

COMMENTARY

The art of reinvention: The remarkable longevity of the OSCE

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Objective Structured Clinical Examinations (OSCEs) were first introduced by Harden et al. in the 1970s¹ and have proven to be an impressively durable tool in medical education. They were developed to objectively assess medical students' clinical skills using real patients and common conditions. They aligned with the contemporary focus on psychometrics in education research and policy, especially focusing on statistical performance measurement.² Unlike traditional long cases and oral exams, which were criticised for lack of standardisation, poor inter-rater reliability and ambiguity in rating criteria, OSCEs resonated with rising priorities of fairness, rigour and accountability in medical education.^{3,4}

While the initial success of OSCEs aligned with the prevailing educational ideas of its time, what truly stands out is their enduring presence and relevance. Despite ever-changing trends in higher education and debates about the 'objectivity' of OSCEs, they have remained a central and dominant assessment tool for over half a century. In contrast, many other assessment methods have come in and out of favour over this period. For instance, the Situational Judgement Test was praised for its ability to test 'soft skills' and emerged as a popular tool in the United Kingdom. As quickly as it gained popularity, it has now been phased out due to concerns over its validity and predictive ability.^{5,6}

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OSCEs have undergone many iterations of development to meet the evolving needs of medical education learners and leaders, thereby withstanding the test of time and enabling them to be incorporated into various health professions beyond medicine.^{7,8} Such complexity has led to both critiques challenging its validity and reliability⁹ and efforts to improve authenticity. For example, various strategies to improve station design and implementation have been developed, such as scripting detailed patient backgrounds, meticulous planning of physical settings and props and offering narrative cues to immerse candidates in realistic scenarios. Furthermore, OSCEs have evolved to be used for the assessment of crucial, but non-objective, skills like communication, professionalism and ethics, as recognition has grown that medical competence extends beyond the clinical skills that OSCEs were first designed to test.¹⁰ As medical education strives to be more inclusive, OSCEs have also been adapted in efforts to ensure that scenarios reflect a diverse range of patient experiences and backgrounds.¹¹ The growing emphasis on standardisation and quality assurance in OSCEs examiner training, scoring and analysis further contributes guidance to building OSCEs that meet standards for both validity and fairness.¹²

The flexibility of the OSCE model is similarly demonstrated by its translation into many different settings. In the context of admissions, OSCEs were the conceptual basis for Multiple Mini-Interviews, a tool designed to improve the reliability of interviews relative to traditional panel-based selection procedures.¹³ In pre-clinical education, adaptations such as Objective Structured Practical Examinations (OSPEs) are now widely used to assess practical skills in basic medical sciences.¹⁴ In post-graduate settings, OSCEs have been modified for high-stakes postgraduate and licentiate exams, including PLAB in the United Kingdom and USMLE in the United States.¹⁵ We have also seen reports of Objective Structured Video Examinations (OSVEs) to evaluate communication skills^{16,17} and Objective Structured Teaching Encounters (OSTEs) to assess our performance as educators.^{18,19} Each

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of these examples shares an emphasis of sampling performance as often as possible within the constraints of feasibility (i.e. they enable rapid replication of assessment) across different professional education spheres, even when there is need to assess things that can hardly be deemed 'objective' such as interpersonal interaction and professionalism.²⁰

For all this work, conducted over 5 decades, it is pleasing to see that Brown et al., published in this issue, have managed to again further our understanding of OSCEs by using an elegant theoretical approach enabling new insight into the spatial elements of this assessment method.²¹ It is both a testament to the authors' sophisticated study design and affirmation of just how multifaceted and complex OSCEs are.

Drawing on theatrical language, such as 'actors', 'movement patterns' and 'props', they aligned their findings with existing literature conceptualising OSCEs as 'choreographies' and 'performances'.²² This is reminiscent of the work of Laera, who brought together renowned practitioners and academics to analyse how theatre moulded and recalibrated itself to current circumstances and needs in her influential book, *Theatre and Adaptation: Return, Rewrite, Repeat*.²³ In it, she emphasised that the processes and modalities of adaptation are intertwined and reflect the underlying motivations for change. Similarly, Brown et al. portray OSCEs as a dynamic 'network'. In both arenas, OSCEs and theatre, subtle shifts in social and material configurations could lead to significant, often unanticipated, ripple effects. Even as OSCEs are choreographed to follow a standardised protocol, the differences in interpretations and reactions of students, examiners and standardised patients inadvertently introduce variability. Consequently, each OSCE 'performance' is distinct, drawing parallels to how each theatre performance is unique due to its dynamic elements.

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In contrasting traditional in-person OSCEs to those taking place using a hybrid format, Brown et al. showcased OSCEs' remarkable versatility and adaptability and emphasised the profound significance of human interaction and the physical environment during OSCEs. Their paper complements a growing literature aimed at re-examining OSCEs in the context of technological advancements, spurred forward by the COVID19 pandemic catalysing a transformation in assessment design and implementation.²⁴⁻²⁶ Building on the theatre metaphor, we might conceptualise the transition from traditional to hybrid

OSCEs as a parallel to the shift from live stage performances to filmed productions. Just as a film director considers camera angles and settings in films, the OSCE coordinator must now navigate the complexities of physical and virtual spaces to ensure that the examination remains authentic.

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For instance, deliberate spatial planning is required to consider camera locations and virtual spaces (actors' or patients' home environments) to maintain human connections across the digital realm. As we embrace hybrid OSCEs, theatrical and cinematic perspectives remind us to examine the interaction between spatial and virtual elements to promote assessment authenticity and objectivity.

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In sum, after 50 years, OSCEs have maintained their relevance in the ever-changing world of medical education and demonstrated an impressive capacity to be reinvented in terms of content, use and delivery. Moreover, there now exists significant expertise in the field about how best to design and deliver them effectively. However, recent moves to 'hybridise' OSCEs remind us that this reinvention journey is far from over. The work of Brown et al. helps us understand that we must continue to attend to the relational connections, both physical and human, to ensure that OSCEs continue to retain their strengths and flourish in the years ahead.

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AUTHOR CONTRIBUTIONS

See **Chai Carol Chan**: Conceptualization; visualization; writing—original draft; writing—review and editing. **Mohammed Ahmed Rashid**: Conceptualization; supervision; visualization; writing—original draft; writing—review and editing.

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