

# Using OSCEs with simulation to maximise student learning and assess competencies in psychology: A pilot study

*R. Roberts, A. Chur-Hansen, H. Winefield, S. Patten, H. Ward  
& D. Dorstyn*

---

## Abstract

**Introduction:** There is limited research on the use of objective structured clinical examinations (OSCEs) in psychology despite their extensive use in medicine. This pilot study extended the evidence base by assessing the impact on student learning of OSCEs focused on motivational interviewing.

**Methods:** A mixed-methods approach was used with quantitative and qualitative data analysed. Data were collated from all 14 professional psychology students enrolled in a health psychology course.

**Results:** Findings suggest that OSCEs are a feasible, reliable and valid method for professional psychology trainees to demonstrate competencies in complex, interventional skills.

**Conclusions:** Implications for incorporating OSCEs into professional psychology training are described. Future work addressing issues including optimal approaches to provision of feedback for learning is needed.

**Keywords:** OSCE; objective structured clinical examinations; simulation; competency; training; psychology.

---

University of Adelaide, Australia

### *Correspondence*

Rachel Roberts  
School of Psychology, Faculty of Health and Medical Sciences  
University of Adelaide  
Adelaide, South Australia 5005  
Australia  
Tel: +61 8 8313 5228  
Email: rachel.roberts@adelaide.edu.au

---

## USING OSCEs IN PSYCHOLOGY

**Introduction**

Objective structured clinical examinations (OSCEs) and simulation have been used to assess competencies in medicine, nursing and dentistry for many years, and they have been demonstrated to be authentic, reliable and valid ways to assess competencies (Newble, 2004). Calls are only just being made in the UK for OSCEs (using role plays with actors) to be introduced into professional psychology training programmes to assess clinical competencies (McManus & Bennett, 2015). Similarly, in the US, the use of simulated patients in training has been advocated, with Gillaspay, Litzenburg, Leffingwell and Miller (2015) suggesting that motivational interviewing (MI) provides an excellent opportunity for students to develop and demonstrate a range of core competencies required in psychology training, including professionalism, interpersonal skills and application of evidence-based practice.

MI is a person-centred style of counselling that focuses on change and is designed to strengthen motivation and commitment to a goal (Miller & Rollnick, 2012). MI is useful when there is ambivalence to lifestyle change, a common experience in relation to motivation among patients with chronic health conditions and health-related behaviours, such as diet, exercise and substance use (see [www.motivationalinterviewing.org](http://www.motivationalinterviewing.org) for a range of relevant resources). MI has strong evidence underpinning its effectiveness in the areas focused on in the current study, including alcohol use (Joseph & Basu, 2016), management of type 2 diabetes (Ekong & Kavookjian, 2015) and weight loss (Barnes & Ivezaj, 2015). However, to date, we are not aware of reports of the use of MI-based OSCEs to assess clinical competencies in psychology training. The use of OSCEs to assess other clinical competencies, such as suicide risk assessment training, is in its initial stages, with Cramer, Johnson, McLaughlin, Rausch and Conroy (2013) developing a risk assessment framework that includes OSCEs for psychology professional training programmes.

OSCEs have only very recently been piloted in professional postgraduate psychology training programmes within Australia, with both pilot projects reporting that OSCEs were well received by both staff and students (Sheen, McGillvray, Burtman, & Boyd, 2015; Yap, Bearman, Thomas, & Hay, 2012). Feedback from students included the appreciation of realistic but safe and scaffolded learning, with real time feedback on performance. Factors that were seen as disadvantages included the anxiety experienced by some students who may feel insufficiently prepared for OSCEs in addition to staff concerns regarding the resources needed to develop and run OSCEs (Muldoon, Biesty, & Smith, 2014; Sheen et al., 2015). In addition, the reliability and validity of feedback from simulated patients is yet to be established in psychology, although OSCE studies in medicine are promising (e.g., Karen, King, Malone, & Guerandel, 2014). Nonetheless, advocates of the OSCE method recommended incorporating this assessment into psychology programmes (Sheen et al., 2015; Yap et al., 2012). Moreover, Australian psychology accreditation standards recommend the use of OSCEs (APAC, 2010), and it is anticipated that they will be mandated in the near future.

In summary, despite the potential to maximise learning offered by OSCEs and simulation (Sheen et al., 2015), psychology has been slow to incorporate OSCEs or simulation

## USING OSCEs IN PSYCHOLOGY

into professional training programmes, both in Australia and internationally. Moreover, OSCEs reported in the psychology literature have largely focused on assessment and diagnosis, history taking and mental state examinations, with suggestions that assessing interventions via OSCEs may be more complex (Yap et al., 2012). Our pilot study addresses this research gap by assessing the feasibility of using OSCEs to assess the complex competencies involved in psychological intervention. Specifically, we aimed to pilot MI OSCEs to begin to examine whether our approach to OSCEs would result in manageable levels of anxiety and feelings of appropriate preparedness, and whether the learning outcomes outweighed these potential issues. Our approach was to draw on a range of strategies used in medicine and on work on use of reflection and feedback and use of simulated patients (SPs) to maximise student learning (Chur-Hansen & Burg, 2006). In addition, we assessed the reliability of feedback on performance in OSCE stations by utilising a standardised rating scale from multiple examiners (registered psychologist academic staff).

***Our approach***

To reduce student anxiety in a cohort of students with no previous experience of OSCEs, the OSCE was not formally graded, although students were provided with feedback regarding their competencies. The grade for this part of the course was based on a related written reflection assignment. To increase students' feeling of being appropriately prepared for the OSCEs, they received a stepped introduction to the OSCE (seminars, practice with peers, group practice with an SP and a practice OSCE). The process was as follows:

1. Over the 6 months prior to the OSCE, participants attended a seminar on motivational interviewing (based on Miller & Rollnick, 2012), practiced with peers, practiced with an SP in a group setting (one SP, class taking turns to interact with the SP) and were provided with resources on MI for self-study and an explanation of the OSCE process.
2. Staff training provided familiarisation with the OSCE process and assessment rubric, and co-training of SP with experienced simulation trainer.
3. Two weeks prior to OSCE, a practice session (1 station run exactly like the OSCE) was conducted.
4. OSCE administered (2 stations)
5. In the days following the OSCE, students were emailed a link to the video recording of their OSCEs, including a recording of feedback from the SP. Students were also provided with written copies of the assessment rubric from at least two faculty members for each station.
6. Two weeks following the OSCE, students submitted their reflection assignment.

Given the limited research on the use of OSCEs in psychology, the current pilot project aims to contribute to the evidence base by using a mixed-methods approach to assess the impact of OSCEs on student learning. We predicted that the majority of students would demonstrate competencies in the OSCEs and reflective writing assignment at

## USING OSCEs IN PSYCHOLOGY

appropriate levels for their stage of training. Overall, we expected that the approach we have described would result in positive learning outcomes for students that outweigh concerns about student anxiety and resourcing. We also expected the assessment rubric to have acceptable inter-rater reliability.

## Method

Data were collated from all 14 students (5 men, 9 women) enrolled in the “Health Psychology” course at the University of Adelaide School of Psychology during Semester 2, 2015. This is one of a total of seven courses that, with practicum and a research thesis, make up a 2-year accredited professional postgraduate degree programme leading to registration as a psychologist with the Psychology Board of Australia on graduation. The primary therapeutic approach taught across the degree programme is cognitive behavioural therapy, however motivational interviewing is also taught. Students were enrolled in this course as a component of the MPpsych (Clinical) (n = 9) and MPpsych (Health) (n = 5) degree programmes. For all students, this was their first experience of an OSCE. All students were in the first year of professional training.

## Materials

### *Assessment rubric*

Examiners rated students’ performance using an assessment rubric modified from a rubric that has been used for a range of OSCEs in the University of Adelaide, School of Medicine. Students were rated on professionalism, clinical skills, knowledge and reasoning in the context of an MI-based session. Thus, the rubric described performance across four levels of competency; an overall rating was also made. This rubric was used for all OSCE stations (available from corresponding author on request). Modifications required to make the rubric appropriate for a psychologist delivered intervention were: changing of wording from “medical practitioner” to “psychologist”, changing of wording from “patient” to “client” and removal of references to “physical examination”, “investigations” and “hand hygiene”. The modification required to make the rubric appropriate for MI was removal of references to the ability to prioritise differential diagnoses.

### *SP feedback to students*

SPs provided up to 5 minutes of oral face-to-face feedback to students. SPs were provided with the following written instructions to inform their feedback:

*Please provide verbal feedback to the student about any relevant points as you see fit, but including: how comfortable you felt during the discussion (i.e., rapport); how empathic the student seemed to be; whether you felt the student allowed you the opportunity to speak; Was this a client-centred consultation or psychologist centred?; Did you feel that you were being “talked at”?; When providing information, was the student clear?; Is this someone you would return to?*

USING OSCES IN PSYCHOLOGY

Table 1  
*Student Feedback Survey Results (n = 14)*

Item	N/A	SD	D	N	A	SA
1. The OSCE appeared to provide a valid assessment of						
1.1 Skills in engaging patients	0	0	2	1	7	4
1.2 Skills in motivational interviewing overall	0	0	2	1	9	2
1.3 Skills in clinical interviewing	0	0	3	1	9	1
2. The learning objectives of the OSCE were clearly defined	0	0	2	0	7	5
3. The content of the stations was relevant to the course	1	0	0	0	5	8
4. Scenarios and cases used in the OSCE were relevant to practise	1	0	0	1	5	7
5. The standardised patients were realistic	0	1	0	3	7	3
6. The OSCE was anxiety provoking	0	0	1	3	7	3
7. The OSCE was more anxiety provoking than other types of assessment	0	0	4	1	4	5
8. OSCEs provide a better method than written assessment to develop competency to practise	0	0	1	1	9	3
9. The OSCE was a fair assessment	0	0	1	1	9	3
10. I felt poorly prepared for the OSCE	1	2	5	4	0	2
11. Preparing for and completing the OSCE enhanced my learning	0	0	1	2	3	8
12. The feedback I received as part of the OSCE facilitated my learning	0	0	1	1	7	5
13. The OSCE did not translate well to psychology training	1	6	5	1	1	0
14. Overall, the OSCE was a worthwhile exercise	0	1	1	1	5	6
15. Incorporating the OSCE into psychology training would be beneficial	0	1	0	2	2	9

N/A, no answer; SD, strongly disagree; D, disagree; N, neutral; A, agree; SA, strongly agree

*Student feedback survey*

The Student Feedback Survey is a 17-item questionnaire that has been used in previous assessments of psychology student perceptions of OSCEs (Sheen et al., 2015, Yap et al., 2012). Minor modifications to statements were made to ensure questions were relevant to the current OSCE. Students responded on a Likert scale ranging from 1 “strongly agree” to 5 “strongly disagree” to statements regarding the OSCE (see Table 1).

*Student reflection assignment instructions*

Students were provided with the following guidelines to complete the reflection assignment:

*Please reflect on the feedback provided across the three OSCEs by 1) the OSCE assessors, 2) the simulated patient and 3) your own self-assessment of your interviews. Please comment on any similarities and discrepancies between the sources of feedback. Please also comment on what you have learned from this experience, and what implications this has for your future professional development. Finally, please comment on the future development of the OSCE. Comment on any ways that the OSCE could be run differently to improve the learning experience and any aspects of the OSCE that should not be changed (maximum 1000 words).*

## USING OSCES IN PSYCHOLOGY

***Procedure***

Ethics approval for this research project was obtained from the University of Adelaide Human Research Ethics Committee. Students were invited to give consent for project researchers to use their assessment material and the Student Feedback Survey for this research.

Three OSCE stations were developed; all focused on MI but drew upon different scenarios with the client expressing different points of the Stages of Change model (Prochaska & DiClemente, 1984) and varying levels of resistance to change a health-related behavior (i.e., adherence to diabetes management, alcohol use, unhealthy eating). Students were instructed to conduct a 20-minute MI session with the client. Each student undertook one practice OSCE station, then two OSCE stations.

Actors were employed in the role of SP. Actors worked for half days and so each station was portrayed by two SPs. SPs were selected to match the age and gender of the scenario and were drawn from a pool of actors trained specifically for working with medical and nursing students. All were experienced SPs with prior training and experience in the provision of feedback to OSCE candidates.

The examiners were not in the same room as the student and SP but observed the student via a video link in the simulation centre. Examiners were six members of academic staff who were also registered psychologists with endorsements in health psychology ( $n = 1$ ), clinical psychology ( $n = 2$ ) or both ( $n = 3$ ). Examiners had all received training in MI from a range of sources, and all but one examiner had used MI in their clinical practice to varying extents. Three examiners had extensive experience with OSCEs with medical students; three examiners had no experience with OSCEs. Examiners worked in teams of two or three, depending on availability.

Each OSCE station was 20 minutes and was followed by 5 minutes of feedback from the SP and then 5 minutes of feedback from the examiners. Students completed stations with a 1- to 2-hour gap between stations to give them time to consider and incorporate feedback. Half of the students completed station one first; half completed station two first. Assessment rubrics were provided to students the following day. Students received, via email, a link to a recording of their performance in the OSCE stations and the SP feedback.

Students were required to write a reflection on the feedback from the SP and the examiners. This aimed to give the student the opportunity to reflect on their performance and the different aspects of the information they had received from the various sources (e.g., technical MI skills and skills such as empathy and therapeutic rapport). After submission of the reflection, students completed the Student Feedback Survey. This was completed anonymously, and so these data could not be linked to the student's OSCE performance or reflection assignment.

Time given to staff to complete the OSCEs included one half-day training (including training the SPs), one half day for the practice OSCE, one full day for the OSCE and additional time to mark the reflection assignments by the course coordinator.

## USING OSCEs IN PSYCHOLOGY

For the reported OSCE, six staff were involved (to ensure all staff in the professional training programmes had the opportunity to experience the OSCE); however, future OSCEs would require only two staff for SP training and four staff for the OSCEs (total of 7 staff days). In addition, SPs were paid (total cost approximately AUS \$1500). Additional staff time was required for preparatory sessions, including teaching the MI seminar and arranging practice with an SP in a group setting. However, these activities are longstanding components of the curriculum that have been delivered regardless of whether OSCEs are used.

***Data analysis***

There were three sources of data to be analysed. Firstly, examiner ratings of student competency for each OSCE station were collated, and inter-rater reliabilities were calculated using R version 3.1.2 2014, following Hallgren's (2012) guidelines. Intra-class correlation (ICC) benchmarks as suggested by Landis and Koch (1977) were used (0–.2 “slight agreement”, .21–.4 “fair agreement”, .41–.6 “moderate agreement”, .61–.8 “substantial agreement”). Secondly, student responses to the feedback survey were collated. Finally, a systematic content analysis of the qualitative text of student reflection assignments was undertaken by applying a deductive category approach, as per Mayring (2000). The codes were formulated by one rater (ACH) and checked by a second rater (HW).

**Results*****Examiner ratings of student competency***

Examiner ratings of student competency for the practice station and the two subsequent stations were compiled (see Table 2). Two students (on medical leave) did not complete the practice OSCE. For the practice OSCE, all of the students fell into one of two overall categorical ratings: “clearly at the expected level of competency” for 45.8% of ratings and “just reached the expected competency” for the remaining 54.2%. For the actual OSCEs, there was greater variation in ratings, with a high proportion of students “clearly at” or “above” the expected level of competency (92.3% for Station 1 and 54.8% for Station 2). Two students received overall ratings of “below the expected competency” from an examiner, representing 2.6% of Station 1 ratings and 7.1% of Station 2 ratings.

***Inter-rater reliability of ratings***

Inter-rater reliability for the six raters in rating four competencies plus the overall rating for Station 1 and Station 2 was assessed using a one-way random, consistency, average-measures intra-class correlation (ICC). This assessed the degree that examiners provided consistency in their ratings of competency across students (see Table 3). The resulting ICCs were in the fair to moderate range for both stations for clinical skills, knowledge and reasoning ratings (.25–.67). ICCs were in the moderate range for Station 1 overall ratings (.48) and in the substantial range for Station 2 overall ratings (.78). However, there were low ICCs for ratings of professionalism for both stations. This is likely to



USING OSCEs IN PSYCHOLOGY

Table 2  
Examiner Ratings of OSCE Performance

	<b>A</b> Above the expected competency	<b>B</b> Clearly at the expected competency	<b>C</b> Just reached the expected competency	<b>D</b> Below the expected competency	<b>E</b> Far below the expected competency
<b>PRACTICE</b>					
Professionalism	0	15	9	0	0
Clinical skills	1	7	15	1	0
Knowledge*	0	9	14	0	0
Reasoning	1	13	10	0	0
Overall	0	11	13	0	0
<b>STATION 1</b>					
Professionalism	2	36	4	0	0
Clinical skills	6	29	7	0	0
Knowledge	3	31	7	1	0
Reasoning	3	34	4	1	0
Overall	3	33	5	1	0
<b>STATION 2</b>					
Professionalism	0	37	4	1	0
Clinical skills	4	26	11	1	0
Knowledge	3	17	19	3	0
Reasoning	2	24	13	3	0
Overall	1	22	16	3	0

Note: missing data n = 1

Table 3  
Inter-Rater Reliability for Examiner Ratings of Competencies for Station 1 and 2

	<b>Station 1</b>	<b>Station 2</b>
Professionalism	.35	-.37
Clinical skills	.40	.44
Knowledge	.48	.67
Reasoning	.25	.60
Overall	.48	.78

reflect the very restricted range of scores for professionalism, with 88.1% of ratings “clearly at the expected competency”. These findings demonstrate acceptable inter-rater reliability, suggesting that competency was rated similarly across examiners.

***Intra-rater reliability of ratings***

ICC was also used to determine intra-rater reliability of ratings from the two stations for the competency ratings. A mean value for each competency rating was calculated before comparing Station 1 to Station 2. This was assessed using a two-way fixed



## USING OSCES IN PSYCHOLOGY

consistency ICC. ICCs were moderate for ratings of knowledge (.44) and reasoning (.59) and substantial for ratings of clinical skills (.64) and the overall ratings (.74). As with the inter-rater reliabilities, the intra-rater reliability for the professionalism ratings was low (.4), again a likely reflection of the very restricted range of scores. Overall, this indicates acceptable agreement across the two stations in ratings of student competencies, reflecting similar levels of performance by students across stations.

### ***Student Feedback Survey***

Results from the Student Feedback Survey are shown in Table 1. They show the majority of students reported positive responses, considering the OSCE a valid and fair assessment of their skills, with relevant content and realistic simulated patients that enhanced their learning. The majority of students also indicated that the OSCE was anxiety provoking—more than for other types of assessment. In addition, students indicated that the OSCE translated well to psychology training, was worthwhile and would be beneficial to incorporate into psychology training. However, there were a significant minority of students who reported negative or neutral responses to each of these questions. Responses to the item about how well prepared students felt for the OSCE were mixed, with more student ratings of “neutral” to this item than any other ( $n = 4$ ), and with students who strongly agreed ( $n = 2$ ), disagreed ( $n = 5$ ) and strongly disagreed ( $n = 2$ ).

### ***Content analysis of student reflections***

In total, 22 codes were identified in the reflections. These were further grouped according to two main areas: “positive impact on learning” and “challenges with the experience”. Content in the reflections that expressed positive learning experiences were as follows: an overall valuable learning experience; realistic/authentic experience; practice OSCE important for learning; feedback from both examiners and simulated patients valuable for learning; reviewing videos valuable for learning; areas for future professional development self-identified; skills learned transferable to other settings; exercise increased confidence; increased use of OSCEs in psychology training recommended. Examples of quotes that reflect the positive impact on learning include:

*I would like to begin this reflection by stating this was the best learning experience I have had in my time studying psychology.* (Student participant 6)

*Knowing that staff from the school have assessed me as competent in a clinical setting has increased my confidence in relation to beginning placement.* (Student participant 1)

Challenges with the experience were reflected in the following content: feedback from examiners inconsistent with own perceptions; OSCE unrealistic/inauthentic; not adequately prepared for OSCE; needed exact model of what was required for OSCE; feedback from simulated patient inconsistent with own perceptions; feedback from simulated patient inconsistent with assessors; feedback from assessors inconsistent with one another; time management challenging; experience anxiety provoking; student role plays may be better for learning. Quotes that encapsulate challenges with the experience include:

## USING OSCEs IN PSYCHOLOGY

*I felt that the client's feedback was particularly negative, with the criticisms feeling more like personal attacks rather than constructive criticisms. (Student participant 13)*

*This exercise was the first time I have experienced performance anxiety to the point of not being able to remember or think clearly or logically at times. (Student participant 7)*

*There was a considerable discrepancy between one assessor and all other assessors regarding my competency level for each skill component. (Student participant 3)*

## Discussion

This study provides preliminary evidence that OSCEs are a feasible, reliable and valid method for professional psychology trainees to demonstrate competencies in a complex interventional skill. Consistent with previous research (Sheen et al., 2015; Yap et al., 2012), students found the experience to be authentic (though not universally so) and overall, they considered the feedback on performance to be valuable. As in previous studies, the OSCE as a form of assessment was deemed anxiety provoking. In our study, for some students, the experience was so stressful as to reportedly interfere with performance. It is noteworthy that the feedback provided by students on the anonymous survey highlighted the challenges of the experience more so than the reflective pieces, which were identifiable, and seemingly drew out more positive content. Examiners' feedback for our small sample of students on their performance in MI and personal and professional skills was acceptably consistent, although at times, discrepancies in feedback were apparent between examiners, and between examiners and the simulated patients, which some students found challenging.

### *Lessons learned and suggestions for future OSCEs in professional psychology training*

Based on our trial, there are several areas that might be considered when adopting OSCEs in professional psychology training. First, preparation for the OSCE task is crucial, not only from the view of practicalities, but also psychologically. We had considered this and believed that making the OSCE formative rather than summative would reduce the anxiety experienced. It is probable that if this had been a high-stakes pass or fail exercise, anxiety would have been higher still. Research on OSCE candidates' levels of anxiety in other health professional training, such as medicine, where OSCEs are an accepted and integrated mode of assessment, confirms that anxiety for summative OSCEs can be so high as to be detrimental to performance (Furmedge, Smith, & Sturrock, 2016). In future research, it will be instructive to test whether repeated exposure to OSCEs as a teaching and learning tool in psychology reduces anxiety, as the novelty of the experience is also likely to have contributed to stress for our cohort.

Second, the issue of summative as opposed to formative use of OSCEs is central with regards to their use in psychology, given their relative novelty. There are continuing debates in the medical education literature around the reliability and validity of OSCEs for passing or failing candidates, including their use as barrier examinations to allow registration (or not), i.e., as qualifying examinations. Issues such as the number of stations (e.g., Swanson & Roberts, 2016), the possibility of rotating examiners across candidates (e.g., Brennan et al., 2016), standard setting (e.g., Dwyer et al., 2016)

## USING OSCEs IN PSYCHOLOGY

and the order of stations (e.g., Monteiro, Walsh, & Grierson, 2016) are all aspects of OSCEs that need consideration in relation to psychology. It is not reasonable to assume that research in medicine, nursing and dentistry can transfer directly to psychology, given that the competencies to be developed and met are not procedural. Probably the closest existing exemplars for psychology come from psychiatry (Hodges, Hollenberg, McNaughton, Hanson, & Regehr, 2014), although the skills, knowledge and abilities required of psychiatry are not identical to psychological training. The number, length, order and content of stations required for a reliable decision regarding competency to be a registrable psychologist at present have no evidence base upon which to construct any such examination. Clearly, these are areas for further research.

Third, the feedback provided by the examiners and the simulated patients is an area for further consideration. Whilst all of the examiners were registered psychologists, we do not have evidence to argue that this is an appropriate minimum criterion. It may be that students could serve as examiners, or professionals from other disciplines may also be appropriate. MI is a core skill in health psychology. Not all of the examiners in this study were using MI on a regular basis in their clinical practice—did this matter? Again, these questions are unexplored areas in the use of OSCEs in psychology. The use of SPs as examiners is another area that can be explored further. Three categories of non-expert OSCE examiners—SPs, trained lay examiners and trained students—have been identified by Swanson and van der Vleuten (2013). There is some evidence that SPs can be as reliable as expert examiners in scoring student performances in OSCEs. The question of “what it actually means to be an examiner” was raised by Hodges and McNaughton (2009, p. 282), who commented that SPs are not only objective observers in the OSCE but also that their feedback to students can be very useful for “highly affective or psychologically complex cases” (p. 283). The use of SPs as raters in OSCEs can bring in valuable aspects of the patient experience and focus more on assessment for learning in terms of providing valuable information for students beyond the actual examination (Johnston, Lundy, McCullough, & Gormley, 2013).

In our trial, the student reflections suggested that the examiners did not always give consistent feedback. This may reflect a need for more preparation and training for examiners. All examiners used in this study were registered psychologists who have undertaken formal supervisor training, including provision of feedback on clinical tasks. However, the training varied, with no common model of feedback. None had received specific training focusing on debriefing in simulation. When developing OSCEs and simulation in psychology, it is worth examining the role of feedback/debriefing, in particular the why, when, how, duration and their relation to anxiety.

Similarly, simulated patient feedback was not always consistent with the examiners’ feedback, or with the student’s perception of performance. For example, a core requirement in MI is to work with the client but not direct the person by offering them solutions to their problems. Novice psychology trainees can revert to the role of problem solver. In clinical practice, in “the real world”, clients are often eager to have a clear and easy solution offered, and the simulated patient feedback reinforced this—thus, if the student offered a solution (“try walking to the shops every day”), the simulated patient

## USING OSCEs IN PSYCHOLOGY

usually gave positive feedback to the student at the end of the station. However, the examiners' feedback was that this response did not meet the level of MI competency expected. Students described finding this frustrating and contradictory when receiving their feedback from examiners. The examiners saw this as an opportunity for students to learn, but this was not always successful, as evidenced by the written reflections. The opportunity for students to review their videos and seek further discussion and clarification with examiners, as well as through self-directed learning after the OSCE, was a valuable aspect of the trial.

It is evident, in the reflections and in the survey, that some students found receiving negative feedback from either the examiners or the simulated patients to be problematic. Selection into professional psychology training programmes in Australia is very competitive and requires high undergraduate academic performance. Thus, it is possible that some students have perfectionistic personality traits that may mean accepting critical feedback is difficult. Whilst we have no data on the personality traits of the trainees in this study, it is possible that for some, perfectionism may have contributed to heightened levels of anxiety. A further area of research sorely needed in psychology is the way in which students are selected for professional training. It is possible that OSCEs might be one tool for selection, rather than interviews—this has been explored for other health professions, such as medicine (Eva, Rosenfeld, Reiter, & Norman, 2004), but has not been a feature of selecting psychology students.

There is no doubt that feedback/debriefing has an important role in simulation and OSCEs in psychology, in both learning and the reduction of anxiety. As in all healthcare simulation, how this is delivered, when and using what model needs further research. We used a multitude of approaches: SP feedback, facilitator face-to-face, reflective self-assessment and video self-assessment. Each feedback source has strengths and limitations and, thus, their use in combination is likely to yield greater educational results (Fanning & Gaba, 2007). It may be beneficial to simplify this approach, with students able to self-reflect initially using diary and video, and then meet with a facilitator to explore their performance gaps or to perform a longer initial debriefing in a supportive environment. This can be likened more to mentoring the participant than providing feedback. Within this environment, the facilitator should ensure that they have the flexibility to examine learner-generated objectives (Motola, Devine, Chung, Sullivan, & Issenberg, 2013). This may provide the opportunity to reduce perceived stress by participants and, therefore, enhance their learning.

The current paper reports only pilot data involving a small cohort from one course in one Australian university, and as such, findings should be considered preliminary. Future work should aim to replicate and extend this study. In particular, an examination of multiple OSCE stations with regards to acceptability and validity for formative and summative assessments is warranted, as per the processes used in medicine. In addition, the current study was conducted by academic staff involved in teaching the course, and questionnaire feedback from students, despite being confidential, may have been affected by this. Collaboration across universities in addressing questions concerning the use of OSCEs in psychology training may address some of these issues.

## USING OSCES IN PSYCHOLOGY

## Conclusions

The current pilot study contributes to the limited evidence base on the use of OSCEs and simulation in professional psychology training. This supports the findings from other disciplines, that these approaches can provide valid, reliable and cost-effective contributions to learning that may outweigh concern about student anxiety, although this requires further consideration. However, more work is needed, particularly in understanding optimal approaches to the provision of feedback for learning, before OSCEs become a standard method of assessment in psychology. This pilot study suggests promise in further considering the use of both SPs and OSCEs across the curriculum in professional psychology training, from selection into programmes to optimising learning and assessment of competencies in psychological assessments and interventions.

## References

- Australian Psychology Accreditation Council (APAC). (2010). *Rules & accreditation standards for psychology courses* (Version 10). Flinders Lane, Victoria: Author. Retrieved from [www.psychologycouncil.org.au/Assets/Files/APAC\\_Rules\\_for%20Accreditation\\_and\\_Accreditation\\_Standards\\_for%20Psychology\\_Courses\\_Ver\\_10\\_June\\_2010.pdf](http://www.psychologycouncil.org.au/Assets/Files/APAC_Rules_for%20Accreditation_and_Accreditation_Standards_for%20Psychology_Courses_Ver_10_June_2010.pdf)
- Barnes, R. D., & Ivezaj, V. (2015). A systematic review of motivational interviewing for weight loss among adults in primary care. *Obesity Reviews*, *16*, 304–318. doi:10.1111/obr.12264
- Brennan, P. A., Croke, D. T., Reed, M., Smith, L., Munro, E., Foulkes, J., & Arnett, R. (2016). Does changing examiner stations during UK postgraduate surgery objective structured clinical examinations influence examination reliability and candidates' scores? *Journal of Surgical Education*. Advance online publication. doi:10.1016/j.jsurg.2015.12.004
- Chur-Hansen, A., & Burg, F. D. (2006). Working with standardised patients for teaching and learning. *The Clinical Teacher*, *3*, 220–224.
- Cramer, R. J., Johnson, S. M., McLaughlin, J., Rausch, E. M., & Conroy, M. A. (2013). Suicide risk assessment training for psychology doctoral programs: Core competencies and a framework for training. *Training and Education in Professional Psychology*, *7*, 1–11. doi:10.1037/a0031836
- Dwyer, T., Wright, S., Kulasegaram, K. M., Theodoropoulos, J., Chahal, J., Wasserstein, D., . . . Ogilvie-Harris, D. (2016). How to set the bar in competency-based medical education: Standard setting after an objective structured clinical examination (OSCE). *BMC Medical Education*, *16*, 1. doi:10.1186/s12909-015-0506-z
- Ekong, G., & Kavookjian, J. (2015). Motivational interviewing and outcomes in adults with type 2 diabetes: A systematic review. *Patient Education & Counselling*, *99*, 944–952. doi:10.1016/j.pec.2015.11.022
- Eva, K. W., Rosenfeld, J., Reiter, H. I., & Norman, G. R. (2004). An admissions OSCE: The multiple mini-interview. *Medical Education*, *38*, 314–326. doi:10.1046/j.1365-2923.2004.01776.x

## USING OSCES IN PSYCHOLOGY

- Fanning, R. M., & Gaba, D. M. (2007). The role of debriefing in simulation-based learning. *Simulation in Healthcare*, 2, 115–125. doi:10.1097/SIH.0b013e3180315539
- Furmedge, D. S., Smith, L. J., & Sturrock, A. (2016). Developing doctors: What are the attitudes and perceptions of year 1 and 2 medical students towards a new integrated formative objective structured clinical examination? *BMC Medical Education*, 16, 1. doi:10.1186/s12909-016-0542-3
- Gillaspy, S. R., Litzenburg, C. C., Leffingwell, T. R., & Miller, M. B. (2015). Training in motivational interviewing as a best training practice in pediatric psychology: Relationship to core competencies. *Clinical Practice in Pediatric Psychology*, 3, 225–232. doi:10.1037/cpp0000106
- Hallgren, K. A. (2012). Computing inter-rater reliability for observational data: An overview and tutorial. *Tutorials in Quantitative Methods in Psychology*, 8, 23–34.
- Hodges, B. D., Hollenberg, E., McNaughton, N., Hanson, M. D., & Regehr, G. (2014). The psychiatry OSCE: A 20-year retrospective. *Academic Psychiatry*, 38, 26–34. doi:10.1007/s40596-013-0012-8
- Hodges, B. D., & McNaughton, N. (2009). Who should be an OSCE examiner? *Academic Psychiatry*, 33, 282–284. doi:10.1176/appi.ap.33.4.282
- Johnston, J. L., Lundy, G., McCullough, M., & Gormley, G. J. (2013). The view from over there: Reframing the OSCE through the experience of standardised patient raters. *Medical Education*, 47, 899–909. doi:10.1111/medu.12243
- Joseph, J., & Basu, D. (2016). Efficacy of brief interventions in reducing hazardous or harmful alcohol use in middle-income countries: Systematic review of randomized controlled trials. *Alcohol*. Advance online publication.
- Karen, O., King, R., Malone, K. M., & Guerandel, A. (2014). Clinical examiners, simulated patients, and student self-assessed empathy in medical students during a psychiatry objective structured clinical examination. *Academic Psychiatry*, 38, 451–457.
- Landis, J. R., & Koch, G. C. (1977). The measurement of observer agreement for categorical data. *Biometrics*, 33, 159–174.
- Mayring, P. (2000). Qualitative content analysis. *Forum: Qualitative Social Research*, 1, 20.
- McManus, J., & Bennett, L. (2015). Clinical portfolios: Putting the new British Psychological Society standards for clinical psychology programmes into practice. *Clinical Psychology Forum*, 276, 32–35.
- Miller, W. R., & Rollnick, S. (2012). *Motivational interviewing: Helping people change* (3rd ed.). New York, NY: Guilford Press.
- Monteiro, S. D., Walsh, A., & Grierson, L. E. (2016). OSCE circuit performance effects: Does circuit order influence scores? *Medical Teacher*, 38, 98–100. doi:10.3109/0142159X.2015.1075647
- Motola, I., Devine, L. A., Chung, H. S., Sullivan, J. E., & Issenberg, S. B. (2013). Simulation in healthcare education: A best evidence practical guide (AMEE Guide No. 82). *Medical Teacher*, 35, e1511–e1530. doi:10.3109/0142159X.2013.818632



## USING OSCES IN PSYCHOLOGY

- Muldoon, K., Biesty, L., & Smith, V. (2014). "I found the OSCE very stressful": Student midwives' attitudes towards an objective structured clinical examination (OSCE). *Nurse Education Today*, *34*, 468–473. doi:10.1016/j.nedt.2013.04.022
- Newble, D. (2004). Techniques for measuring clinical competence: Objective structured clinical examinations. *Medical Education*, *38*, 199–203. doi:10.1111/j.1365-2923.2004.01755.x
- Prochaska, J. O., & DiClemente, C. C. (1984). *The transtheoretical approach: Crossing traditional boundaries of therapy*. Homewood, IL: Dow Jones-Irwin.
- Sheen, J., McGillvray, J., Gurtman, C., & Boyd, L. (2015). Assessing the clinical competence of psychology students through Objective Structured Clinical Examinations (OSCEs): Student and staff views. *Australian Psychologist*, *50*, 51–59. doi:10.1111/ap.12086
- Swanson, D. B., & Roberts, T. E. (2016). Trends in national licensing examinations in medicine. *Medical Education*, *50*, 101–114. doi:10.1111/medu.12810
- Swanson, D. B., & van der Vleuten, C. P. M. (2013). Assessment of clinical skills with standardized patients: State of the art revisited. *Teaching and Learning in Medicine*, *25*, S17–S25. doi:10.1080/10401339009539432
- Yap, K., Bearman, M., Thomas, N., & Hay, M. (2012). Clinical psychology students' experiences of a pilot objective structured clinical examination. *Australian Psychologist*, *47*, 165–173. doi:10.1111/j.1742-9544.2012.00078.x