



Comparison of SP and Faculty Member Responses on Long Checklists

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Introduction

SP scoring has been shown to be accurate, but reliability decreases quickly with increasing checklist length. A separate observer may be able to reliably score a greater number of items, but adds to the cost of the program. The goal of this study was to assess the reliability of observers vs. SP scoring from memory of long checklists on an extended SP history and physical examination (H&P).

Methods

For three years, all second year medical students were evaluated on their performance of a complete, 60 minute, head-to-toe H&P, after their Clinical Skills Course (CSC).

- Scored by
 - Faculty with 130 item checklist
 - SP with 50 item checklist
 - (subset of 130 items)
- Compared faculty and SP agreement
- Analyzed disagreements by:
 - Individual Faculty Member
 - # H&Ps scored by each Faculty Member
 - Individual SP
 - Item number

Table 1. Individual Faculty Members have a wide range of mean number of disagreements, with some consistently disagreeing

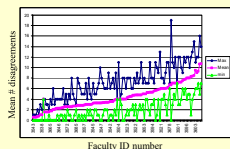


Table 2. SPs had a more narrow mean number of disagreements, with all agreeing well at times

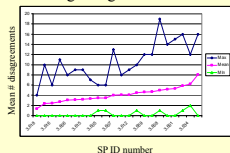


Table 3. Some items consistently had very good agreement

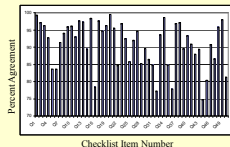
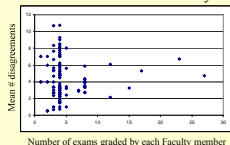


Table 4. Practice did not reduce Faculty disagreement



Items ≥ 95% agreement

- Introduces him/herself appropriately (states name and position)
- Gets chief complaint in the patient's own words
- Location of pain
- Hospitalizations for medical illnesses
- Lists current medications
- Obtains smoking history (current)
- Clarifies level of alcohol intake
- Rechecks blood pressure in one arm
- Evaluates extraocular muscle function in 6 directions
- Inspects eyes with ophthalmoscope
- Examines ears bilaterally (both sides) with otoscope
- Inspects nasal vaults with nasal speculum on otoscope
- Examines anterior cervical chain lymph nodes (in front of sternocleidomastoid)
- Auscultates (listens with stethoscope) lung fields
- Auscultates (listens with stethoscope) all 4 areas of heart
- Palpates abdomen (feels with fingers/hands) in all 4 quadrants
- Bicep reflex (will tap on elbow)
- Patellar reflex (will tap on knee)

Items ≤ 85% agreement

- Quantity or severity of pain
- Symptom(s) onset (circumstances)
- Inspects eyes (retracts [pulls up/down] lids)
- Inspects floor and base of tongue
- Performs fist percussion of CVA (kidneys for punch tenderness)
- Checks for chest expansion (places hands on back during deep breath)
- Positions patient with head elevated (there should be a pillow on the bed)
- Observes precordium (looks at exposed chest)
- Checks for leg edema (leg swelling) (presses finger on pretibial area [your shin])
- Palpates (feels with fingers) clenched masseter (jaw) muscle
- Tests light touch or light pain (sharp vs. dull using a broken Q-tip) in feet or hands

Results

Number exams	574	
Number faculty	119	(range 1-27 H&Ps)
Number SPs	22	(range 2-64 H&Ps)
Data points available	27,849	(97%)
Overall agreement	25,361	(91.1%)
# faculty ≤ 1 disagreement	7	(6%)
# faculty ≥ 8 disagreements	11	(9%)
# items ≥ 95% agreement	18	(36%)
# items ≤ 85% agreement	11	(22%)

Conclusions

- Overall very good agreement between SPs and faculty, even on very long checklists
- Analyzing agreement useful for
 - Identifying tapes to review
 - Identifying checklist items to review

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