

Development and acceptability of a vignette-matching procedure to assess clinical psychology trainees' competencies in field placements

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Why develop a vignette-matching procedure?



- Strong evidence for leniency and halo biases
- Similar results across disciplines
- Inaccurate ratings produce adverse consequences

Supervisor assessments: Reasons for leniency bias

| Reasons for leniency | % |
|---|------|
| 1) Guilt/fear of damaging supervisee's career | 60 % |
| 2) Difficulty providing negative feedback | 50 % |
| 3) Awareness of subjectivity inherent in evaluation | 49 % |
| 4) Fear of potentially diminished rapport | 48 % |

Robiner et al., 1987

Reasons for leniency

- Gonsalvez, Wahnnon & Deane 2016
- Survey of 113 supervisors of postgraduate psychology trainees
- 58% believed their ratings were affected by leniency bias
- 66% believed their peers' ratings were affected by leniency bias
 - Lack of objective measures (52%) or clear criteria (43%) for competence and incompetence
 - Guilt or fear about damaging a supervisee's career or lengthening their education/internship (35%)

Measurement issues

- Typical Competency Evaluation Rating Forms use Likert-type or visual analogue scales
- Multiple items covering diverse domains
- Field supervisors consistently reluctant to assign average and below average grades
- Not remedied by
 - assigning wider scales (from 5 to 6-point)
 - or changing reference points from performance of other trainees to readiness to practice (Gonsalvez & Freestone, 2007)

Aim

- To design and evaluate a new vignette-based instrument to assess practitioner competencies in psychology

Practicum model in Australia

- Typically four placements
- First placement usually in University affiliated psychology training clinic
- Subsequent placements must have child/adolescent and adult psychiatric (SMI) experiences
- Evidence of leniency bias
 - At end of Placement 1, most students are rated as being in Stage 3 (out of 4) on most competency domains
 - Very few failed placements

Vignette Matching Procedure (VMAT)

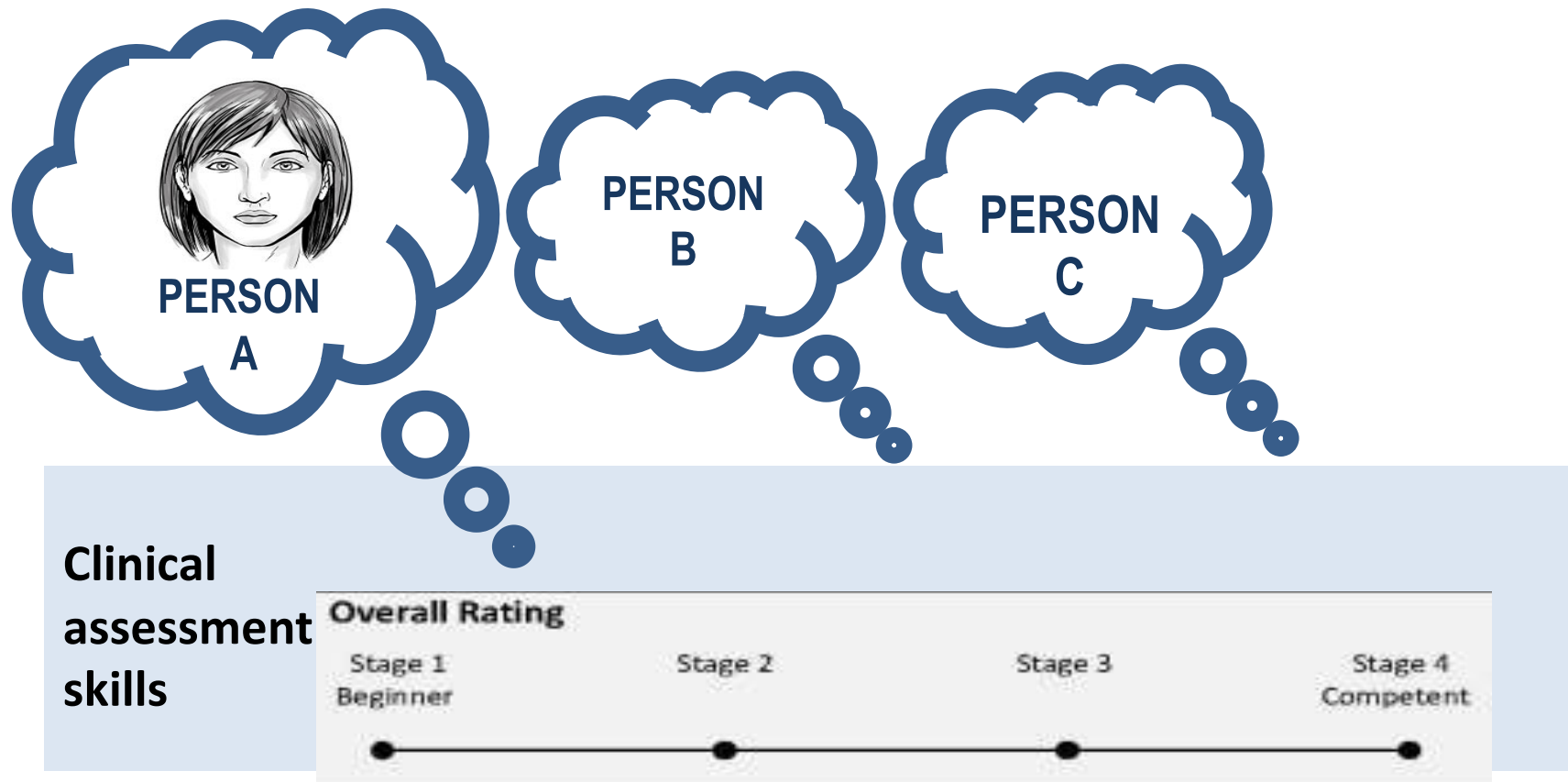
- Catalogue of behaviourally descriptive vignettes
- Nine competency domains
 - Counselling
 - Clinical Assessment
 - Case Conceptualisation
 - Intervention (generic and CBT)
 - Ethical attitude and behaviour
 - Scientist-practitioner approach
 - Professionalism
 - Psychological Testing
 - Response to supervision

Vignette Matching Procedure (VMAT)

- Four to five vignettes per domain, 1 for each stage of development (stages 1 – 4)
- Each vignette carefully crafted and revised
- Panel of experts calibrated vignettes by assigning them to developmental stages

Calibrating vignettes

- Expert Panel (N=21 Clinic Directors)
- Reviewed sets of vignettes (each domain separately) and anchored them to a point along a continuum where the vignette best fitted



VMAT Calibration Scores: Australian External Experts

| Domain | Stage 1 | Stage 2 | Stage 3 | Stage 4 |
|-------------------------------------|-------------|--------------------|-------------|-------------|
| Ideal | 1.50 | 2.50 | 3.50 | 4.50 |
| Counselling | 1.58 | 2.32 | 3.52 | 4.57 |
| Clinical Assessment | 1.35 | 2.30 | 3.34 | 4.65 |
| Case Conceptualisation | 1.73 | 2.37 | 3.29 | 4.54 |
| Intervention (Generic competencies) | 1.60 | 2.56 | 3.65 | 4.31 |
| Intervention (CBT) | 1.58 | <u>2.79</u> | 3.55 | 4.46 |

N = 21; Scores in excess of +/- 0.25 are **highlighted**

VMAT Calibration Scores: Australian External Experts and Site Coordinators

| Domain | Stage 1 | Stage 2 | Stage 3 | Stage 4 | Stage 5 |
|---|--------------------|--------------------|-------------|-------------|-------------|
| Ideal | 1.50 | 2.50 | 3.50 | 4.50 | 5.50 |
| Psychological Testing | 1.41 | 2.41 | 3.56 | 4.61 | NA |
| Scientist /Practitioner Competencies | <u>1.87</u> | <u>2.92</u> | 3.28 | 4.65 | NA |
| Ethical Attitude and Behaviour | 1.75 | <u>2.10</u> | 3.00 | 4.33 | NA |
| Professionalism | 1.35 | 2.39 | 3.71 | 4.64 | NA |
| Response to Supervision | <u>1.83</u> | 2.55 | 3.45 | 4.38 | 5.45 |

Case conceptualisation: Vignette 1

- Trainee CF assesses and formulates only a small number of simple and distinct interventions with supervision. She/he demonstrates difficulty recognising the individual context and client circumstances that require integration into a formulated intervention. She/he is not able to modify an intervention when new information comes to light. She/he requires the supervisor to help translate formulations into a language the client will understand and to communicate these to the client.
- Calibration SCORE: 1.73, SD: 0.38

Case Conceptualisation: Vignette 4

- Trainee CI independently assesses and formulates appropriate interventions which draw from a broad base of standardised models. She/he integrates formulated interventions within the client's individual context and circumstances in both simple and complex cases and modifies these as new information comes to light. She/he translates complex formulations into language the client will understand and accept.
- Calibration SCORE: 4.54, SD: 0.27,

Supervisor ratings

- Presented online, randomly start with highest or lowest vignette
- “Please indicate whether your trainee attained a developmental stage that is higher, equal to, or lower than that depicted in each vignette”
- Radio buttons
 - Higher than
 - Equal to
 - Lower than

Clinical Psychology Competencies Rating Scale (CΨPRS)

- 69 items
- Eight competency domains
- Rate of progress and Response to Supervision during Placement
- 0 (Stage 1 Beginner) to 10 (Stage 4 Competent) visual analogue scale
- Descriptions for Stage 1, 2, 3 and 4 provided as reference point.

Stage 1 Beginner

- Stage 1 Beginner
 - Knowledge and skills are at an early stage of yet to be developed.
 - Inadequate knowledge and/or difficulty applying knowledge to practice.
 - Several problems or inadequacies occur during sessions.
 - Little awareness of process issues.
 - On par with trainees commencing training without any practicum experience.
 - Regular and intensive supervision required.

Stage 4 Competent

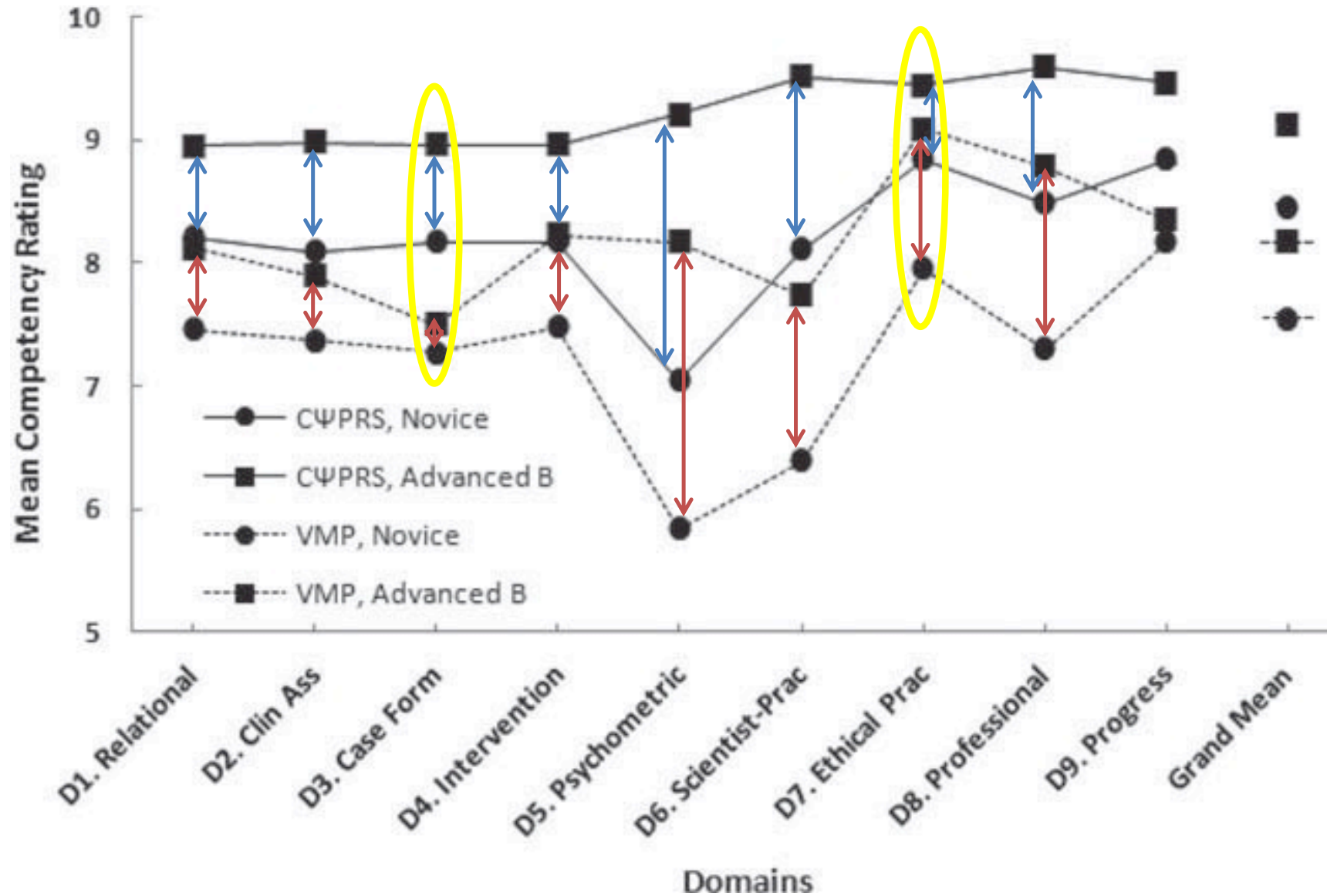
- Large repertoire of basic and advanced competences in both assessment and intervention, applied across a range of clients and severity levels.
- On par with a clinical psychologist working in their first job upon qualification.

Percentage trainees assigned to stage four developmental stage (n = 57)

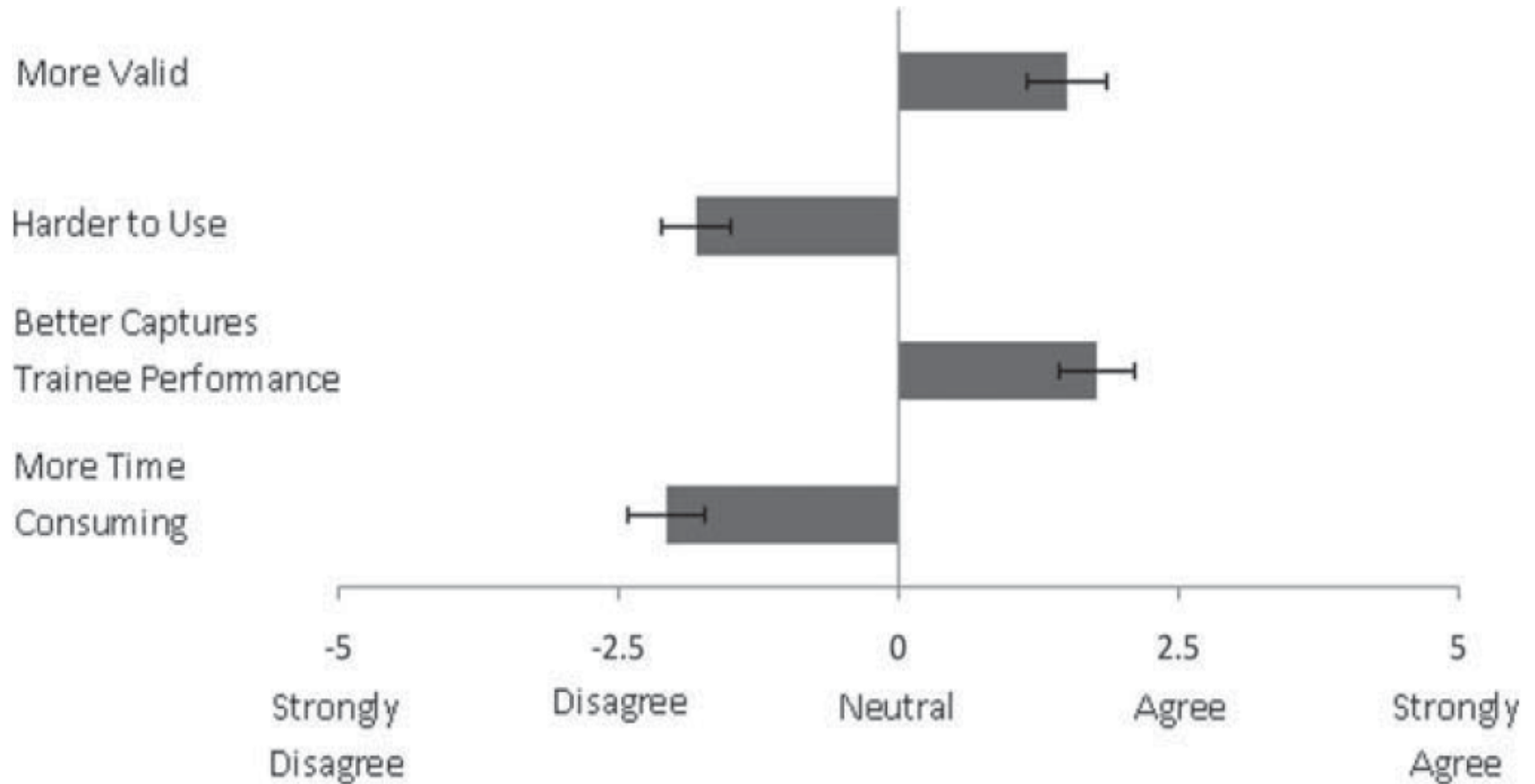
Gonsalvez et al., 2013 in *Training and Education in Professional Psychology*

| Competency domains | CYPRS | Vignette Matching Procedure | |
|---------------------------|------------|-----------------------------|------------|
| | Stage 4 | Stage 4 | Difference |
| Relational skills | 70% | 44% | 26% |
| Clinical assessment | 67% | 56% | 11% |
| Case formulation | 63% | 34% | 29% |
| Intervention skills | 69% | 49% | 35% |
| Psychometrics | 69% | 10% | 59% |
| Scientist-practitioner | 80% | 36% | 25% |
| Ethical practice | 80% | 69% | 11% |
| Professional skills | 83% | 53% | 30% |
| Progress during placement | 85% | 57% | 28% |
| Grand mean | 74% | 45% | 29% |

Differentiating Novice (n = 30) from Advanced students (n = 16)



Supervisors evaluations of VMAT compared to CYPRS



Supervisors' evaluations

- N = 96 supervisors
- % “Agree” or “Strongly agree”
- 88% VMAT more accurate & valid than CYPRS
- 83% VMAT more reliable than CYPRS
- 47% CYPRS easier to distinguish between stages

Conclusions

- 65% of trainees had completed only one placement (200-300 hours) and would be considered novices by training institutions but mean competency ratings were above 8/10.
- Vignette approach seemed to yield data suggestive of reduced leniency and halo biases
- Vignettes did not better differentiate novice and advanced beginners
- Supervisors evaluated vignette approach positively

Study 2 Revised CYPRS and VMAT

- CYPRS revised visual analogue
 - Prior: Beginner 0 _____ 10 Competent
 - New:
 - Stage 1 Stage 2 Stage 3 Stage 4
 - Beginner |-----|-----|-----|-----|-----|-----|-----| Competent
 - Brief stage descriptors
- VMAT
 - Still higher, equal or lower judgements
 - When between stages
 - Stage descriptions presented and
 - Visual analogue slider to refine judgements

Revised Vignette Matching Procedure (VMAT)

Stage X - Trainee GJ does not prioritise and effectively discharge casework, work, and personal responsibilities. Consequently she/he requires close supervision to monitor and ensure adequate client and agency outcomes. Because of a limited competency set or unreliable self-evaluations, Trainee GJ requires direction to ensure appropriate client care and professional development. Problematic communication styles and/or hypersensitivity to comments and feedback may lead to interpersonal conflict. Dress, presentation, and demeanour may also fall short of professional standards.

Stage Y - Trainee GK experiences some difficulties in managing the professional demands of the placement. This has included managing time and priorities in order to ensure that important tasks are completed in a timely manner. Her/his manner with team members is generally appropriate, except when under stress or during interactions with those in authority when appropriate confidence is lacking. She/he responds to feedback relating to many of these issues, but is inconsistent in identifying them for her/himself.

Please estimate, as best you can, the level your trainee has attained by clicking/moving the slider to the relevant point between the two stages.

The image shows a horizontal slider scale. At the top left, the text "Stage X" is positioned above the scale. At the top right, the text "Stage Y" is positioned above the scale. Below the text, a horizontal line represents the scale. A vertical line is drawn near the left end of the scale, with the word "Rating" written below it. A grey slider knob is positioned on the scale, slightly to the right of the vertical line, indicating a rating level between Stage X and Stage Y.

Percentage trainees assigned to stage four developmental stage (n = 91)

| Competency domains | CYPRS | Vignette Matching Procedure | |
|---------------------------------|------------|-----------------------------|------------|
| | Stage 4 | Stage 4 | Difference |
| Counselling skills | 59% | 57% | 2% |
| Clinical assessment | 48% | 49% | -1% |
| Case formulation | 45% | 38% | 7 |
| Intervention skills | 40% | 44% | -4 |
| Ethical attitude and behaviour | 71% | 75% | -4 |
| Scientist-practitioner approach | 57% | 33% | 24% |
| Professionalism | 75% | 65% | 10% |
| Psychometric testing | 33% | 31% | 2% |
| Grand mean | 55% | 51% | 4% |

VMAT changes in percentages in stage four developmental

| Competency domains | VMAT N = 57 2013 | VMAT N = 91 2016 | |
|------------------------|---------------------|---------------------|------------|
| | Stage 4 | Stage 4 | Difference |
| Counselling skills | 44% | 57% | 13% |
| Clinical assessment | 56% | 49% | -7% |
| Case formulation | 34% | 38% | 4% |
| Intervention skills | 49% | 44% | -5 |
| Psychometrics | 10% | 31% | 21% |
| Scientist-practitioner | 36% | 33% | -3% |
| Ethical practice | 69% | 75% | 6% |
| Professional skills | 53% | 65% | 12% |
| Grand mean | 44% | 49% | 5% |

Why are CYPRS ratings lower?

- In 2013 study 54% were “Novice” on first placement ratings.
- In 2016 only 38% of sample are “Novice” or first placement ratings
- Clearer Stage anchors and descriptors

Conclusion

Contributions include

- Design of new instrument – Vignette Matching Assessment tool (VMAT)
- Comprehensive catalogue of vignettes designed and calibrated
- Currently being trialled by multiple sites
- Wealth of data from conventional scale
- Good preliminary results favouring the new instrument
- Has cross-disciplinary applications

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