McMaster University

Family Medicine

Message Development & Delivery: And, But, and Therefore

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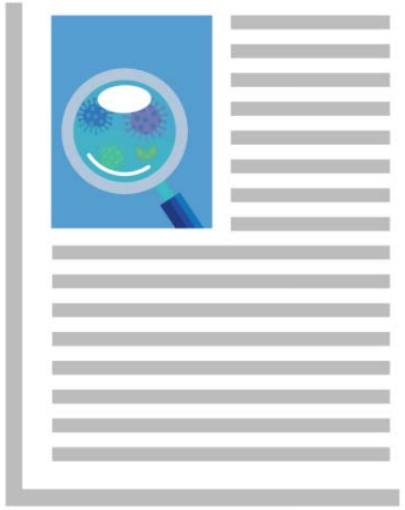
Michael G. DeGroote SCHOOL OF MEDICINE

When are you most engaged?

What about..



Abstract

English | French

Objective:
No recent meta-analysis has examined the effects of cognitive-behavioural therapy (CBT) for adult depression. We decided to conduct such an updated meta-analysis.

Methods:
Studies were identified through systematic searches in bibliographical databases (PubMed, PsycINFO, Embase, and the Cochrane library). We included studies examining the effects of CBT, compared with control groups, other psychotherapies, and pharmacotherapy.

Results:
A total of 115 studies met inclusion criteria. The mean effect size (ES) of 94 comparisons from 75 studies of CBT and control groups was Hedges g = 0.71 (95% CI 0.62 to 0.79), which corresponds with a number needed to treat of 2.6. However, this may be an overestimation of the true ES as we found strong indications for publication bias (ES after adjustment for bias was g = 0.53), and because the ES of higher-quality studies was significantly lower (g = 0.53) than for lower-quality studies (g = 0.90). The difference between high- and low-quality studies remained significant after adjustment for other study characteristics in a multivariate meta-regression analysis. We did not find any indication that CBT was more or less effective than other psychotherapies or pharmacotherapy. Combined treatment was significantly more effective than pharmacotherapy alone (g = 0.49).

Conclusions:
There is no doubt that CBT is an effective treatment for adult depression, although the effects may have been overestimated until now. CBT is also the most studied psychotherapy for depression, and thus has the greatest weight of evidence. However, other treatments approach its overall efficacy.

How can we deliver vital, evidence based information in an effective way? Especially from a virtual format?

Solution: ABT Model

And

But

Therefore

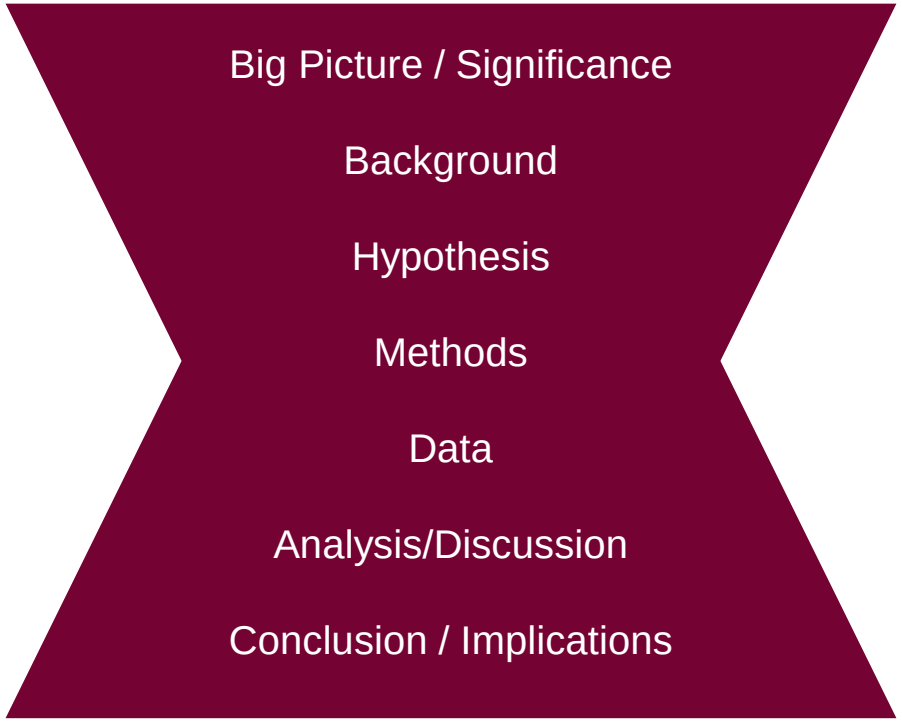
A high school chemistry teacher gets diagnosed with stage 4 cancer, **AND** he is expected to only live under a year, **AND** he has a wife, son and an unborn daughter on the way, the diagnosis is what it is, **BUT** the cost of his treatment will leave his family with nothing, **THEREFORE** he starts an undercover and completely illegal meth business to leave behind money for his family. The show is called breaking bad and I encourage you all to watch it if you have not already

[1] TEDMED, 2013

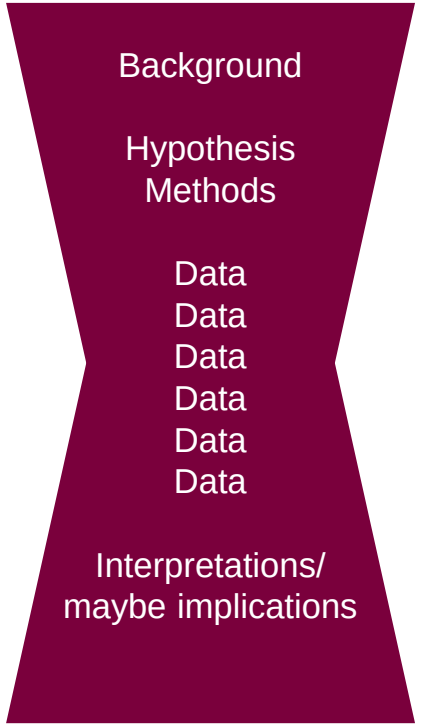
1 What is ABT and how is it delivered?

Scientific Structure

Paper



Presentation



accuracy > engagement

[2] Coursera

ABT in a Scientific Format

And: Background/Context

What is **known?**

But: Knowledge gap

What is **unknown?**

Therefore: Implications/Resolution

What needs to **change?**

[2] Coursera

Lets see an example:

Before ABT :

COVID-19 has impacted Ontario long-term care structure and could represent an inflection point in how resident agency and autonomy is prioritized moving forward.

PSSP is well-positioned to be part of a positive cultural shift through its current strategies and past and present success.

After ABT :

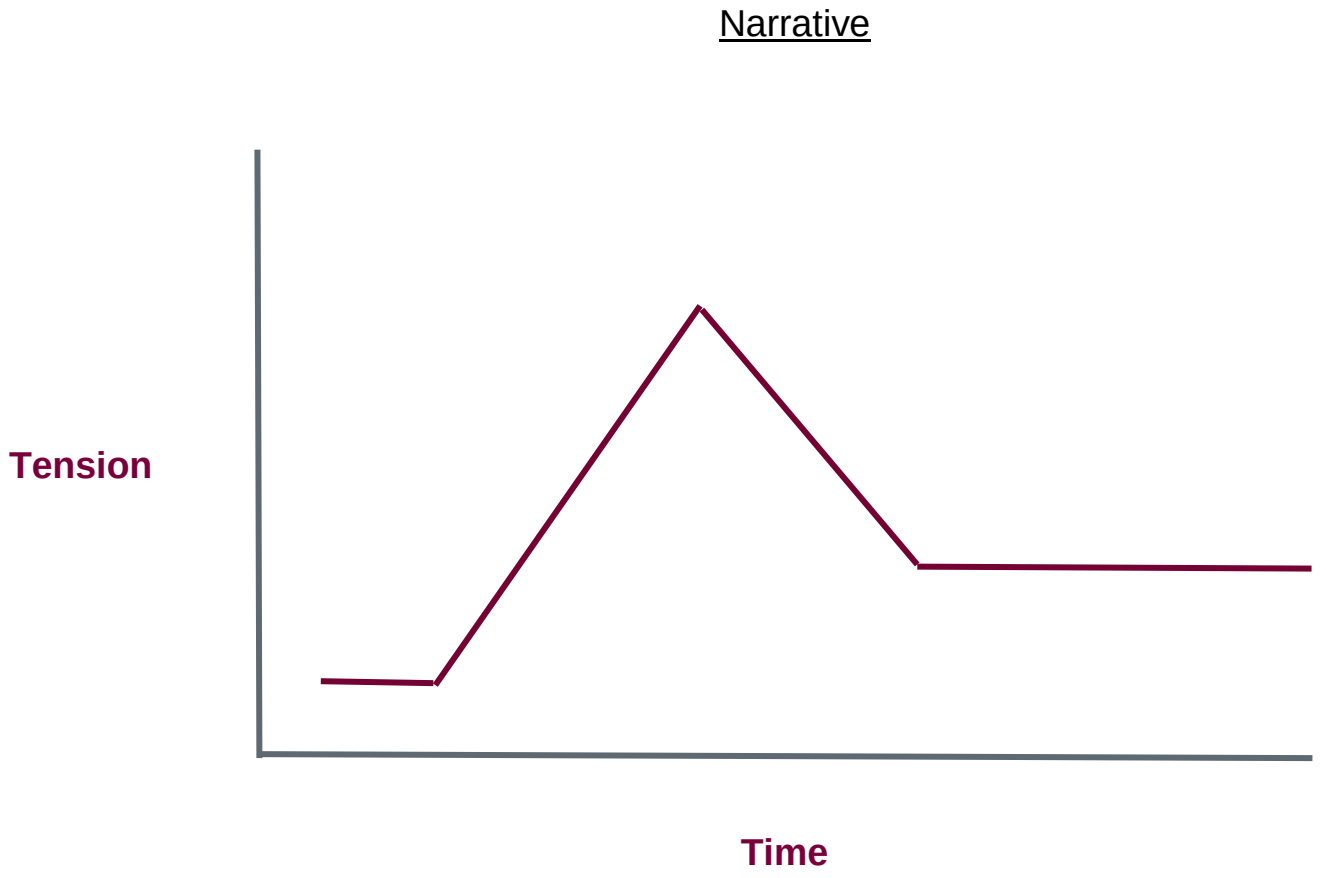
The need for informed consent
and prioritizing long-term care residents' wishes is more important than ever during COVID-19;

but existing practice cultures & policies in Ontario long-term care homes need to change.

Therefore, a large scale launch of PoET in Ontario through PSSP is an important first step in driving this necessary change

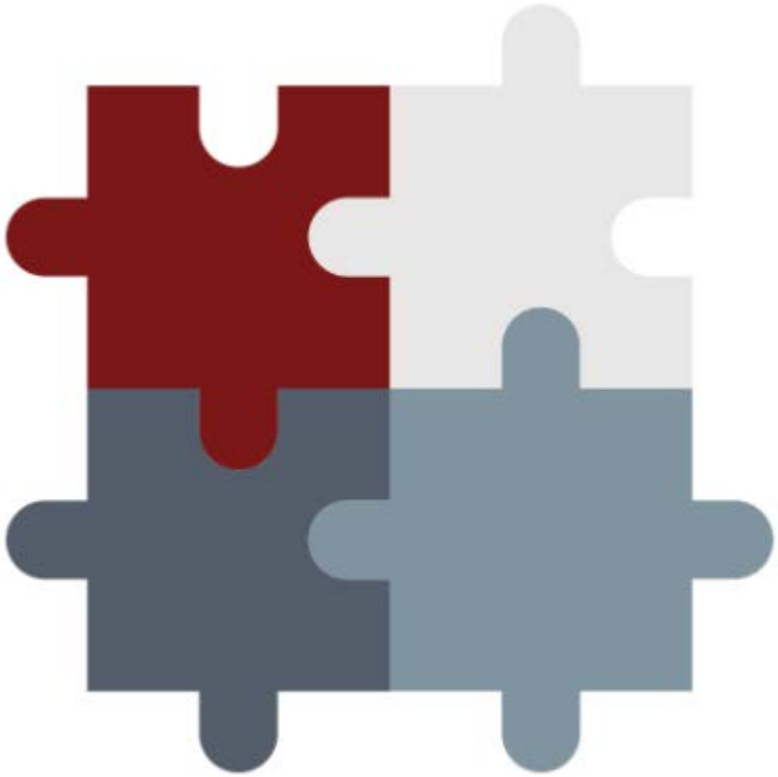
The importance of ‘But’

- Importance of research
- Address knowledge gap
- Why should the audience care?
- Introduce tension



ABT encourages sticking to specifics

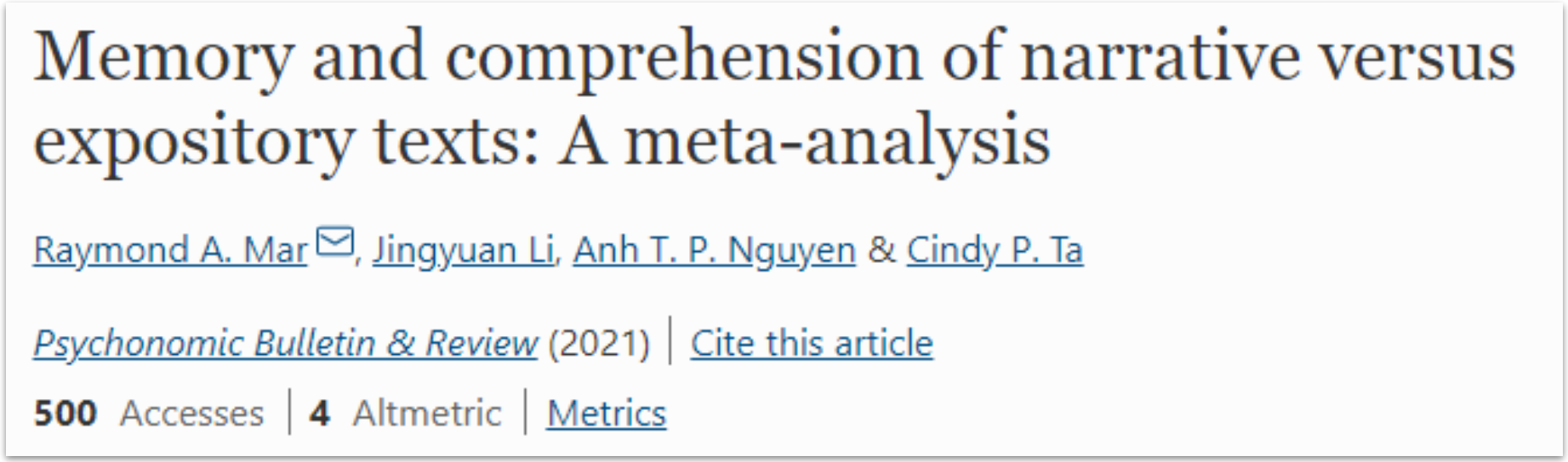
One story at a time



[2] Coursera

2. Why use ABT?

Numerous studies prove this effectiveness



Memory and comprehension of narrative versus expository texts: A meta-analysis

Raymond A. Mar, Jingyuan Li, Anh T. P. Nguyen & Cindy P. Ta

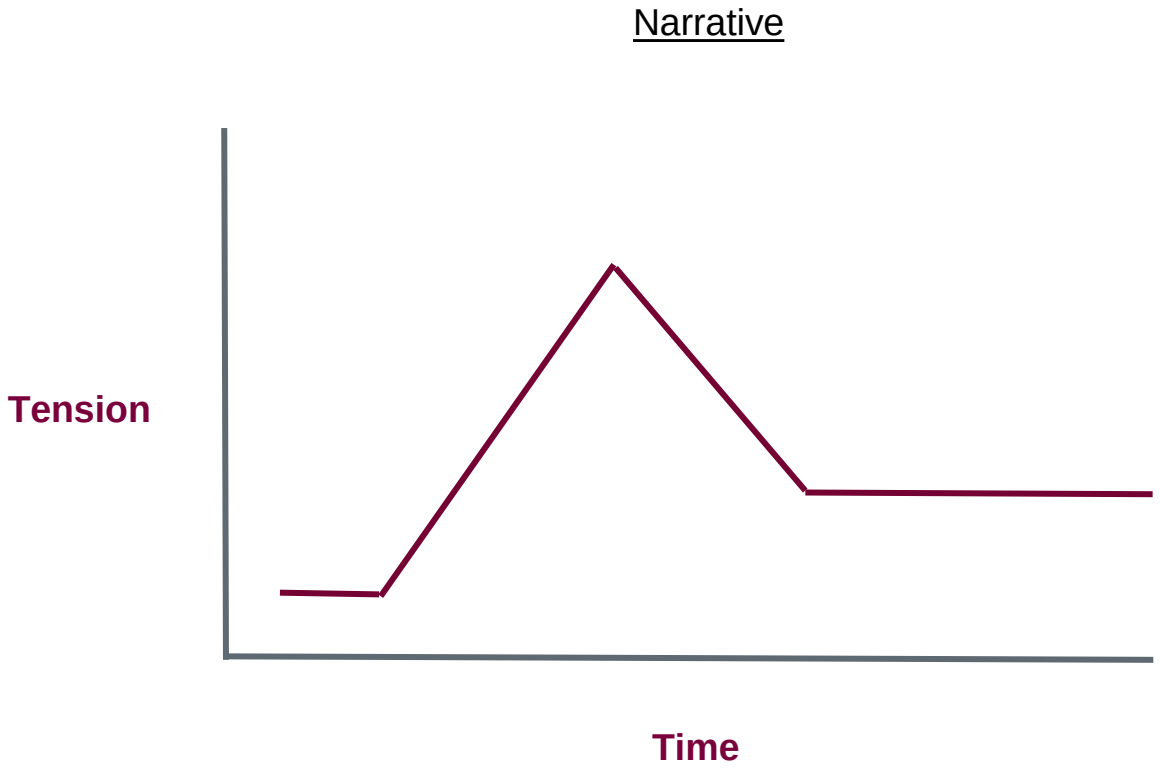
Psychonomic Bulletin & Review (2021) | Cite this article

500 Accesses | **4** Altmetric | Metrics

[2] Mar A.R. et al, Psychon Bull Rev, 2021

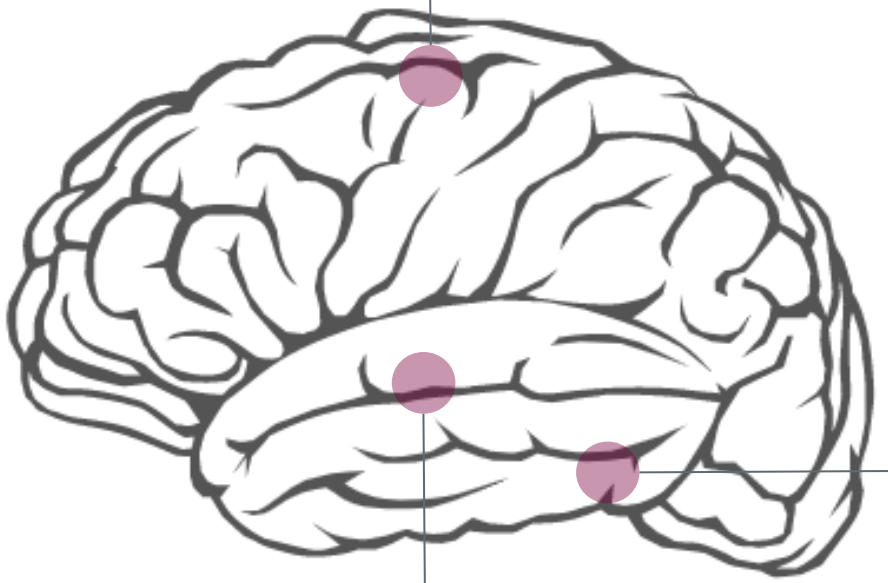
Tension is Introduced

- Attention is increased through a concept called **Transport engagement**
- Increased mental activity leads to **cortisol release**
  - Resulting in **increased immersion** in presentation



[3] Bezdek M. et. al., Media Psychology, 2016
[4] Heffernan M., 2017
[5] Hinde SJ et. al., Cogn Res Princ Implic, 2018

Changes in Brain Activity



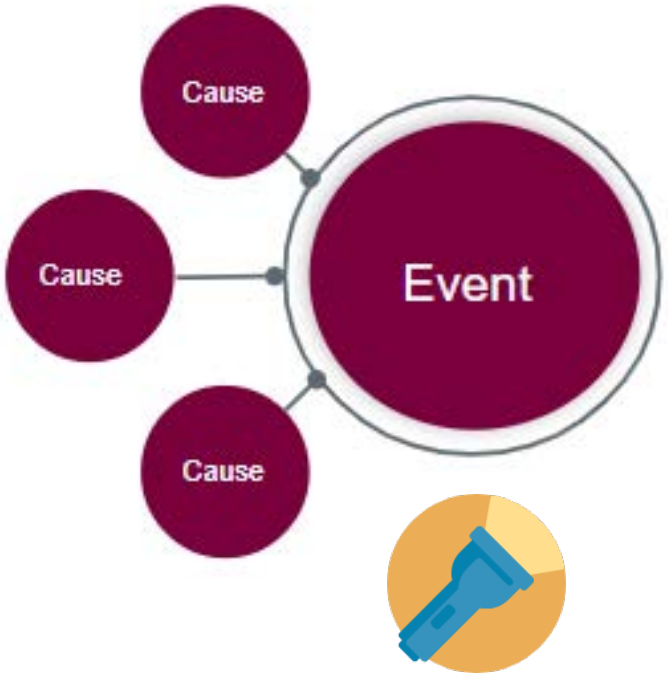
Parietal and frontal cortices activated - deeper sense of emotional engagement

Auditory cortex activated

Receptive areas in **temporal cortex** activated

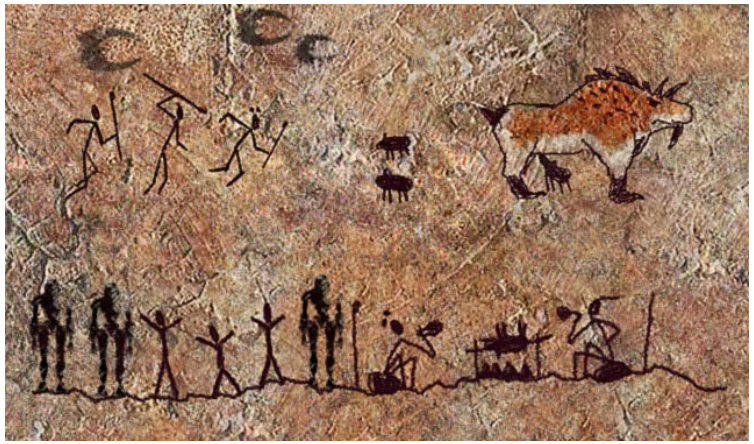
[4] Heffernan M., 2017

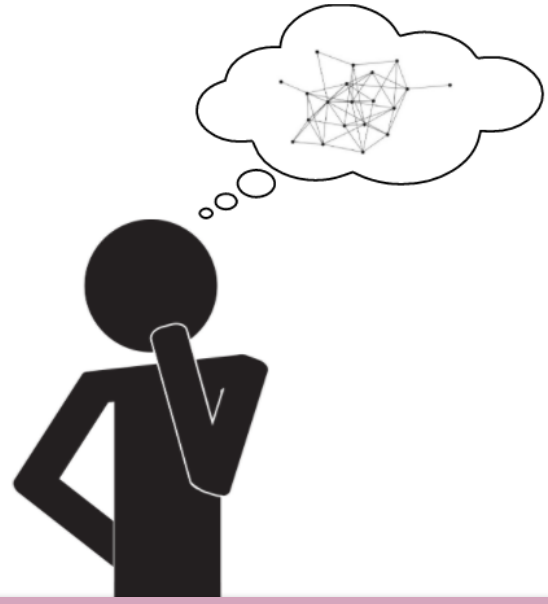
Biographical experiences are cognitively organized as narratives



Cause and Effect Structure

Increased Comprehension





Enhanced Recall and Retention

[2] Mar A.R. et al, Psychon Bull Rev, 2021
[7] Glaser M, et. al., De Gruyter, 2009

Where Can ABT be Used?

How to use ABT

- Brief summary of a publication or research program
- Tweet, Social Media Caption
- Using it as an intro and outro to a research presentation
- Key message in a poster or oral presentation

[8] Mike Morrison, 2019

Wrap up: ABT...

- Summarizes important information
- Audience can use it as a mental guideline
- Captures and retains attention
- Balance of expository and narrative components

Wrap up: ABT...

Research findings are evidence based **AND** useful in all sorts of settings and for all sorts of demographics

BUT, the typical manner in which these findings are conveyed is unengaging

THEREFORE, translating parts of the research into an ABT framework allows for greater engagement, comprehension and retention.

References

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Thank You!

Questions?

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