



Motivation of senior veterinary students during clinical rotations at a Veterinary Teaching Hospital

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Introduction

- Student-centered teaching should consider cognition (what to learn), metacognition (how to learn) and motivation (why learn).^{1,2}
- Intrinsic motivation for an activity is to pursue it solely because of a genuine liking or interest for that activity.
- Extrinsic motivation for an activity is to pursue it for external gain or benefit.
- Approximately 20% of students at this veterinary school receive didactic education on how to practice evidence-based veterinary medicine (EBVM), during their first year of a four year degree.

Hypothesis

A familiar letter system to grade performance would be associated with improved motivation in students, compared with a novel numeric system.

Objectives

- Compare the difference between interim and final evaluations in students receiving letter or numeric grades.
- Determine features of the rotation that motivated and frustrated senior students.

Materials and Methods

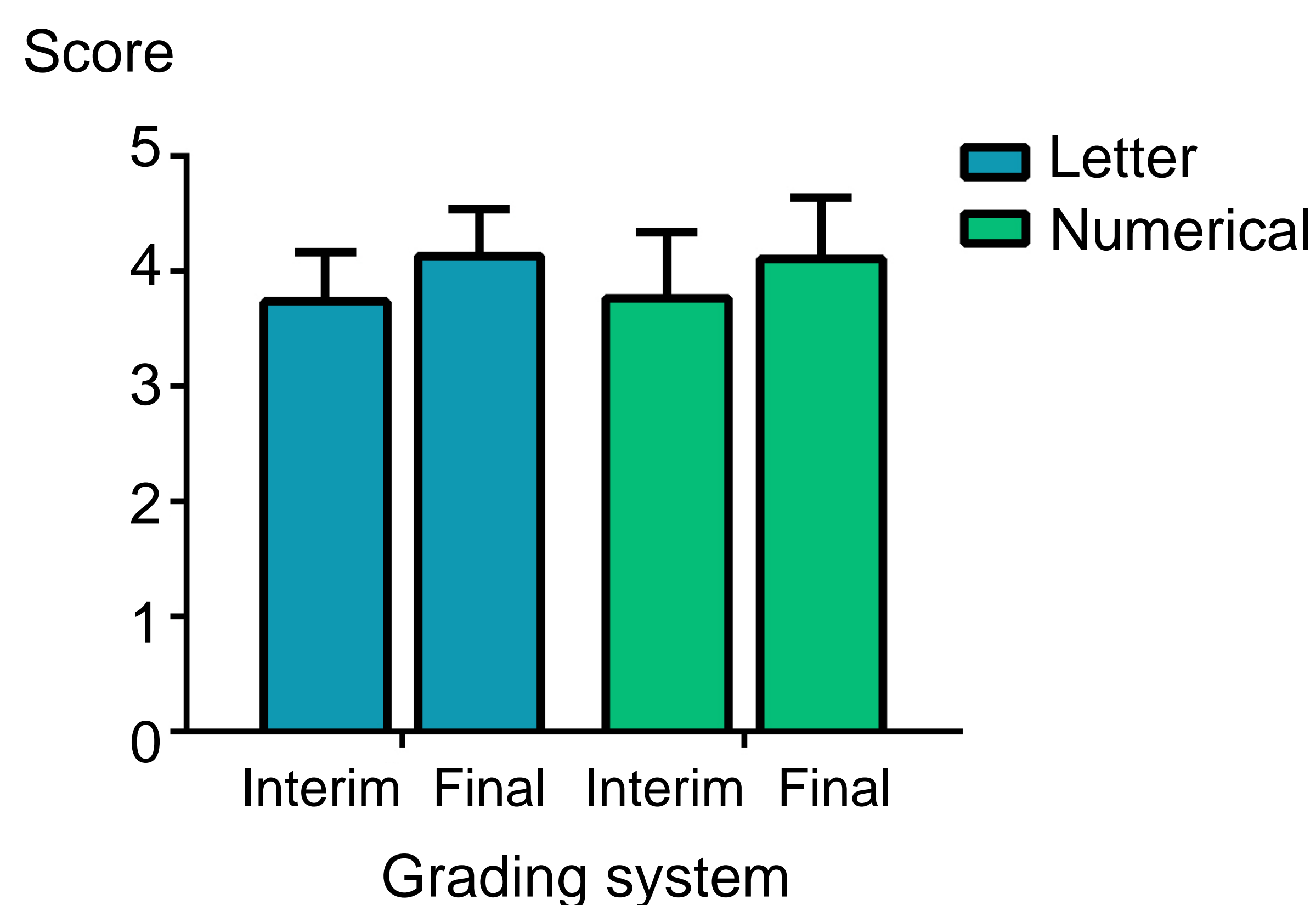
- Groups of students were randomised to receive letter or numerical grades at interim and final evaluations.
- Final course evaluations (scale 1-5) were used as outcomes.
- Improvement in score from interim to final evaluations was considered a proxy measure of motivation.
- Grades were compared using T-test; a P value < 0.05 was deemed statistically significant.
- Students completed an anonymous survey containing objective and free-response items at the end of the rotation.
- Questions included:
 - times allocated to different aspects of the rotation
 - most utilised resources and personnel
 - factors deemed important and unimportant to motivation
 - factors deemed beneficial or detrimental to learning.

Results

Motivation of students

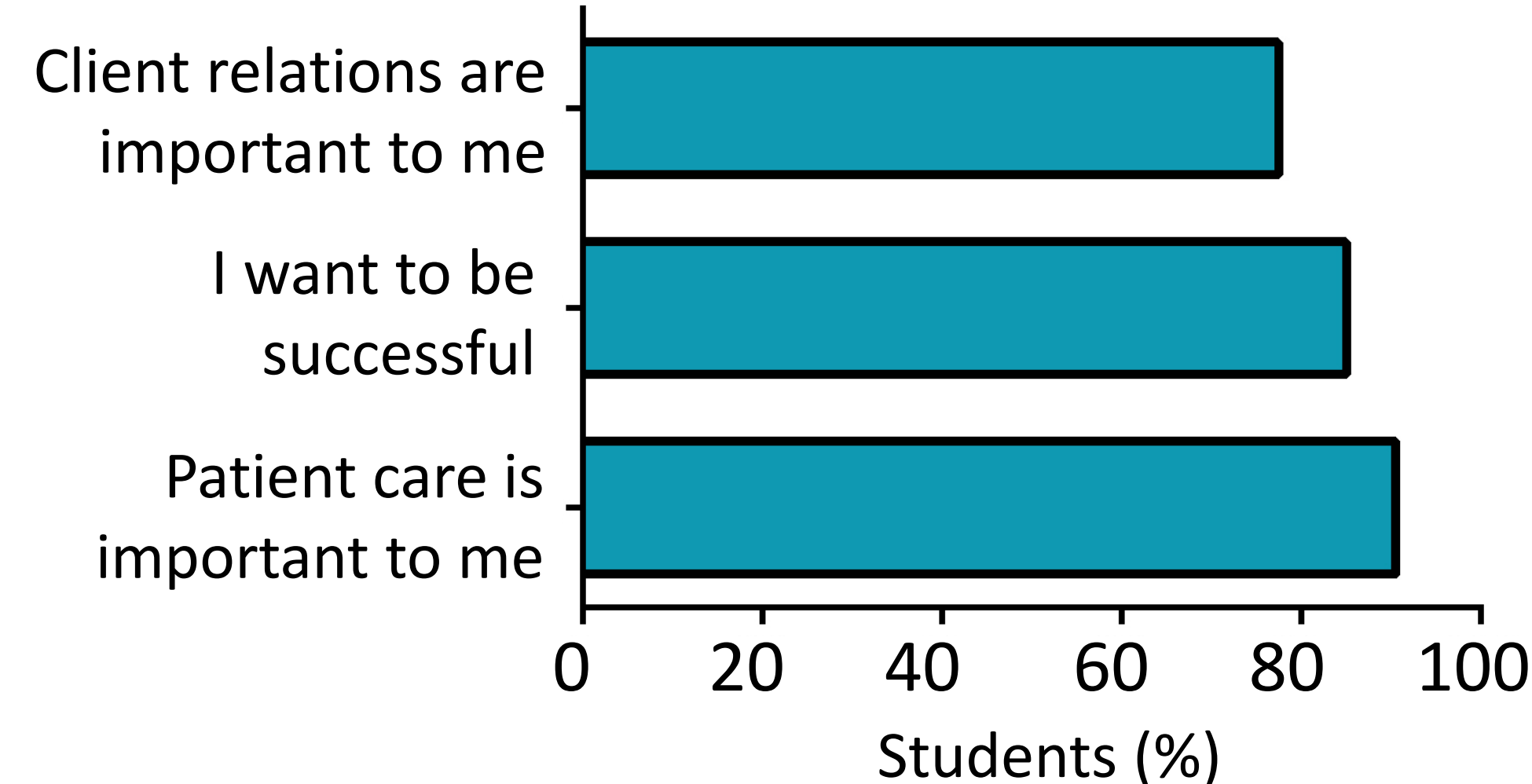
- Duration of the study was 14 months.
- 157 students participated; $n=74$ letter, $n=83$ numerically graded.
- There was no difference between groups for interim scores ($P=0.69$), final scores ($P=0.90$), or change between interim and final scores ($P=0.56$).

Clinical rotation evaluations for senior students

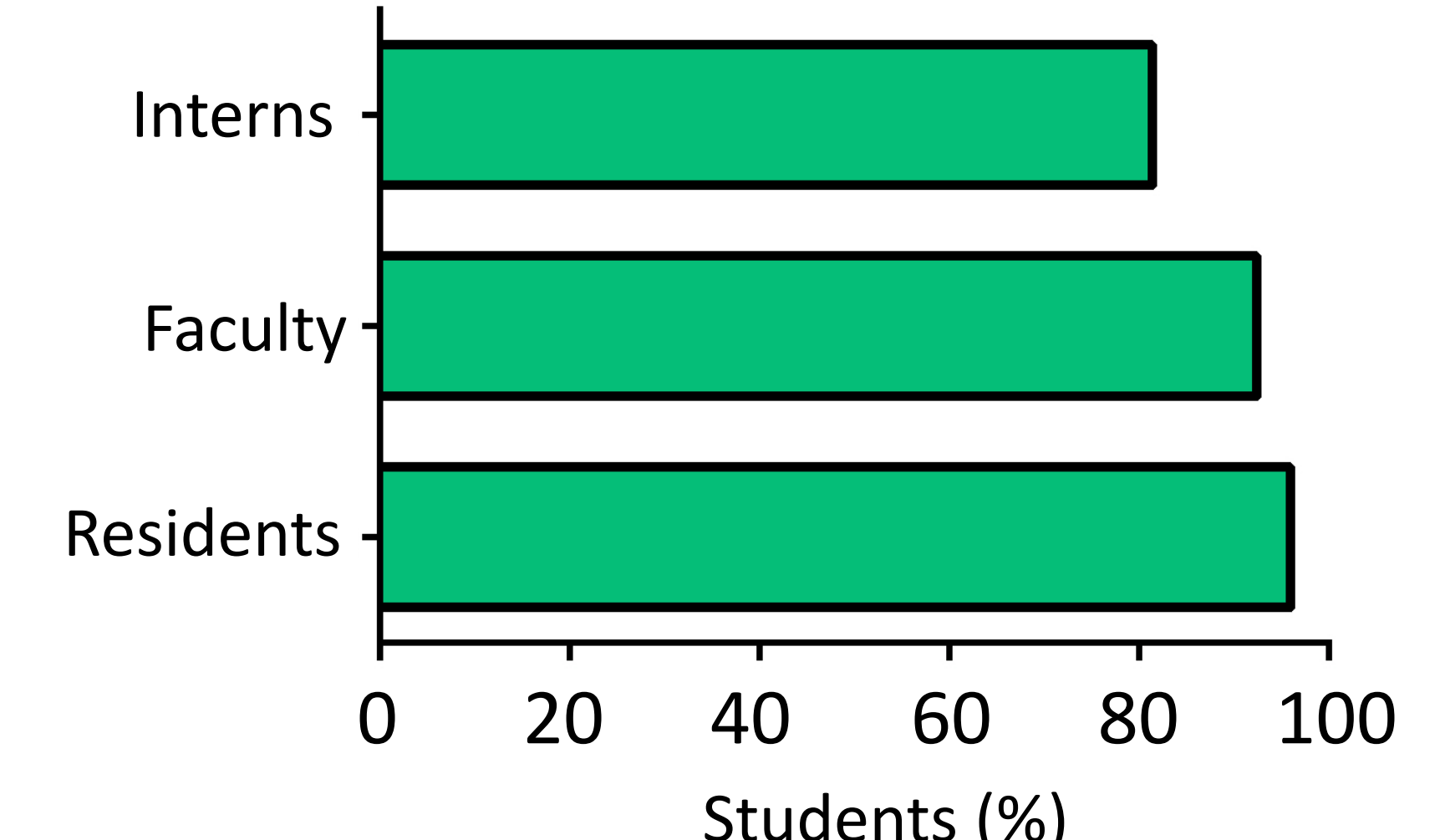


Features of rotation

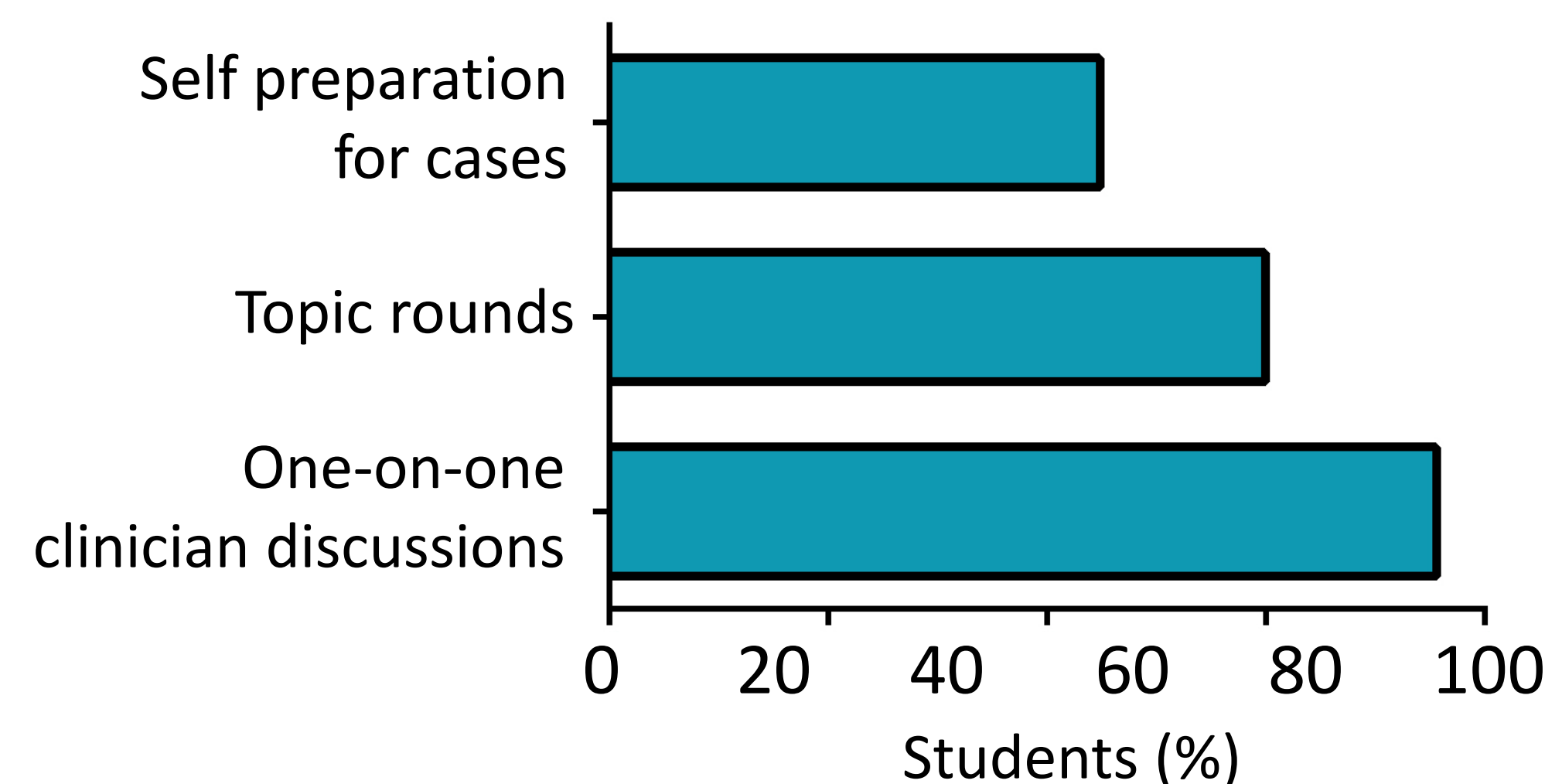
Motivating factors



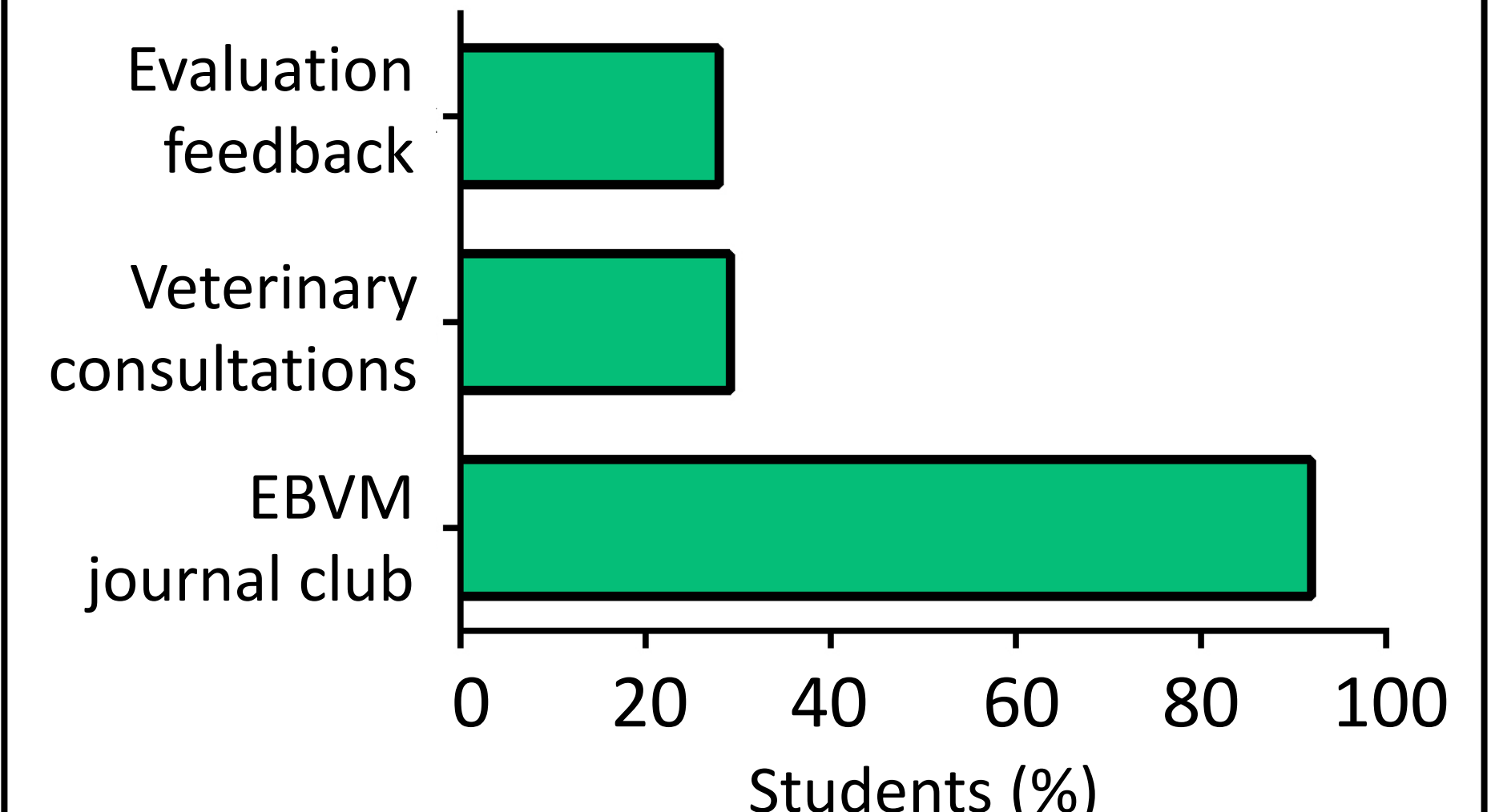
Who helped you learn



Most beneficial factors to learning



Least beneficial factors to learning



Discussion

- Students cited intrinsic factors as more important than extrinsic factors for their motivation on this clinical rotation.
- The EBVM journal club was valued least by the students for promoting their learning and professional growth.
- *“I understand the importance of journal club but it was the least educational part of internal med.”*
- Greater integration of EBVM throughout the curriculum may increase students' familiarity and confidence with EBVM, their ability to perform it and their appreciation of the topic.
- Alternate methods, other than a journal club, could be considered to promote EBVM.³

Conclusions

- The most frequently reported motivating factors were intrinsic; letter grades had minimal effect as a motivational factor.
- Evidence-based veterinary medicine was least valued for contributing to professional learning and growth by senior veterinary students.

References

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2. Mikkonen J, Ruohoniemi M, Lindblom-Yläne S. The role of individual interest and future goals during the first years of university studies. *Stud Higher Educ* 2013;38:71-86.
3. Ahmadi N, et al. Teaching evidence based medicine to surgery residents – is journal club the best format? A systematic review of the literature. *J Surg Edu* 2012;69:91-100.