|        | Learning climate-Scales/ Factors  | Μ    | SD   | r <sub>it</sub> | α    | М#   | SD#  | α#  |
|--------|---|------|------|-----------------|------|------|------|-----|
|        | 1. Supervision  | 3.38 | 0.78 |                 | .584 |      |      | .64 |
| 1      | SV1: The guidelines clearly outline when to request input from a supervisor.  | 2.66 | 1.17 | .605            |      | 4.26 | 0.95 |     |
| 2      | SV2: The amount of supervision I receive is appropriate to my level of experience.  | 3.24 | 1.04 | .596            |      | 4.09 | 0.91 |     |
| 3      | SV3: It is clear which attending supervises me.   | 4.31 | 0.87 | .347            |      | 4.26 | 0.95 |     |
|        | 2. Coaching & Assessment  | 2.24 | 0.71 |                 | .833 |      |      | .80 |
| 4      | CA1: I am asked on a regular basis to<br>provide a rationale for my<br>management decisions and actions.  | 2.60 | 1.00 | .465            |      | 3.88 | .88  |     |
| 5      | CA2: My attendings coach me on how to communicate with difficult patients.  | 2.10 | 1.04 | .563            |      | 3.42 | 1.03 |     |
| 6      | CA3: My attendings take the initiative to explain their actions.  | 2.83 | 0.94 | .602            |      | 3.46 | 0.98 |     |
| 7      | CA4: My attendings take the initiative to evaluate my performance.  | 2.32 | 1.03 | .621            |      | 3.08 | 1.06 |     |
| 8      | CA5: My attendings take the initiative to evaluate difficult situations I have been involved in.  | 2.21 | 1.00 | .563            |      | 3.01 | 1.04 |     |
| 9      | CA6: My attendings evaluate whether<br>my performance in patient care is<br>commensurate with my level of<br>training.                          | 2.18 | 1.11 | .597            |      | 3.40 | 1.09 |     |
| 1<br>0 | CA7: My attendings occasionally observe me taking a history.  | 1.36 | 0.79 | .354            |      | 2.85 | 1.22 |     |
| 1<br>1 | CA8: My attendings assess not only<br>my medical expertise but also other<br>skills such as teamwork, organization<br>or professional behavior. | 2.33 | 1.33 | .550            |      | 3.67 | 1.12 |     |
|        | 3. Feedback   | 1.52 | 0.53 |                 | .569 |      |      | .75 |
| 1<br>2 | FB1: My attendings give regular feedback on my strengths and weaknesses.  | 2.37 | 0.99 | .647            |      | 3.37 | 1.14 |     |
| 1<br>3 | FB2: Observation forms (i. e. Mini-CEX) are used to structure feedback.   | 1.10 | 0.56 | .248            |      | 3.81 | 1.19 |     |
| 1<br>4 | FB3: Observation forms (i. e. Mini-<br>CEX) are used periodically to monitor<br>my progress.  | 1.10 | 0.55 | .255            |      | 3.42 | 1.27 |     |
|        | 4. Teamwork   | 3.41 | 0.74 |                 | .737 |      |      | .69 |
| 1<br>5 | TW1: Attendings, nursing staff, other allied health professionals and residents work together as a team.  | 3.68 | 0.81 | .422            |      | 3.82 | 1.00 |     |
| 1<br>6 | TW2: Nursing staff and other allied health professionals make a positive contribution to my training.   | 3.60 | 0.93 | .305            |      | 3.66 | 1.09 |     |
| 1<br>7 | TW3: Nursing staff and other allied<br>health professionals are willing to<br>reflect with me on the delivery of<br>patient care.               | 3.22 | 0.94 | .378            |      | 3.76 | 1.02 |     |
| 1      | TW4: Teamwork is an integral part of  | 3.14 | 1.25 | .397            |      | 3.00 | 1.04 |     |

| 8      | my training.   |      |      |      |      |      |      |     |
|--------|--|------|------|------|------|------|------|-----|
|        | 5. Peer Collaboration  | 3.70 | 0.81 |      | .583 |      |      | .76 |
| 1<br>9 | PC1: Residents work well together.   | 3.99 | 0.83 | .351 |      | 4.48 | .79  |     |
| 2<br>0 | PC2: Residents, as a group, make sure the day's work gets done.  | 3.68 | 1.19 | .274 |      | 4.14 | 1.04 |     |
| 2<br>1 | PC3: Within our group of residents it is<br>easy to find someone to cover or<br>exchange a call.   | 3.42 | 1.24 | .267 |      | 4.26 | .91  |     |
|        | 6. Professional relations between attendings   | 2.64 | 0.91 |      | .658 |      |      | .77 |
| 2<br>2 | PR1: Continuity of care is not affected<br>by differences of opinion between<br>attendings.  | 3.23 | 1.16 | .374 |      | 3.76 | 1.12 |     |
| 2<br>3 | PR2: Differences of opinion between<br>attendings about patient management<br>are discussed in such a matter that is<br>instructive to others present. | 2.50 | 1.10 | .441 |      | 3.50 | 1.14 |     |
| 2<br>4 | PR3: Differences of opinion are not such that they have a negative impact on the work climate.   | 2.18 | 1.29 | .343 |      | 3.62 | 1.16 |     |
|        | 7. Work is adapted to residents' competence  | 3.26 | 0.69 |      | .591 |      |      | .66 |
| 2<br>5 | WA1: The work I am doing is commensurate with my level of experience.  | 3.81 | 0.81 | .383 |      | 4.12 | 0.84 |     |
| 2<br>6 | WA2: The work I am doing suits my learning objectives at this stage of my training.  | 3.44 | 0.89 | .420 |      | 3.97 | 0.92 |     |
| 2<br>7 | WA3: It is possible to do follow up with patients.   | 3.00 | 1.36 | .222 |      | 3.96 | 1.08 |     |
| 2<br>8 | WA4: There is enough time in the schedule for me to learn new skills.  | 2.79 | 0.99 | .463 |      | 3.24 | 1.08 |     |
|        | 8. Attendings' role  | 3.67 | 0.68 |      | .832 |      |      | .85 |
| 2<br>9 | AR1: My attendings take time to explain things when asked for advice.  | 3.71 | 0.88 | .606 |      | 4.12 | 0.80 |     |
| 3<br>0 | AR2: 30 My attendings are happy to discuss patient care.   | 3.32 | 0.92 | .671 |      | 4.16 | 0.82 |     |
| 3<br>1 | AR3: There is (are) NO attending physician(s) who have a negative impact on the educational climate.   | 2.49 | 1.45 | .509 |      | 3.34 | 1.27 |     |
| 3<br>2 | AR4: My attendings treat me as an individual.  | 3.94 | 0.97 | .506 |      | 3.47 | 1.18 |     |
| 3<br>3 | AR5: My attendings treat me with respect.  | 4.09 | 0.84 | .541 |      | 4.46 | 0.87 |     |
| 3<br>4 | AR6: My attendings are all in their own way positive role models.  | 3.08 | 1.12 | .582 |      | 3.48 | 1.04 |     |
| 3<br>5 | AR7: When I need a attending, I can always contact one.  | 4.42 | 0.80 | .404 |      | 4.55 | .69  |     |
| 3<br>6 | AR8: When I need to consult a attending, they are readily available.   | 4.22 | 0.84 | .458 |      | 4.52 | .72  |     |
|        | 9. Formal education  | 2.92 | 0.98 |      | .829 |      |      | .75 |
| 3      | FE1: Residents are generally able to   | 3.12 | 1.15 | .345 |      | 3.60 | 1.06 |     |

| 7      | attend scheduled educational activities.  |      |      |      |      |      |      |     |
|--------|---|------|------|------|------|------|------|-----|
| 3<br>8 | FE2: Educational activities take place as scheduled.  | 3.16 | 1.33 | .320 |      | 3.89 | 0.98 |     |
| 3<br>9 | FE3: Attendings contribute actively to the delivery of high-quality formal education.   | 2.90 | 1.19 | .433 |      | 3.63 | 1.14 |     |
| 4<br>0 | FE4: Formal education and training activities are appropriate to my needs.  | 2.49 | 1.14 | .507 |      | 3.61 | 1.06 |     |
|        | 10. Role of the specialty tutor   | 1.74 | 1.07 |      | .847 |      |      | .78 |
| 4<br>1 | RT1: The specialty tutor monitors the progress of my training.  | 2.30 | 1.47 | .508 |      | 4.49 | .84  |     |
| 4<br>2 | RT2: The specialty tutor provides guidance to other attendings when needed.   | 1.59 | 1.43 | .357 |      | 3.46 | 1.26 |     |
| 4<br>3 | RT3: The specialty tutor is actively involved in improving the quality of education and training.   | 1.92 | 1.39 | .442 |      | 4.12 | 1.06 |     |
| 4<br>4 | RT4: In this rotation evaluations are useful discussions about my performance.  | 1.59 | 1.45 | .401 |      | 3.65 | 1.11 |     |
| 4<br>5 | RT5: My plans for the future are part of the discussion.  | 1.71 | 1.49 | .366 |      | 3.61 | 1.16 |     |
| 4<br>6 | RT6: During evaluations, input from several attendings is considered.   | 1.34 | 1.33 | .398 |      | 3.83 | 1.17 |     |
|        | 11. Patient sign out  | 4.14 | 0.88 |      | .766 |      |      | .75 |
| 4<br>7 | PS1: When there is criticism of a management plan I have developed in consultation with my attending physician, I know the attending physician will back me up. | 3.03 | 1.53 | .510 |      | 3.74 | 1.13 |     |
| 4<br>8 | PS2: Sign out takes place in a safe climate.  | 3.06 | 1.37 | .431 |      | 4.02 | 1.04 |     |
| 4<br>9 | PS3: Sign out is used as a teaching opportunity.  | 2.22 | 1.10 | .445 |      | 3.96 | 1.06 |     |
| 5<br>0 | PS4: Attendings encourage residents to join in the discussion during sign out.  | 2.21 | 1.37 | .521 |      | 3.69 | 1.15 |     |

**Table 1**: Represented are item and scale characteristics of the items from D-RECT (M: mean; SD: standard deviation,  $r_{it}$ : discriminatory power according to Pearson,  $\alpha$ =Cronbach's  $\alpha$ ). The evaluation occurs using a five-point Likert Scale (see paragraph 2.1). <sup>#</sup>=Reference data (Boor et al., [7]); Items are ordered by the subscales / factors 1. – 11. of the original [7].