

# The Psychology of Testing

Thinking Grey about Testing

I am:

The Test Practice Manager for  
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A holder of an Honours Degree  
in Cognitive Psychology and  
Philosophy

No, we are not the secret police

11 years into the my test career

No, I cannot read your mind

Experienced in public and

private sector organisations

And I don't want to  
know about your  
mother

# Think Grey

“It has become very fashionable to ‘think green’, and I am fully in favour of this...but there is a bigger and more urgent danger than climate change. That danger is the poor quality of human thinking. This requires even more urgent attention. Perhaps there should be a more important slogan ‘think grey’. The grey refers to our grey matter, or brains. Most of the problems, conflicts and fights in the world are caused by poor thinking.”

- Edward De Bono

# Structure and Chaos in Testing

- Research on fundamental qualities of a Test Analyst
  - High Crystallised Intelligence
  - High Fluid Intelligence
  - High Emotional Intelligence
- Useful information for
  - Recruitment
  - Training and development
  - Analytic and Reactive test strategies
  - Process and People – not one or the other

# Familiarity Bias

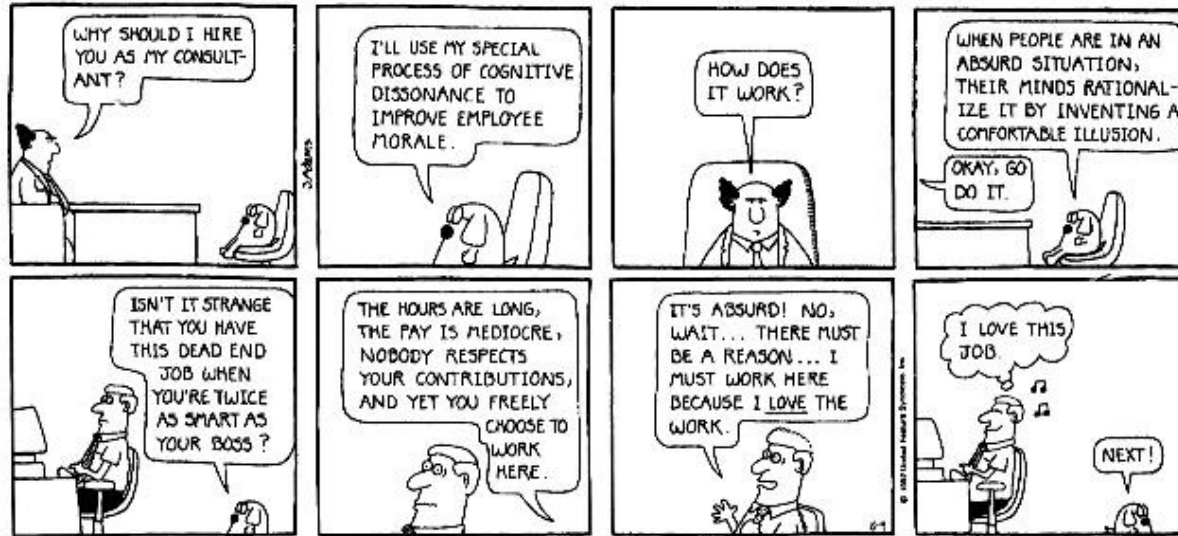
- “Familiarity breeds comfort. People tend to develop a preference for things merely because they are familiar with them. In studies of interpersonal attraction, the more often a person is seen by someone, the more pleasing and likeable that person appears to be.”

— Cris Evatt



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# Cognitive Dissonance



- This is the feeling of uncomfortable tension which comes from holding two conflicting thoughts in the mind at the same time.
- Dissonance increases with:
  - The importance of the subject to us.
  - How strongly the dissonant thoughts conflict.
  - Our inability to rationalize and explain away the conflict.

# Expert Memory

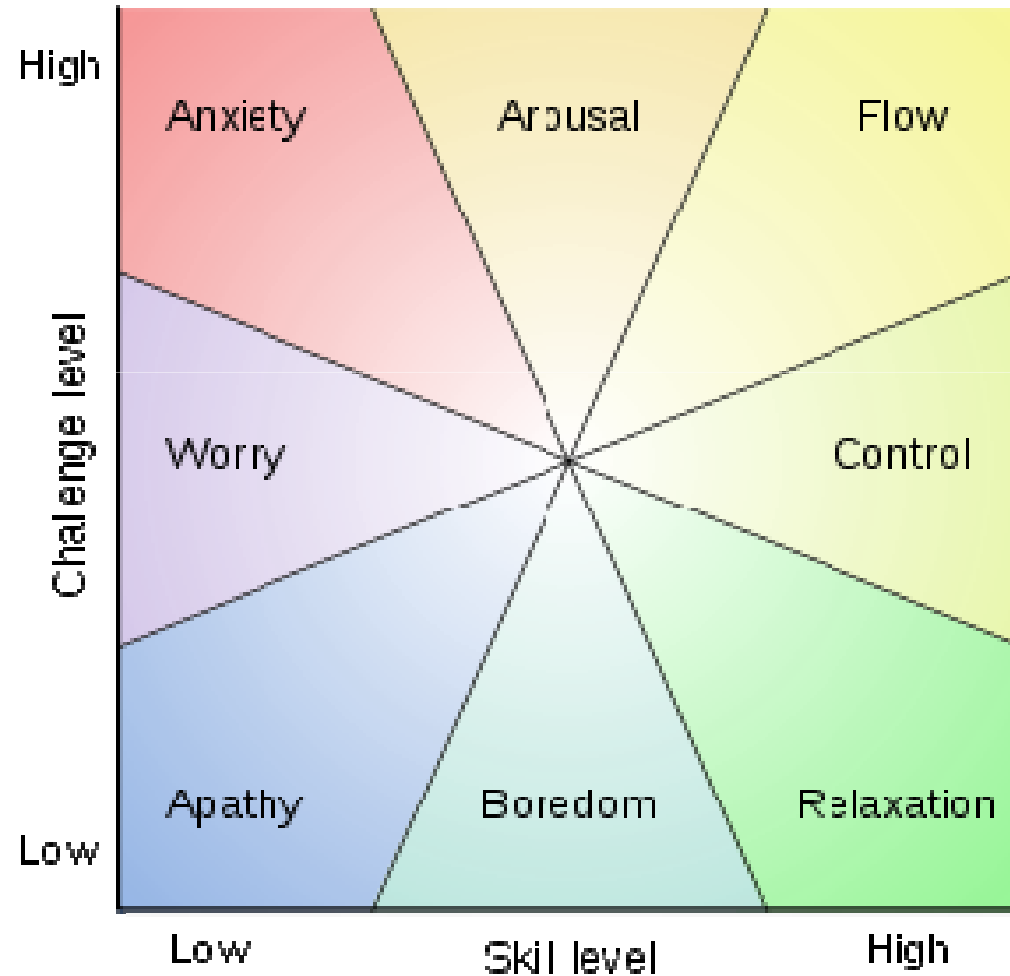
- It has been shown that expert's memory in their domain of expertise is qualitatively and quantitatively better than less experienced practitioners
- The value of Subject Matter Experts
- The value of Test Experts

# Flow

- “Flow is the mental state of operation in which a person in an activity is fully immersed in a feeling of energised focus, full involvement and success in the process of the activity.”
- The seven elements of flow
  - Being completely involved in what we are doing – focussed, concentrated
  - A sense of ecstasy – of being outside everyday reality
  - Great inner clarity – knowing what needs to be done, and how well we are doing
  - Knowing the activity is doable – that our skills are adequate to the task, immediate feedback
  - A sense of serenity – no worries about oneself, and a feeling of growing beyond the boundaries of the ego
  - Timelessness – thoroughly focussed on the present, hours seem to pass by in minutes
  - Intrinsic motivation – whatever produces the flow becomes its own reward, feel a part of something larger



# High Challenge + High Skill = Flow



# Conclusion

- Your brain is a tool, use it or lose it
- In the future testing will be required to be more flexible and clever there is just one tool that will let us do this
- Project teams are more likely to be successful if we understand and implement the psychology of success (i.e. Flow)
- Intelligence is not fixed, you can, and should, actively improve your critical thinking skills

# Acknowledgements

- Victoria University Psych Department
- Jeff Smith and Ethos Consulting for their work on And Mapping test analysts
- Cris Evatt's website: <http://www.brainbiases.com/2008/11/familiarity-bias.html>
- *Educational Psychology* by McInerney and McInerney
- *Think! Before it's too late* by Edward De Bono
- *Dilbert* by Scott Adams
- For more on Flow see <http://www.meaningandhappiness.com/zone-enjoyment-creativity-elements-flow/26/> also see the TED talk here: <http://www.youtube.com/watch?v=fXleFJCqsPs>
- *Outliers* by Malcolm Gladwell