "Books", "Other", "Protocols", "Tools & Templates", "Training Bulletins", "Training Modules", "Videos", "Web Links", and "Webinars". At the bottom left, there is a "PUBLICATION DATE (DATE RANGE)" section with a "From..." input field. In the top right corner, there are social media icons for Facebook, Twitter, LinkedIn, and a plus sign. The main content area displays "745 resources" and lists three items: 1. "12 Key Questions to Guide Victim Notification Protocols" (Articles or Reports, Author: Other, View document | Favorite); 2. "1in6" (Web Links, Author: 1in6, Read more | Visit link | Favorite); 3. "2010 ADA Standards for Accessible Design" (Tools & Templates, September 15, 2010, Author: [Logo], View document | Favorite). A QR code is located in the bottom right corner of the page.

Start by Believing

HOME

PLEDGE

RESOURCES

WHAT TO SAY

TAKE ACTION

CRIMINAL JUSTICE TOOLKIT

MAILING LIST

DONATE

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Believing



The global campaign transforming
the way we respond to sexual
assault, domestic violence,
stalking, and child sexual abuse.



SEEK THEN SPEAK



SEXUAL ASSAULT INFORMATION

WHEN YOU NEED IT

a self-guided tool

SEEK THEN > SPEAK



BEGIN REPORTING

WHEN YOU ARE READY



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Sexual Assault
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Hashtag

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EVAWI



EVAWI Page

<https://www.facebook.com/pages/End-Violence-Against-Women-EVAW-International/104495444561>



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