

Supplementary Online Content

Gardner AK, Dunkin BJ. Evaluation of validity evidence for personality, emotional intelligence, and situational judgment tests to identify successful residents. *JAMA Surg.* Published online December 27, 2017. doi:10.1001/jamasurg.2017.5013

eAppendix 1. The Four Branch Model of Emotional Intelligence

eAppendix 2. Content of the Six Factor Personality Questionnaire

eAppendix 3. Example of Item in Which Trainee Ranks Appropriateness of Responses

This supplementary material has been provided by the authors to give readers additional information about their work.

eAppendix 1. The Four Branch Model of Emotional Intelligence

Branch Name	Brief Description of Skills Involved	Measurement Approach
Perceiving emotions	The ability to perceive emotions in oneself and others, as well in objects, art, stories, music, and other stimuli	Examinees must identify the intensity of emotion expressed in several images of faces and designs
Using emotions to facilitate thinking	The ability to generate, use, and feel emotion as necessary to communicate feelings, or employ them in other cognitive processes	Examinees must identify specific emotions that affect one's behavior or performance on cognitive tasks
Understanding emotions	The ability to understand emotional information, how emotions combine and progress through relationship transitions and to appreciate such emotional meanings	Examinees must demonstrate an understanding of how individuals may experience several emotions simultaneously, and how some emotions, when combined, form other emotions
Managing emotions	The ability to be open to feelings, to modulate them in oneself and others so as to promote personal understanding and growth	Examinees must select the most appropriate social responses to achieve desired outcomes in social situations

eAppendix 2. Content of the Six Factor Personality Questionnaire		
Broad Factor	Facet Scales	Example Facet Content
Extraversion	Affiliation	Makes effort to win and maintain associations with people.
	Dominance	Attempts to control environment and influence other people.
	Exhibition	Wants to be center of attention.
Agreeableness	Abasement	Accepts blame and criticism even when not deserved.
	Even-tempered	Avoids confrontations and conflicts.
	Good-natured	Is willing to concede mistakes.
Independence	Autonomy	Enjoys being unattached and free from obligations.
	Individualism	Unconcerned about reputation with others.
	Self-reliance	Does not seek advice and confronts problems alone.
Openness to Experience	Change	Dislikes and avoids routine.
	Breadth of Interest	Interested in learning about a diversity of things.
	Understanding	Enjoys satisfying intellectual curiosity.
Methodicalness	Cognitive Structure	Does not like ambiguity or uncertainty in information.
	Deliberateness	Acts with deliberation and prudence.
	Order	Dislikes and avoids clutter and lack of organization.
Industriousness	Achievement	Maintains high standards and is willing to work toward difficult goals.
	Endurance	Perseveres and does not give up quickly on problems.
	Seriousness	Takes serious approach to life and work.

Adapted from Jackson, Paunonen, & Tremblay, 2000.¹

eAppendix 3. Example of Item in Which Trainee Appropriateness of Responses

Your Program Director contacts you regarding your case logs. Apparently, your case logs are significantly lower than everyone else in your graduating class. You respond to the Program Director that the reason is quite simple: that you are the only one reporting your case numbers and roles in procedures honestly. He is very concerned that you may not graduate if you continue at your current rate- but offers no remedy other than to “fix it”. Please rate your responses, from most to least appropriate.

- A. Talk to your peers and adopt their reporting methods
- B. Break duty hours and scrub in more cases
- C. Take credit for cases in which you are not directly involved
- D. Take over the cases from the juniors on your service so you can increase your numbers
- E. Demand that the Program Director monitor your colleagues' case logs to determine if any impropriety has occurred
- F. Complain to the Program Director that self-reporting is a flawed system
- G. Ask to discuss the issue with the Program Director and the Chair of the department

eReference

1. Jackson DN, Paunonen SV, Tremblay PF. Six Factor Personality Questionnaire. Port Huron, MI: Sigma Assessments Systems; 2000.