

SJT for medical selection

at UCT Health Sciences

Monday, 24 July 2017

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Aim

- To introduce our project and outline our planning considerations to develop an SJT to assess medical school applicants' interpersonal effectiveness and emotional intelligence

Scope

- Background
- Competency model
- Aim and design requirements
- Development issues

Background

South African context





Historical and national context



From then to now

(in UCT Jameson Hall...)

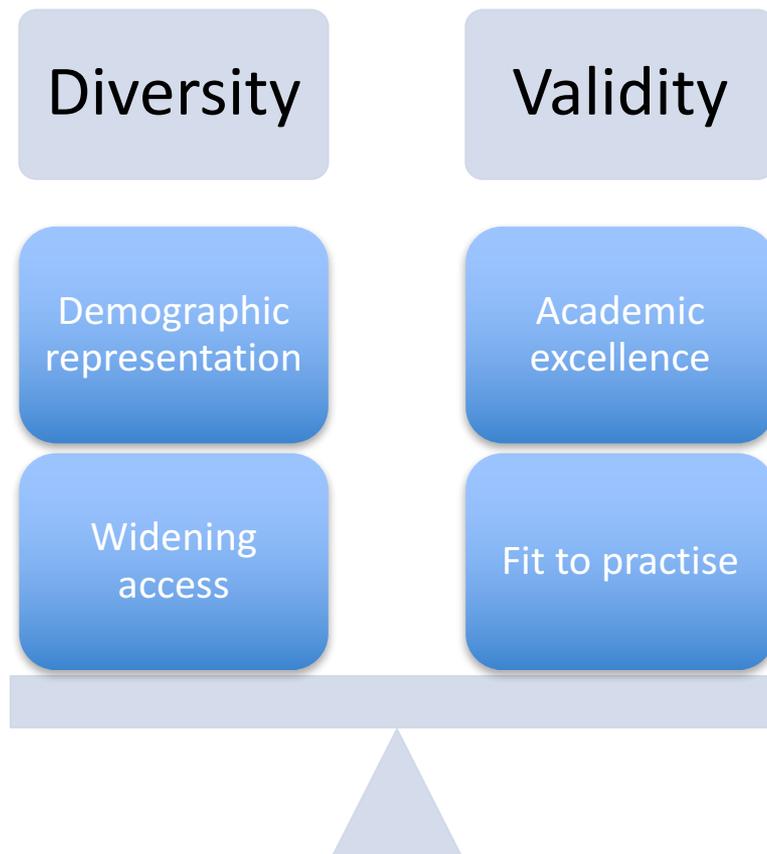
Robert F. Kennedy 1966



Barack Obama 2013



Medical selection in SA



Background

About UCT Faculty of Health Sciences



University of Cape Town

Founded 1829



University of Cape Town

2017



About UCT Faculty Health Sciences

- Attracts top students from SA and Africa
- Some facts
 - 2116 undergraduates
 - 99% pass rate
 - 2309 postgrad (2015)
 - MBChB class 200-230
 - Ranked 48th (2014) Times HE WU rankings for clinical, preclinical and health

FHS Training areas

Professions

Medical

Nursing

Rehabilitation

Sciences

Basic

Translational

Clinical

Public health

Criterion-related validity

UCT FHS 2016

	M	SD	1	2	3	4	5	6	7	8
1. Nat. Senior Certif.	517.1	29.12								
2. Math & Verbal Lit	220.4	31.48	.50**							
3. Biod (Leader)	11.48	9.37	.09	.15*						
4. Biod (Comm serv)	39.30	23.53	.16*	.25**	.26**					
5. Biod (Cultural)	47.08	26.72	.16*	.33**	.16*	.37**				
6. Biod (Sports)	35.15	24.01	.07	.32**	.27**	.29**	.34**			
7. Biod (Total – Mech)	33.25	14.74	.18*	.40**	.45**	.73**	.77**	.72**		
8. Biod (Total – Clin)	52.32	17.95	.25**	.40**	.42**	.57**	.52**	.52**	.74**	
9. Academic Perf (Y1)	67.59	7.51	.71**	.51**	.00	.11	.15*	-.00	.11	.22**

* $p < .05$, ** $p < .01$



Selecting for 'deficient' criteria



Competency model

Medical and Dental Professions Board



Core competencies

- Model developed by Medical and Dental Professions Board (MDPB) and training institutions (Medical Deans)
- For training undergraduate students in clinical, associate, dentistry and medical teaching and learning programmes
- Adapted from CanMEDS Physician Competency Framework by SA

Core competencies (MDPB)



Competency statements: Example

- *Role:* Healthcare practitioner
 - *Key competency 1.3* Perform comprehensive assessments of patients/clients
 - *Enabling competency b)* Elicit a history of the patient/client that is relevant, concise and accurate to context, for the purposes of disease prevention, health promotion, diagnosis and/or management.

'Non-academic' competencies

- Examples

- Communicate effectively by listening, clarifying uncertainties, probing sensitively, and being aware of, and responsive to, non-verbal cues.
- Establish positive therapeutic relationships with patients/clients and their families characterised by understanding, trust, respect, honesty, integrity and empathy.
- Develop rapport, trust and ethical therapeutic relationships with patients/clients, families and communities from different cultural backgrounds.

Research problem

- We know emotionally intelligent behavior and interpersonal effectiveness in doctor-patient interactions may impact therapeutic outcomes.
- But traditional tests used in medical admissions don't predict these 'contextual' job performance behaviors in medical practice well.

Research aim

- To develop SJT measures of emotional intelligence (EI) and interpersonal effectiveness (IE) in the medical context
- Investigate prediction of non-academic performance of medical students

Research questions

- Would SJT measures of emotional intelligence (EI) and interpersonal effectiveness (IE) predict the non-academic performance of medical students?
- Would the SJT show incremental validity and lower adverse impact?

SJT development 'laundry list'

SJT for medical selection at UCT



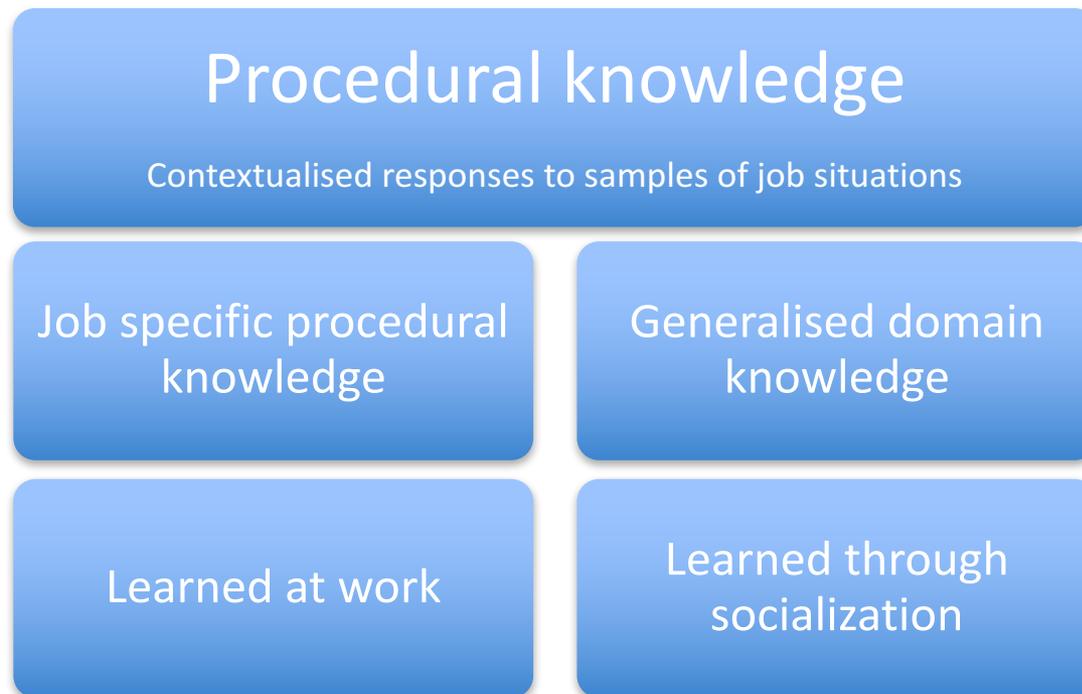
SJT design requirements

- Construct-driven assessment with SJT
 - Emotional intelligence
 - Interpersonal effectiveness
- Culture-reduced assessment and suitable item characteristics across cultures
- Suitable for (high) English 2nd language
- Reduced cognitive load (to avoid adverse impact) and 30 minute administration time

Medium and method

- Stimulus medium for scenarios (text vs. video-vignettes)?
- Language medium (and minimum language proficiency required)
- Delivery method (unproctored online vs. supervised mode)?

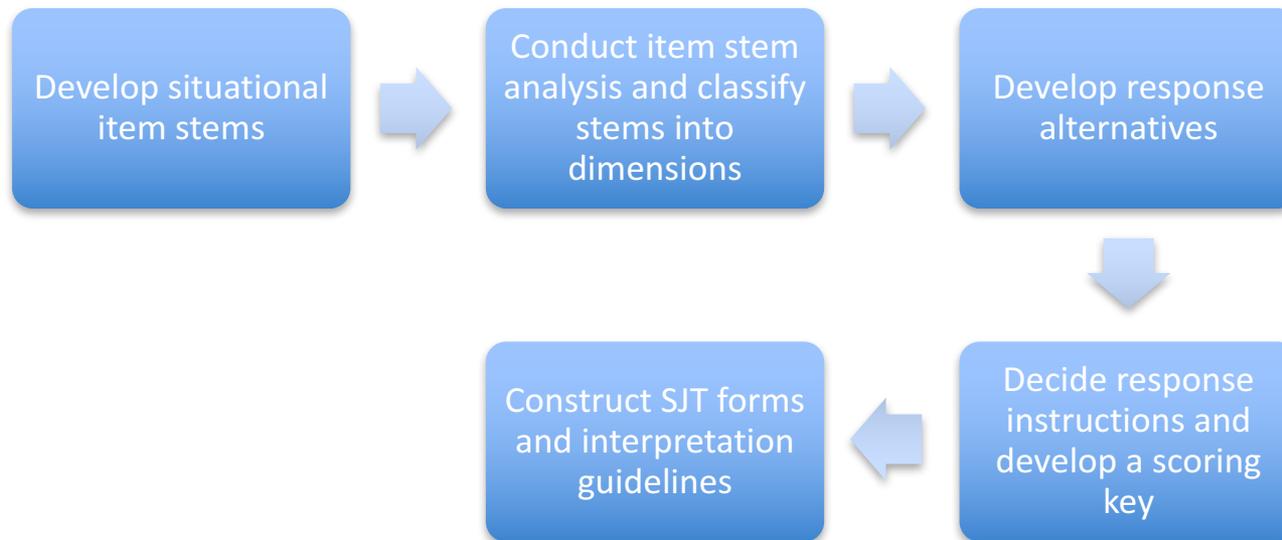
What do SJTs measure?



'Off-the-shelf' or 'from-scratch'?

Adopt	Adapt	Self-develop
<ul style="list-style-type: none">• (+) Time• (-) Fit• (?) Transportability	<ul style="list-style-type: none">• (+-) Time• (+-) Fit	<ul style="list-style-type: none">• (-) Time• (+) Fit

Construct-driven SJT development



SJT validation design

- Match predictor and construct domains
- Predictive criterion-related validity study (T1-yr1, T2-yr6, and T3-5 yr post-training).
- Use multiple criteria
 - Task performance
 - Interpersonal effectiveness
 - Return-to-practice (rural vs. urban area)
 - Specialisation (y/n, and area)

Thank You



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