

Stop and Think: how to improve your reasoning



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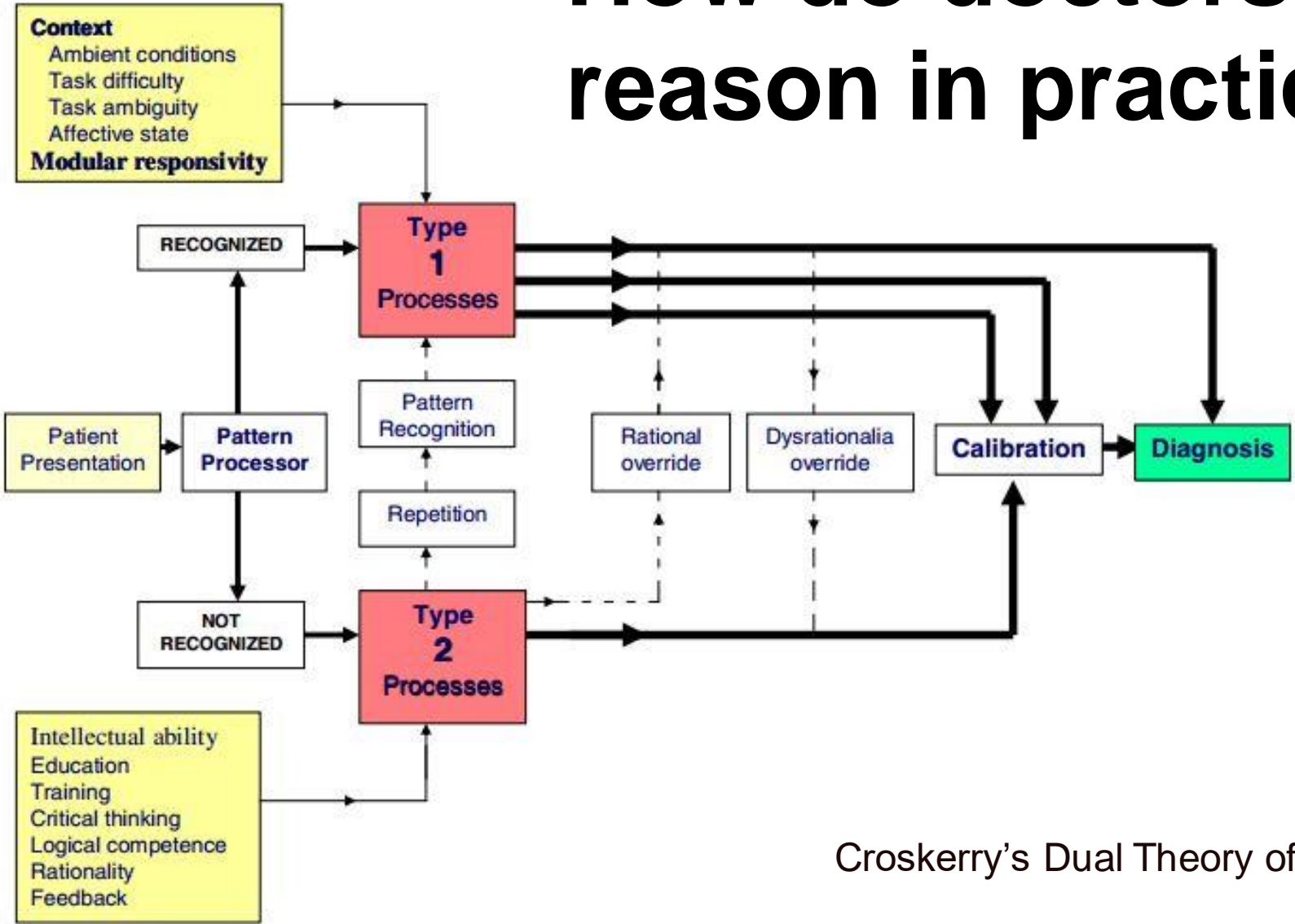
Course Lead Year 6 General Practice Senior Assistantship (GPSA)



Stop and Think: how to improve your reasoning

- Last Friday of the 4-week placement
- Small group facilitated session
- Aim is to help students become aware and think about their reasoning during consultations and how it can be improved
- Students have already completed a Medlearn workbook on clinical reasoning during the placement

How do doctors reason in practice?



Croskerry's Dual Theory of Diagnostic reasoning 2009

Fail to notice that something is out of the ordinary and switch from Type 1 into Type 2 thinking or switch inappropriately from Type 2 back to Type 1 thinking

Cognitive 'debiasing' strategies



JUST
SLOW
DOWN



MINDFULNESS:
BEING AWARE
OF YOUR OWN
BIASES AND
WHEN YOU
TEND TO MAKE
'MENTAL
SHORTCUTS'



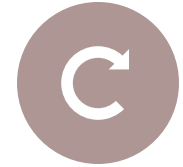
LISTEN TO
YOURSELF
WHEN
SOMETHING
DOESN'T FEEL
RIGHT



CHECKLISTS



SEEK A
SECOND
OPINION



REFRESH
AND
REVIEW:
START
AGAIN



REFLECTION-IN-ACTION:
STOP AND THINK
FRAMEWORK

Stop and Think Framework

Recognise the problem			
<ul style="list-style-type: none"> • What have I noticed? • What am I thinking/feeling at this moment? • Why doesn't this feel right? 			
Reframe the problem			
<ul style="list-style-type: none"> • How else can I think of this problem? • What do I already know about it? • What is the likely effect of this problem? 			
Generate hypotheses			
<ul style="list-style-type: none"> • What else could be going on? (Consider surgical sieve, pathophysiological mechanisms, epidemiology, patient co-morbidities and medications, psychological factors, context) • What is the worst-case scenario? 			
Deduct hypotheses			
Hypotheses	Supportive findings?	Opposing findings?	What symptoms or signs would I expect to be present but are not?
1.			
2.			
3.			
Test working hypotheses			
<ul style="list-style-type: none"> • How can I verify my working hypotheses? (Further questions/examination? Investigations? Test of time? Test of treatment?) • Have I considered what the patient thinks? • Is there anything that still doesn't fit, and does it matter? • Do I need to make the diagnosis now? 			
Monitor and detect likely consequences			
<ul style="list-style-type: none"> • If my diagnosis is wrong, what are the consequences? • How will I monitor my plan and detect any consequences? • Have I safety-netted adequately? 			
Reflection-on-action			
<ul style="list-style-type: none"> • Is what happened to the patient what I expected? • What additional knowledge, information or skills do I need if I encounter a similar situation in the future? • What have I learnt about my clinical reasoning / myself? 			

Am I being affected by any bias?

Deep-dive case- solving exercise

- Each student brings case of diagnostic uncertainty from their recent placement
- Rest of group attempts to 'solve' their case
- Presenting student gives initial presenting complaint
- Rest of group writes down initial Type 1 diagnoses and tutor collates list on flipchart
- Group to ask presenting student questions that support or oppose the diagnosis in question
- Group deduct list to create working hypotheses
- Group requests examination or bedside investigations and presenting student to give relevant results
- Group discuss how they are going to 'verify' their working diagnosis: test of time/ treatment or further investigations and how they will monitor the consequences

Role of tutor



Signpost students to questions from the framework to help students realise the value and relevance of the reflective questions



Check-in with the presenting student at timely intervals to prompt reflection on any differences between their reasoning with the groups' reasoning

Identify and explore biases in a safe space



Guide the groups' clinical problem-solving

Evaluation

Feasibility and acceptability study using mixed methods:

- Students reported gaining insights into their clinical reasoning of relevance to their future practice
- Students reported change in understanding of reflection
- Use of students' own cases means students' own learning needs addressed
- Teachers reported benefits to own clinical practice

“I think at the time it doesn't seem as useful as it might be but I had an experience actually in A&E recently where I realised I was biased and that was because I'd remembered it from this part of the course”

“I thought it was really useful for Finals actually..our tutor tried to get us to focus on the broader aspects and sort of got us to stop thinking so narrow-mindedly about diagnosis”

“I learnt that I tend to just focus on the first diagnosis I think of, from now on I'll always ask myself 'but what else could it be?’”

“Yeah I guess I'd always thought of reflection as something you always do afterwards not really during, but it's been quite useful to see it is what we're doing anyway all the time”



Thank-you for listening!

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