

Controlled Cognitive Engagement (CCE)

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Overview

- Introduction to Controlled Cognitive Engagement (CCE)
- Why it is effective in portals contexts:
 - Border
 - Events
 - Aviation
- Aviation Security **Context**



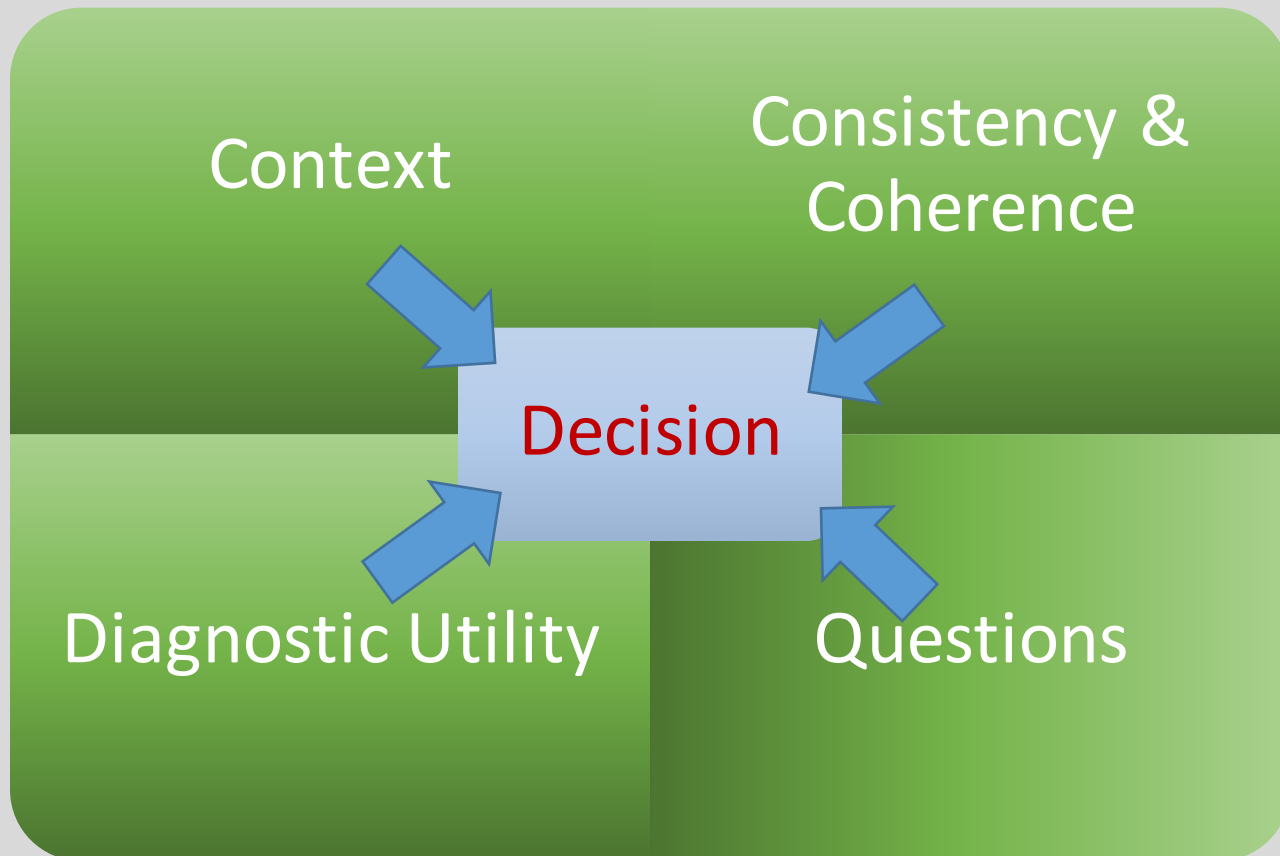
CONTEXT

Funding

- Research funded by:
 - US Dept. Homeland Security BAA
 - UK Centre for the Protection National Infrastructure (CPNI)
- TSA & UK Dept. of Transport (DfT)
- AA & Delta Airlines



Truth Default Theory



Problem 1: Context

- Customer service**
- Security
- Time critical
- Limited factual information
- Not known
- Consistent procedure/approach
- Real time decision
- Truth default & Lie Bias

Problem 2: Diagnostic Utility

US international flights - 'Suspicious Signs' approach:

- Documentation
- Travel
- Behaviour and appearance
 - Physical manifestations
 - Nervousness/aggressiveness etc.
 - Rushing security staff/covert links in queue, etc.
 - 'Pax appears to be lying or withholding'



'The question'...

Problem 3: Questions

Audio Example 1



Audio Example 2



Problem 4: Consistency and Coherence

- Known facts are documents
- Correspondence can be practiced
- Rely on coherence & Communication content

CCE In formal interrogation contexts

- 1980s shift from 'interrogation' to 'interview'
- All audio recorded (typically videoed)
- 7 core principles:
 - Gain an accurate & reliable account
 - Investigative mind set
 - Act fairly
 - Ask a range of question to gain information
 - Recognize the positive impact of an early admission
 - Interviewer does not have to accept answers – persistent questioning
 - Right to silence BUT interviewer must continue to question

Psychology and the Interviewer mindset

- Social cognition: how people think and behave in a social setting
 - Non coercive
 - Information gathering – admission is not enough
 - Non accusatory
 - Provide interview objectives
- Psychological knowledge can assist you to manage the interview for more successful outcome
 - Expert questioning
 - Diagnostic utility

One Solution ?

- CCE is...

- A way of testing the truthfulness of accounts
- Improve chances of making people lie
- Applied equally to all
- Unpredictable
- Derived from an empirically validated method

- CCE does not ...

- Detect suspicious signs
- Rely on passive observation of behaviour
- Try to resolve suspicions

Controlled Cognitive Engagement

- **Controlled**
 - Questioner controls the conversation
 - Incremental phased questioning
 - Managed questioning approach
- **Cognitive**
 - Questioner decision-making skills
 - Asymmetric cognitive loading
 - Unpredictable for receiver
- **Engagement**
 - Customer service/covert/formal uses
 - Reducing stereotype biases
 - Structure & timeline to observe behaviour change

Stages of CCE

- **Stage 1: Control**
 - Build rapport and open a dialogue
 - Establish a behavioural baseline
- **Stage 2: Information gathering**
 - Gather information using open unpredictable questions
 - Commit passenger to version of truth
- **Stage 3: Veracity testing and/or corespondence testing**
 - Test the truth of the account using probe questioning
 - Observe behavior change (verbal & demeanor)
- After 3 cycles, make a decision

Example



Dando El Paso 1st March 2017

Evaluation: Detection testing

- £750K field trials funded by UK & US Govt. (MI5 CPNI & Dept. Homeland Security: TSA)
 - Major EU airports & Major international carriers
- Aim
 - To compare detection rates for CCE and suspicious signs method
 - To test method under pressure
- Method
 - CCE training
 - 10 accredited CCE trainers & 80 accredited CCE screeners
 - Double-blind randomised-control trial
 - 200 participants per method, diverse participant sample
 - Participant-generated deceptions
 - Incentivized performance 1; 1000 (low base rate)

Results: Detection Rate

	January 2012	June 2012
CCE	63.4%	74.1%
Current method	2.7%	0%

- 3,000,000+ passengers CCE-screened to date
- Paedophile ring disrupted
- Covert targeting of potential HT victims

But...

- Must be completed correctly

- Audio Example



What Might the 'killer' question be?

- Asked an information gathering question and I have answered
- What question would test the truth of my account?
- Test expected knowledge of EXPERIENCE rather than general knowledge.



Audio Example

How does CCE help in portals context?

- Interview (formal or otherwise) - can be used to disrupt lie script.
- CCE helps ensure that **every** verbal interaction counts
 - Provides a structure/route map
 - Gathers information
 - 'Clever'
- Unpredictable



References

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