SCORING CUT-OFFS:

Single-Issue:

The cut-offs for a single-issue test (one in which all the RQs must be answered either truthfully or deceptively) are +/- 6. The charts are scored after three charts. If a decision can be made, then the exam is complete. If inconclusive, then two more charts are run and scored. The total score (of all five charts) is the final score, and a decision of DI, NDI or NO is then made. Spot scores are not considered.

Multiple-Facet

The cut-offs for a multiple-facet test are +/-3 per spot after three charts. A decision of truth or deception is rendered for each question based on the spot-total of the particular question. Additionally, if the grand total score is +/-6 and all spot totals are either positive or negative, then the call for all questions is NDI or DI, respectively.

7-Point Scale:

0 = no difference (or less than required ratio)
+/-1 = noticeable difference
+/-2 = strong, clear difference
+/-3 = dramatic difference AND the tracing is stable AND the stronger response is the largest on the chart for that physiological measure

NOTE: A score of +/-3 in any channel is rare.

Scoring Windows:

The response must begin after the question onset (immediately for cardio and breathing; 0.5 seconds for EDA; two to four seconds for plethysmograph) and within five seconds of the answer, unless the subject typically doesn’t react until five to eight seconds after answering. An otherwise timely reaction may be considered up to 20 seconds following the onset of the question.

Breathing:
At least two successive cycles of apnea, suppression, baseline arousal and / or slowing of rate (less heavily weighted); both channels are considered, but the final (single) score is based on either the abdominal or thoracic channel, or a composite of the two channels.

NOTE: Scores of 0 and +/-1 are most common; other scores are rare.

EDA:
Amplitude (2:1 = +/- 1; 3:1 = +/- 2; 4:1 = +/- 3)
Duration and complexity are considered (A clearly longer duration or greater complexity may increase the score from 0 to 1 or 1 to 2, but the amplitudes must be at least 1.5:1 and 2.5:1, respectively.)

NOTE: The EDA channel is considered unstable when many non-specific responses are observed throughout the chart.

Cardiovascular:
Amplitude (1.5:1 minimum) Duration and complexity are considered (A clearly longer duration or greater complexity may increase the score from 0 to 1 or 1 to 2.)
NOTE: Scores of 0 and +/-1 are most common.

*Finger Plethysmograph:*

**Amplitude reduction** and / or **Duration** (no minimum required, but +/-2 maximum score allowed)

NOTE: a score of 1 or 2 may be assigned when duration is clearly longer even if there is little or no difference in amplitude reduction of the questions being compared.

**Artifacts:**

Any artifact may render a channel or an entire question unscorable. If a comparison question is not useable for scoring, then use the strongest, closest-in-time comparison question. Additionally, follow these guidelines for analyzing questions that include deep breaths or movements:

*Deep Breaths:*

If the examinee takes a deep breath just before question onset, then breathing should not be scored.

If a deep breath affects other channels, then those channels *might* be used for scoring: If the other channel’s reaction started *before* the deep breath, then the portion (of the other channel’s reaction) occurring before the deep breath may be used for scoring if that portion is larger than the reaction to which it is being compared. If the portion is smaller and is a comparison question, then another comparison question may be used.

If there are deep breaths elsewhere in the charts, especially where no questions were asked, and those deep breaths resulted in similar physiological changes (as the deep breath in question), then the reaction following the deep breath should not be scored. If there is no reaction following the deep breath, score very conservatively.

*Movements:*

If a movement distorts more than two successive (cardio) pulses after question onset, then the changes occurring after the movement should not be scored. The reaction preceding the movement artifact, if any, may be used for scoring purposes if the reaction is larger than the cardio reaction to which it is being compared. If only one or two pulses are distorted, then estimate what the reaction would have looked like had the movement not occurred, if possible.

**References:**


(prepared by Barry Cushman, 9-20-06)