

BACKGROUND

- A relationship has been proposed between personality profiles and teaching performance in nonclinical settings, but this has not been fully defined in clinical settings¹⁻⁴.
- Faculty development efforts must acknowledge learners' perspectives to be effective in improving teaching and learning.
- An improved understanding of an individuals' own personality traits can allow one to gain insight and adapt to the learner and learning environment.
- This study was designed to determine the association between attending surgeons' personality profile and residents' and students' teacher ratings.

METHODS

- 64 faculty members from UTSW Department of Surgery completed a voluntary standardized personality profile: DISC Workplace assessment.
- DISC includes 4 dimensions: Dominance (D), Influence (I), Steadiness (S), and Conscientiousness (C)⁵.
- As part of the trainee evaluation process, residents and medical students complete an anonymous questionnaire, rating and commenting on teaching performance of surgical faculty while on surgical rotations.
- Resident and medical student evaluation of faculty were analyzed and compared with the faculty DISC profiles.
- All data was de-identified, anonymous and IRB approved.

Figure 1: Distribution of DISC Profiles Among UTSW Faculty. Descriptions of DISC Personality Traits⁵.

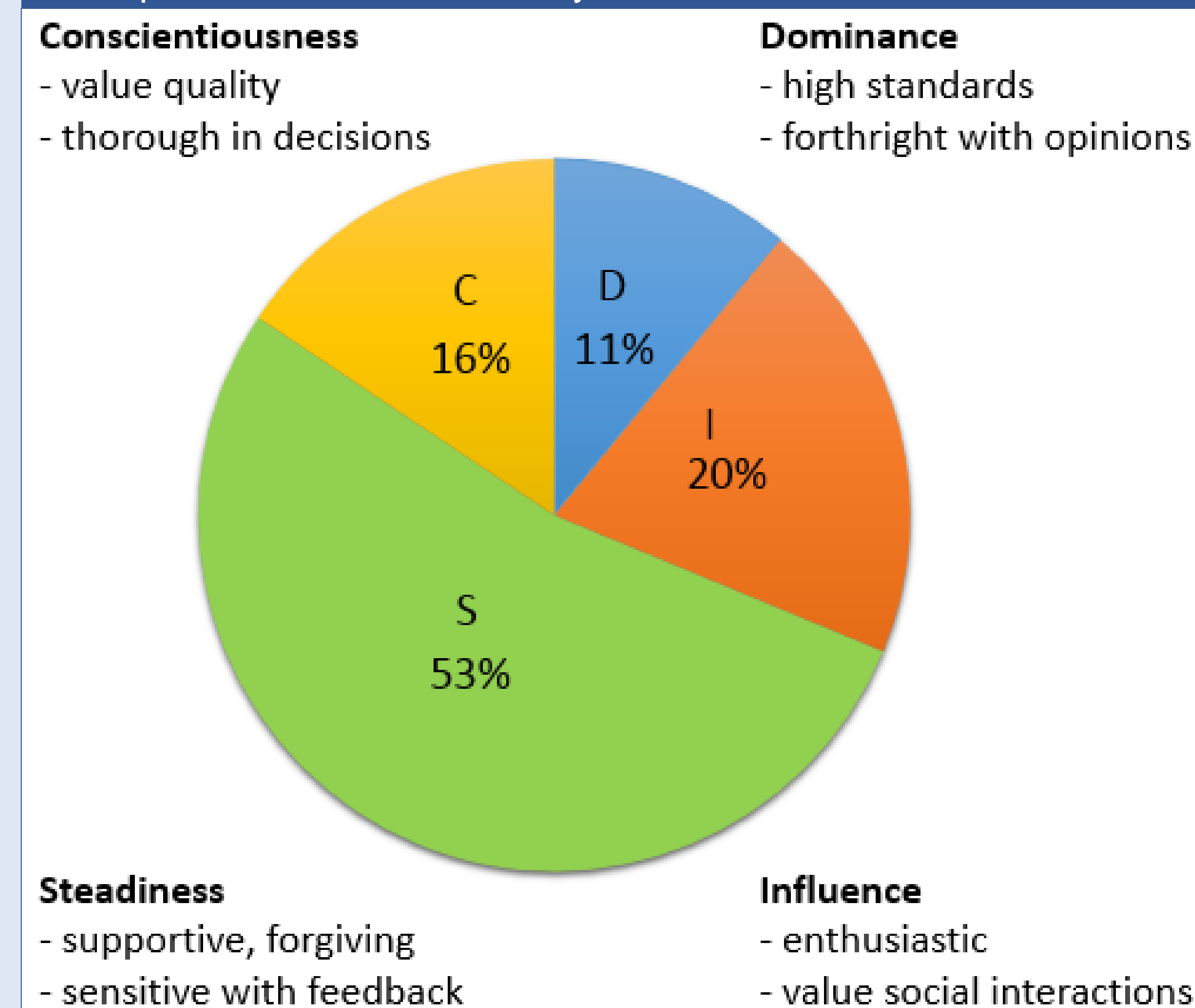


Figure 2: Comparison of Resident and Medical Student Evaluation of Faculty on Effectiveness of Teaching With Faculty DISC Profile.

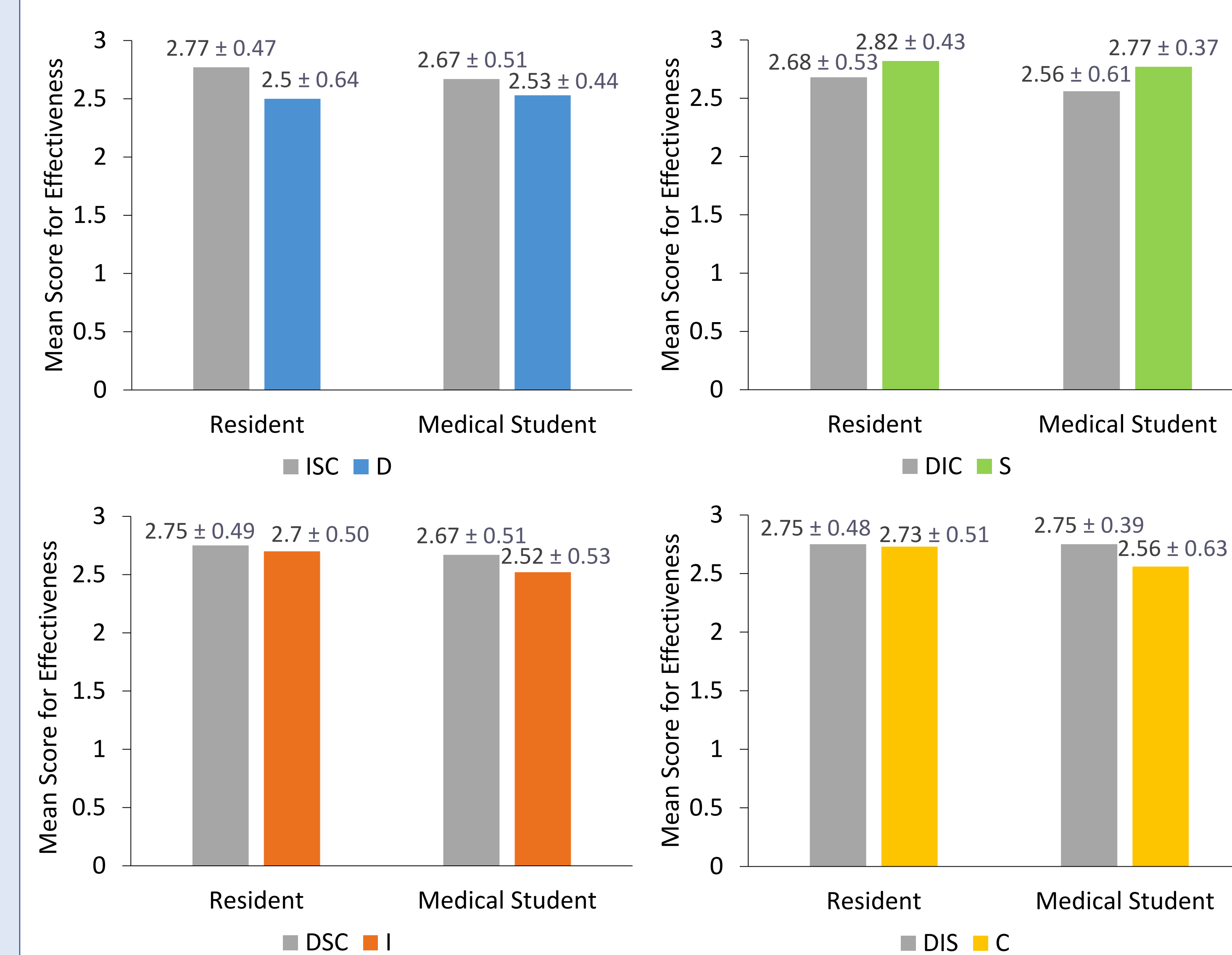


Figure 2: Both residents and medical students considered faculty high in S to be more effective ($T=-7.76$; $p<0.001$ and $T=-4.15$; $p<0.001$). However, faculty high in D or I were given lower scores by residents ($T=6.67$; $p<0.001$ and $T=2.44$; $p=0.015$). Faculty high in C were given lower scores by medical students ($T=3.50$; $p<0.001$).

Figure 3: Comparison of Resident and Medical Student Comment Scores with Faculty who are D and I.

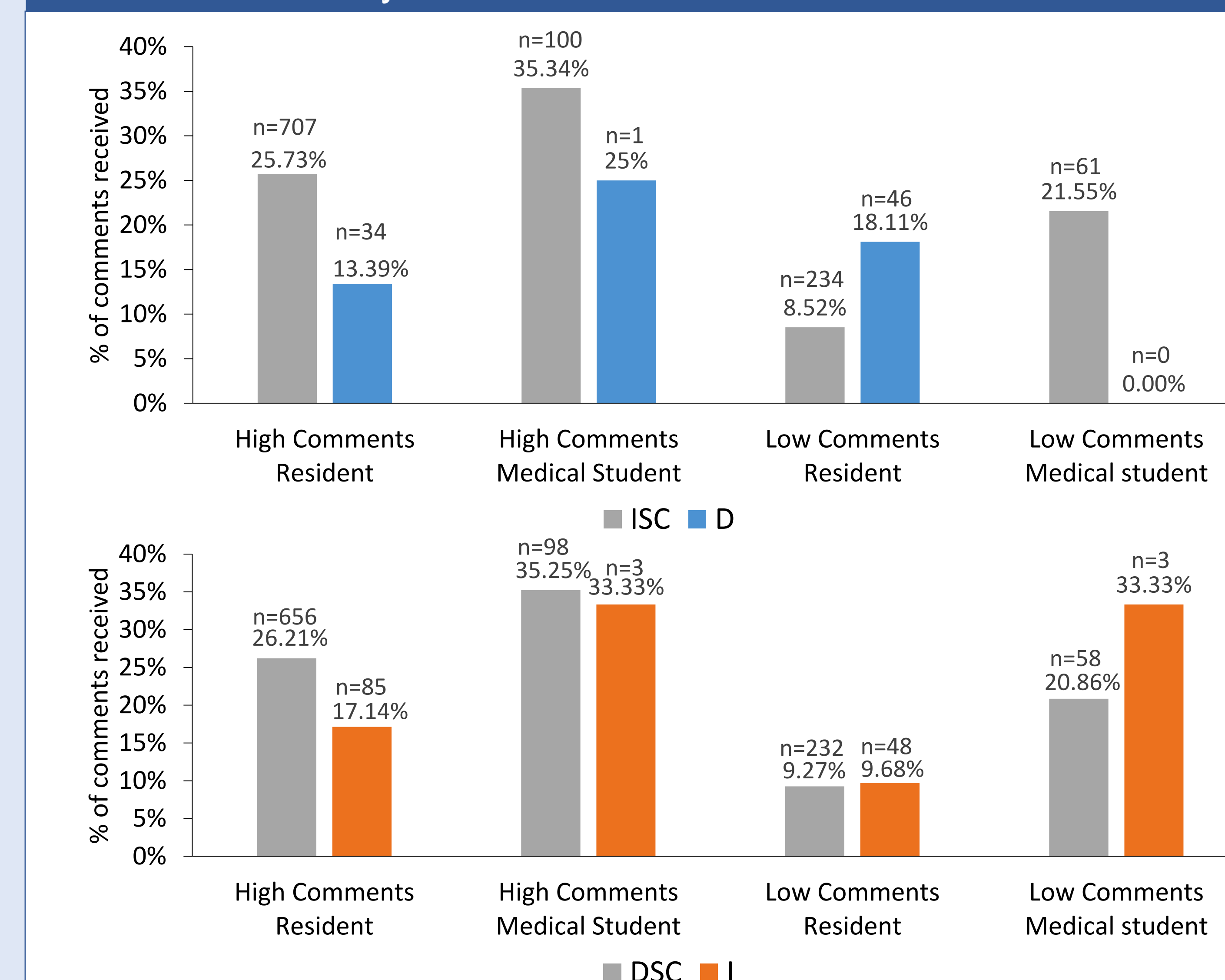


Figure 3: Among residents, faculty high in D were more likely to receive lower comment scores than higher comment scores ($\chi^2=25.24$; $p<0.001$ and $\chi^2=19.12$; $p<0.001$). Faculty with I as their strongest dimension were less likely to receive high comments from residents ($\chi^2=18.31$; $p<0.001$).

Figure 4: Comparison of Resident and Medical Student Comment Scores with Faculty who are S and C.

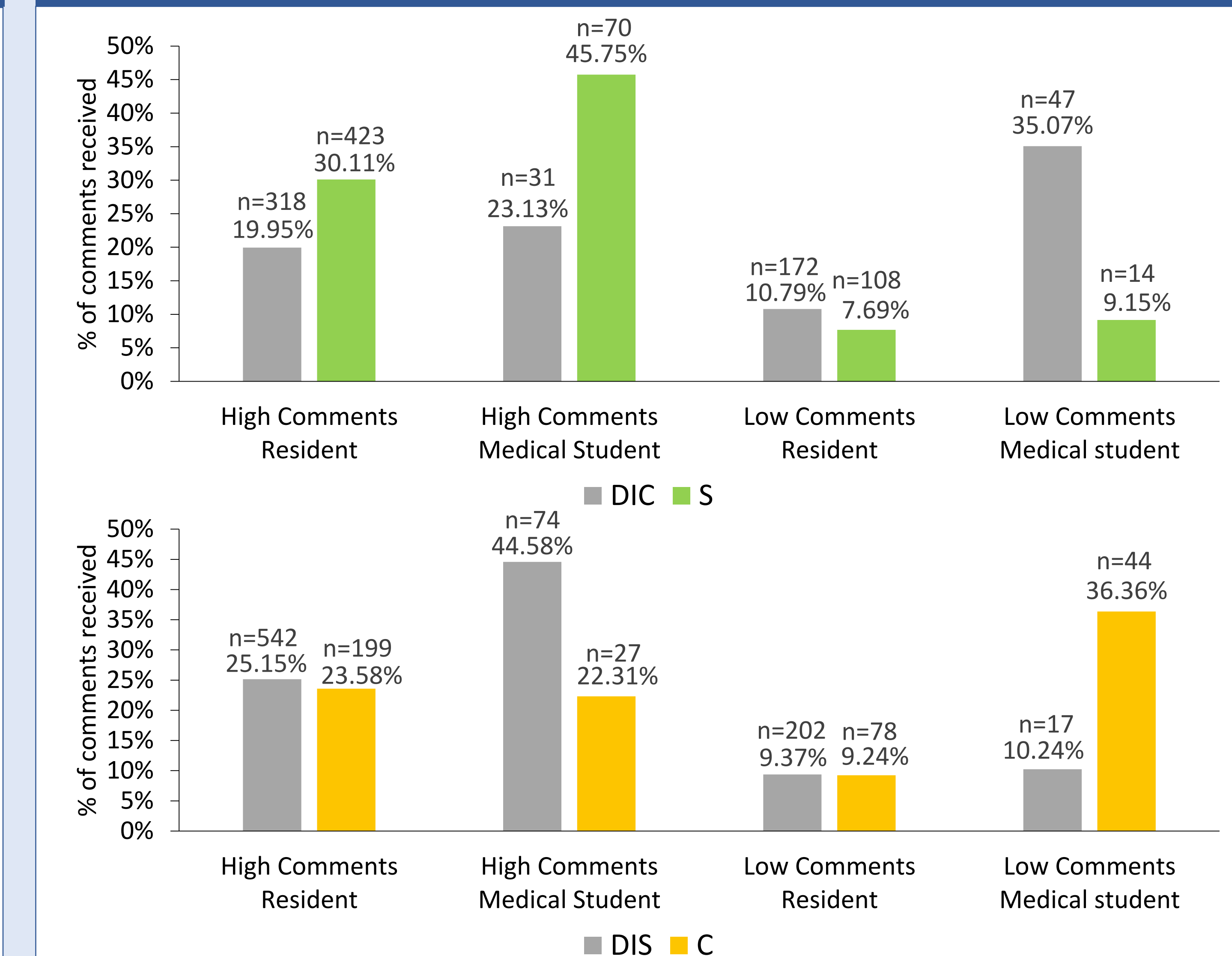


Figure 4: Among both residents and medical students, faculty high in S were more likely to receive higher comment scores ($\chi^2=41.41$; $p<0.001$ and $\chi^2=16.02$; $p<0.001$) than lower comment scores ($\chi^2=8.50$; $p=0.004$ and $\chi^2=28.68$; $p<0.001$). However, faculty high in C received a greater percentage of low comments than high comments by medical students ($\chi^2=28.53$; $p<0.001$ and $\chi^2=15.21$; $p<0.001$).

RESULTS

- Faculty with higher teaching evaluation scores tended to have a DISC profile high in steadiness for both groups of trainees but lower in dominance or influence for residents and conscientiousness for medical students.
- The difference between resident and medical student ratings are small. It is difficult to determine whether these differences could truly be perceived by individuals.

CONCLUSIONS

- Based on these findings, implementation of programs to promote emotional intelligence may allow for increased effectiveness of student and resident education.
- Future studies: disentangle likability and personality type.

REFERENCES

1. Murray, H. G., Rushton, J. P., & Paunonen, S. V. (1990). Teacher personality traits and student instructional ratings in six types of university courses. *Journal of educational psychology*, 82(2), 250.
2. Padhye, V. (2013). Influence of personality on teaching performance of college teachers. *Online International Interdisciplinary Research Journal*, 3(2).
3. Radmacher, S. A., & Martin, D. J. (2001). Identifying significant predictors of student evaluations of faculty through hierarchical regression analysis. *The Journal of psychology*, 135(3), 259-268.
4. Mount, M. K., Barrick, M. R., & Stewart, G. L. (1998). Five-factor model of personality and performance in jobs involving interpersonal interactions. *Human performance*, 11(2-3), 145-165.
5. Sons, J. W. (2007-2013). Research Report for Adaptive Testing Assessment.