

Effect of Rotation Difficulty on Resident Performance on the American Board of Surgery In-Training Examination

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INTRODUCTION

The American Board of Surgery In-Training Examination (ABSITE) has been demonstrated to be predictive of performance on the American Board of Surgery Qualifying Examination and is frequently being used as a marker for competitiveness when applying to surgical fellowships. Therefore, the importance of the examination cannot be understated. All residents have access to the same study materials for ABSITE, but their time to study and ability to retain this information may be limited by their clinical commitments leading up to the ABSITE. A poor ABSITE performer may benefit from easier rotations leading up to ABSITE and enable more time for study and retention. The aim of this study is to evaluate if the clinical rotations a resident is on prior to ABSITE influence their test score.

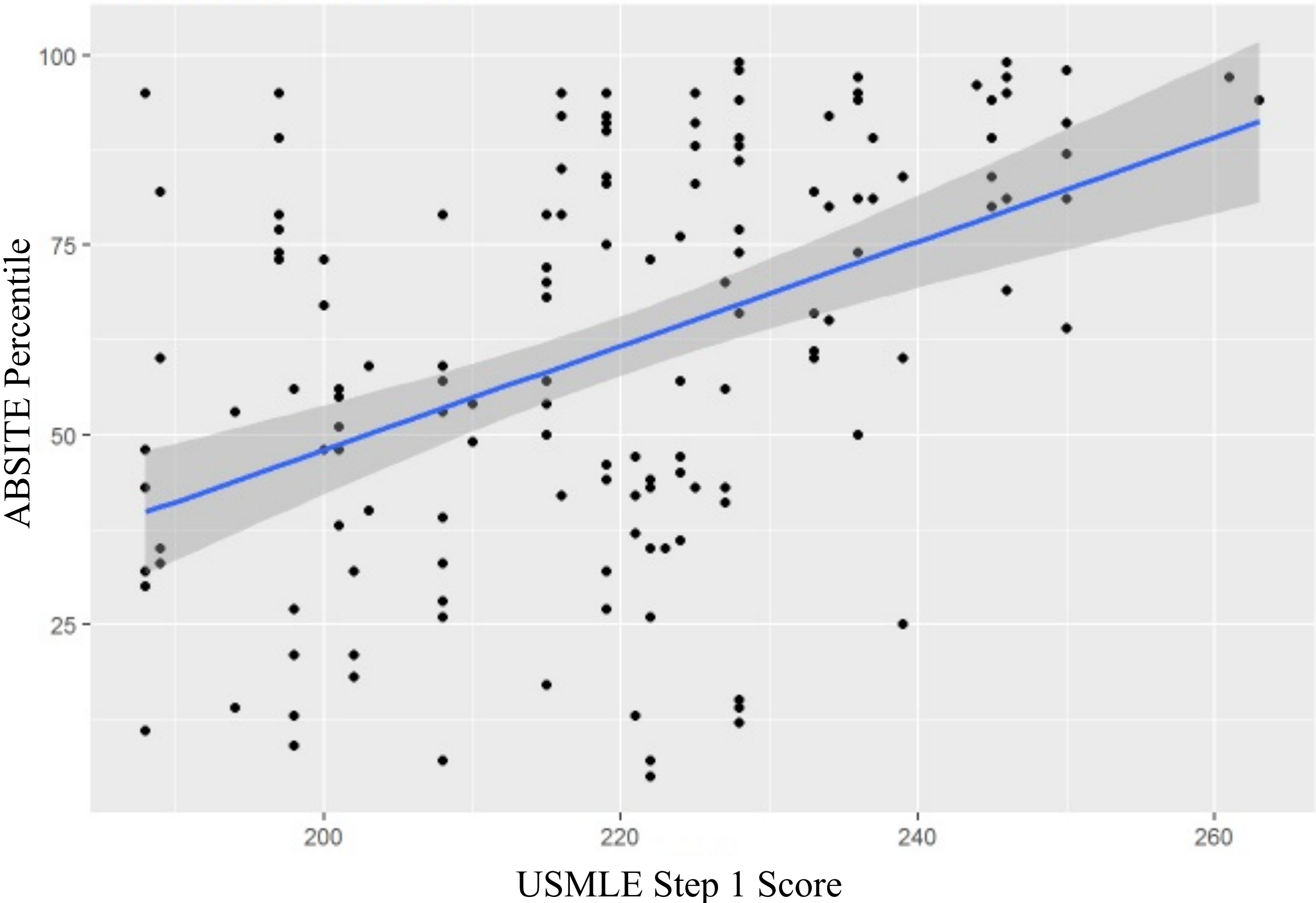
METHODS

Current residents at an ACGME accredited academic community general surgery residency were surveyed to determine subjective rotational difficulty based on post-graduate year (PGY). A retrospective review was conducted from 2013-2018 of ABSITE performance from 51 general surgery residents at the same institution. Analysis noted residents previous exam performances on ABSITE & USMLE, the difficulty of three rotations preceding ABSITE, if they had a vacation in the month prior to the examination, and if they attended an ABSITE review course. Residents were then evaluated as a random effect in a random intercept linear model with univariate testing of each factor being performed.

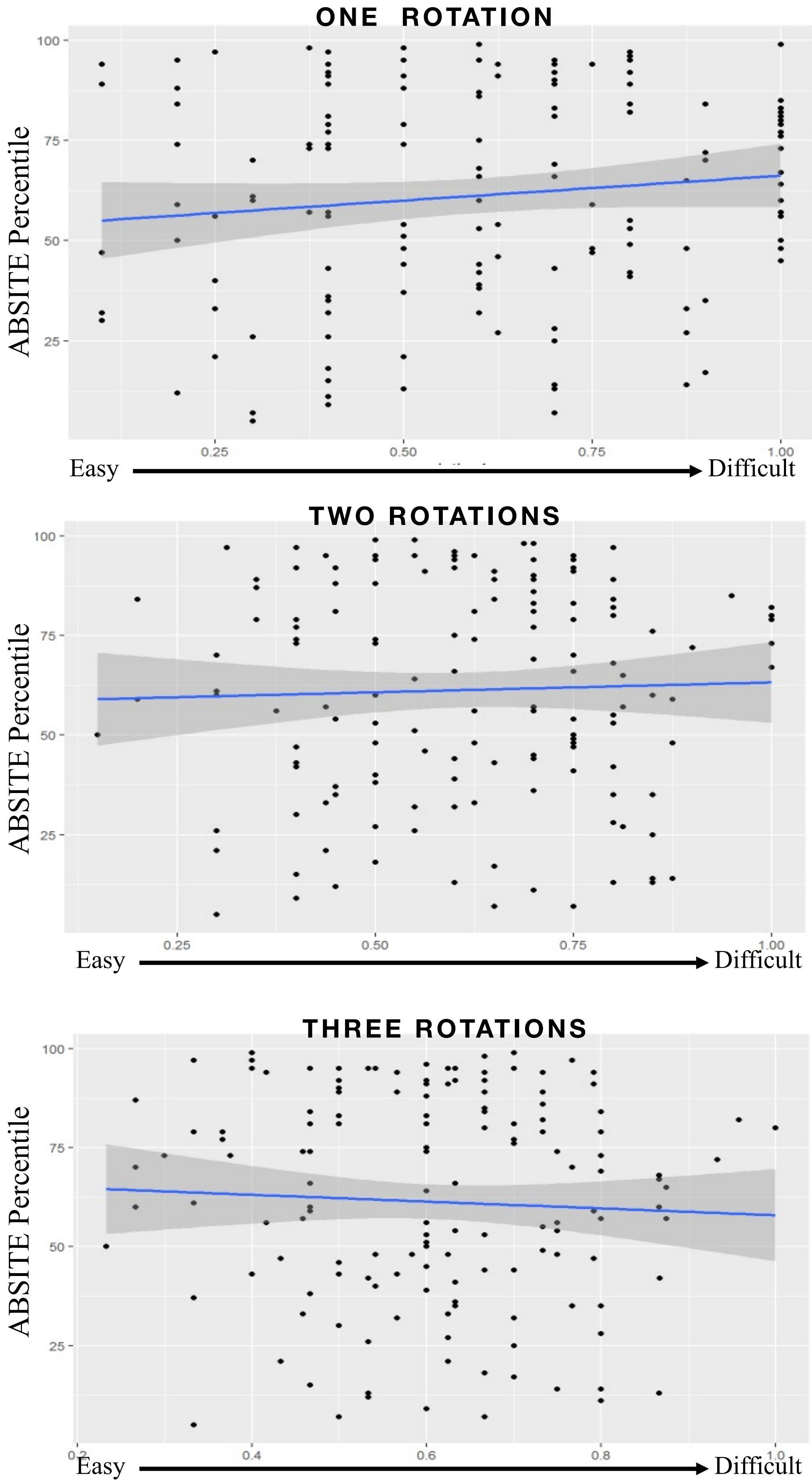
Univariate Analysis of Variables Predictive of ABSITE Performance

	p-value
Difficulty of One Preceding Rotation	0.24
Cumulative Difficulty of Two Preceding Rotations	0.69
Cumulative Difficulty of Three Preceding Rotations	0.96
Post Graduate Year	0.17
Vacation in Month Prior	0.78
Review Course Attendance	0.48
USMLE Step 1 Score	<0.001
USMLE Step 1 Score < 200	0.22
USMLE Step 1 Score < 215	0.007
Prior ABSITE < 35 th Percentile	<0.001
Prior ABSITE < 50 th Percentile	<0.001

Effect of USMLE Step 1 on Score



Cumulative Effects of Preceding Rotation Difficulty on ABSITE Score



RESULTS

Univariate testing demonstrated that the only statistically significant factors for predicting ABSITE performance were poor prior performances on standardized exams including USMLE Step 1 score < 215 (p<0.01) and prior ABSITE score < 50th percentile (p<0.001). The effect of preceding rotation difficulty was not statistically significant. In actuality, there was a non-statistically significant tendency for residents to perform better with more difficult rotations prior to the ABSITE. Both a preceding vacation and attending a review course demonstrated a tendency toward higher scores, these findings were not statistically significant.

CONCLUSION

Our research suggests that difficulty of clinical rotations are not a significant factor contributing to ABSITE performance. Larger studies must be undertaken in order to evaluate if the tendencies noted within the current study are statistically significant across other institutions and may potentially be able to be modified to benefit at-risk residents.