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SHORT COMMUNICATIONS

Development of competency models for assessors and simulators in high-stakes selection processes

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Abstract

Background: Selection for entry into UK medical specialty training is a high-stakes, high-volume process. For selection into General Practice, a large number of assessors and simulators are involved in the delivery of the selection centre, which represents the final stage of selection.

Aim: In order to standardize and quality-assure assessor and simulator involvement in the process, we developed two competency models outlining the knowledge, skills and attributes associated with each role using a previously validated job analysis methodology.

Results: The final qualitative analysis resulted in two competency models, each encompassing eight competency domains. In general, results from a validation questionnaire demonstrated positive feedback from various regional recruitment leads in the UK ($n=14$).

Conclusion: Both models are currently being used in practice for quality assurance and training purposes. We conclude that the competency models can be used in three ways: (1) recruiting assessors/simulators; (2) in measuring performance of assessors/simulators and highlighting areas for potential development; and (3) they can be used for training assessors/simulators.

Introduction

Research evidence shows that selection centers (SCs) are a good indicator of future job performance (Patterson et al. 2005; Lievens & Patterson 2011), however, in large-scale recruitment there is a greater challenge in attaining standardization across different assessment days and locations to ensure fair and consistent treatment of applicants. For example, assessors, and potentially simulators, can be a major source of error during an interview or selection centre process (Chen 2006).

This study presents a case study from the UK General Practice (GP) selection process which is a three-stage, large-scale validated selection process (Patterson et al. 2009); attracting around 6000 applicants per year for approximately 3000 posts. The final stage of the process, a selection centre, involves a written exercise and three simulated consultations, for which assessors and simulators are required. The SCs are typically held over a two- to three-week period across 16 regional locations, with up to 144 candidates taking part each day. For every 48 candidates, approximately 24 assessors and 24 simulators are needed. Given the risk of potential variability between different assessors and simulators, there is a growing demand for competency models related to each role, in order to increase standardization and calibration of the overall process.

The role of assessors in selection

In SCs, assessors are required to observe, record, and evaluate candidates' performance using standardized rating scales. Consequently, studies show that assessors' skills are vital to the success of any SC process (Chen 2006). For example, both "unqualified assessors" and "inadequate training" are thought to negatively influence the validity of SCs (Chen 2006, p. 254). Despite research recognizing the importance of training and developing proficient assessors (Brownell 2005), there is little research exploring the necessary knowledge, skills and attributes associated with success.

The role of simulators in selection

Selection centers often make use of several high-fidelity work sample tests, also known as "role plays". These have been shown to exhibit high criterion-related validities (Wyatt et al. 2010) and are popular in medical education and assessment, since simulations can be used to assess the competence of doctors, whilst providing a real-world context to understand complex patient care needs (Austin et al. 2006). Standardization of simulators' performance (who sometimes plays the role of a patient or colleague) ensures consistency across experiences, which is necessary for making fair and reliable comparisons between candidates. However, there has

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119 been virtually no research regarding the competencies
120 required of a good simulator or how to select simulators.

121 Given the paucity of research in this area, the present study
122 identifies the core competencies and behaviors required for
123 both assessor and simulator roles, in the context of the UK GP
124 selection process.

126 Methods

128 Participants and procedure

130 In accordance with best practice selection, competency
131 frameworks for each role were devised through the use of
132 validated job analysis techniques (Patterson et al. 2000, 2013).
133 Accordingly, a convenience sample was invited to participate
134 in a Critical Incident Technique interview (Flanagan 1954).
135 In total, seventeen interviews were conducted with: lead
136 assessors ($n=5$); recruitment administrators, who oversee
137 delivery of the selection process ($n=5$); senior managers and
138 trainers ($n=4$); and lead simulators ($n=10$). Interviews
139 elicited information about the tasks and responsibilities;
140 knowledge, skills and attitudes required; and behaviors
141 associated with effective/ineffective performance, in each role.

142 On the basis of the interviews, behavioral indicators were
143 extracted and recorded on cards, with codes indicating
144 whether it related to effective/ineffective performance.
145 Second, behavioral indicators were grouped into similar
146 themes via a card-sort procedure. This resulted in a number
147 of overarching competencies, defined as “a set of specific
148 behavior patterns, including knowledge, skills and abilities, a
149 person is required to have to perform effectively as an
150 assessor/simulator”. Competencies were then labeled, using a
151 post-hoc approach and the model was validated by an expert
152 panel of subject matter experts ($n=5$).

154 Initial validation of competency models

155 The GP deans, responsible for recruitment in each regional
156 location, were then asked to complete an evaluation ques-
157 tionnaire via email, asking their views on the appropriateness
158 of both competency models; e.g. how the models were used in
159 their recruitment process and suggestions for improvement.
160 Fourteen respondents (representing 14 of the 16 regional
161 locations) completed the questionnaire.

164 Results

166 The resulting competency models comprised eight compe-
167 tency domains for both assessor and simulator roles. Table 1
168 provides summary descriptions for these domains, classified
169 into four areas, with examples of positive/negative behavioral
170 indicators provided. As expected, there is substantial overlap
171 between the competency domains for assessors and simula-
172 tors; however, for each model the behavioral indicators vary,
173 reflecting the specific knowledge, skills, behaviors and
174 attitudes required for each role. For example, while
175 “knowledge” requirements for an assessor include knowledge
176 about the selection process, employment law and an under-
177 standing of the GP role; a simulator is only required to have

178 knowledge about the general principles of selection (including
179 employment law) and the mechanics of the specific process.

181 Initial validation of the competency models

182 Assessor model

183 All respondents ($n=14$) agreed that the model had good
184 potential to increase standardization and calibration of asses-
185 sors, and most agreed that it was relevant (91%) and useful
186 (82%). Some respondents remarked that it could be used to
187 recruit assessors in their region, in particular for self-selection;
188 as well as train assessors and improve quality assurance. In
189 general, the model was positively received and appeared to
190 provide legitimacy and credibility to the national process, as
191 one respondent indicated, “there’s more confidence... we’ve
192 now got something with external reference and authority.
193 It gives legitimacy, everyone is doing the same”.

195 Simulator model

196 Respondents ($n=14$) agreed that the model was relevant
197 (92%) and had the potential to increase the standardization
198 (75%) and calibration (70%) of simulators. Similarly, some
199 respondents commented that the model could be used for the
200 recruitment, selection and training of simulators in their region.
201 Feedback was also encouraging, for example, as with one
202 respondent suggesting that the model “helped to legitimize
203 and confirm the need to have a professional and common
204 standard for role playing”.

205 Finally, respondents indicated that they planned to use both
206 assessor and simulator competency models more extensively
207 in the following annual national selection process.

211 Discussion

212 The assessor and simulator competency models were devel-
213 oped in response to a need for greater standardization and
214 calibration of these roles in GP national selection. This was the
215 first attempt to define the competencies required of assessors/
216 simulators within this context; and the initial validation results
217 indicate the models could improve the standardization of
218 selection methodology delivery and the quality of the selection
219 process overall. Moreover, the models could serve to provide a
220 further degree of “professionalism” to process.

223 Practical Implications

224 The competency models have the potential to add value in
225 three key areas: (1) They can be used in recruiting assessors/
226 simulators, providing criteria with which to select the most
227 suitable individuals, and can also be used for self-selection,
228 where potential assessor/simulators can determine whether
229 they are suitable and willing to fulfil the responsibilities;
230 (2) They can be useful tools for measuring performance and
231 highlighting areas for potential development. The level of
232 detail provided offers a common language with which to
233 describe the desirable (or indeed undesirable) behaviors
234 associated with each role, with clear examples of each
235 behavior; (3) They can be referred to when developing

Table 1. Descriptions of assessor & simulator competencies.

Competency	Type	Definition	Example positive indicator	Example negative indicator
Assessor Competencies				
Assessor Skills	Knowledge	Knowledge of the selection process, employment law and the specific context	Understands of the role of GP trainee & the context of the work environment	Fails to understand employment law & how it influences selection
Assessor Skills	Technical skills	Understands principles of assessment for selection, uses ORCE model; relates observations to competencies	Perceptive in observations, attentive to whole interaction	Records vague unsubstantiated comments, writes illegible & inconsistent recordings
Resilience	Behaviors	Remains focused throughout the day, able to cope with pressure/emotion	Refocuses after each candidate	Shifts focus throughout the day, becomes bored
Decision Making	Behaviors	Confident and decisive; prepared to support decision if challenged	Comfortable making important decisions & abides by the outcomes	Uneasy in consensual decision making, prefers making decisions alone
Communication Skills	Behaviors	Clear written and verbal communication; active listening and articulate expression	Communicates effectively, articulates points succinctly & gives effective examples	Timid or loud/forceful, verbose, gives ambiguous examples
Team Focus	Behaviors	Works well with assessors, simulators and administrators; not hierarchical	Respects all team members & encourages partnership	Exhibits intolerance or lack of respect for other team members
Openness	Attitude	Takes actions to learn and develop by reviewing own performance and discussion with others	Critically evaluates own performance, prepared to change behaviour	Avoids opportunities for feedback, ignores feedback offered
Commitment	Attitude	Commitment to upholding high standard in terms of selection process and ensuring equal opportunities	Is committed to equal opportunities, treats all candidates the same	Mistrusts the system, regularly dismisses the outcome
Simulator Competencies				
Understanding of Selection	Knowledge	Understanding of the process, general principles of selection and employment law, logistics	Aware of information selectors need to observe & record	Disregards schedule, is in wrong place at wrong time, fails to consider knock-on effects
Simulator Skills	Technical skills	Understands simulator skills, performs calibrated & consistent simulations.	Spends a sufficient amount of time rehearsing scenarios	Over-empathises with candidates, fails to keep appropriate distance
Resilience	Behaviors	Remains focused throughout the day, able to cope with pressure/emotion	Reacts quickly to candidate, adapts behaviour and style appropriately in response to the candidate	Shifts focus throughout the day, becomes distracted or bored
Observation Skills	Behaviors	Confident and decisive; prepared to support decision if challenged	Comfortable making important decisions & abides by the outcomes	Uneasy in consensual decision making, prefers making decisions alone
Communication Skills	Behaviors	Clear written and verbal communication; active listening and articulate expression	Articulates point succinctly, presents evidence of behaviours & facts	Contributions to group discussions lack patient perspective
Team Focus	Behaviors	Works well with assessors, simulators and administrators	Respects all team members & encourages partnership	Exhibits intolerance or lack of respect for other team members
Openness	Attitude	Open to feedback from others, responds to direction & open to change	Open to change in order to help the process	Uncomfortable role-playing in front of others, resists direction
Commitment	Attitude	Commitment to upholding high standard in terms of selection process and ensuring equal opportunities	Discrete, maintains confidentiality at all stages, ensures paperwork is kept secure	Attempts to catch out candidate during scenario, is thoughtless in behaviour

ORCE = Observe, Record, Classify, Evaluate.

assessor/simulator training sessions; if all UK locations use these models, it can aid calibration. In sum, using this kind of competency model approach in high-stakes selection processes could reduce the potential variability among assessors/simulators and ensure fair and consistent treatment of all candidates.

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