

Impact of previous clinical knowledge on AAPD exam scores among Pediatric residents.

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OBJECTIVE

To determine if there was a difference in AAPD in-service exam scores among incoming residents and if their knowledge was dependent on prior experience in clinical practice.

BACKGROUND

Traditionally it is believed that pediatric dentists with many years in regular practice tend to remember more clinical dentistry than their didactic knowledge. Conversely, newly graduated pediatric dentists may have more retention of didactic knowledge. As the number of years of clinical practice increases the student's retention rate of didactic knowledge may reduce. The AAPD in-service exam tests both didactic knowledge and clinical knowledge of the students entering the pediatric dental residency. However, these theories haven't previously been tested.

REFERENCES

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MATERIALS AND METHODS

A retrospective review was conducted of redacted incoming in-service exam scores from 2015 to 2022. Data was compared to the mean score for the year of the exam and was stratified by whether the incoming student had previous clinical experience. Clinical experience could include additional training program or private practice.

The statistical significance level was based on p value <0.05.

RESULTS

108 incoming residents' scores were included in the study. Among them, only 49 (45%) residents had prior clinical experience. 29 (59%) residents with previous clinical experience had scores above the mean for the exam when compared to 31 (53%) for those without work experience. There was no statistically significant difference between previous clinical experience and whether or not a student scored above the mean $p=0.561$.

When the incoming residents' AAPD in-service exam scores were compared, the group that had prior clinical experience scored higher than those that did not have previous clinical experience.

When comparing the incoming in-service exam scores as a percentage above or below the mean, there was no significant difference, $p=0.091$, $F=2.914$.

Figure 1

	Work-Yes	Work-No
Above Mean	29	31
Below Mean	20	28

Figure 2

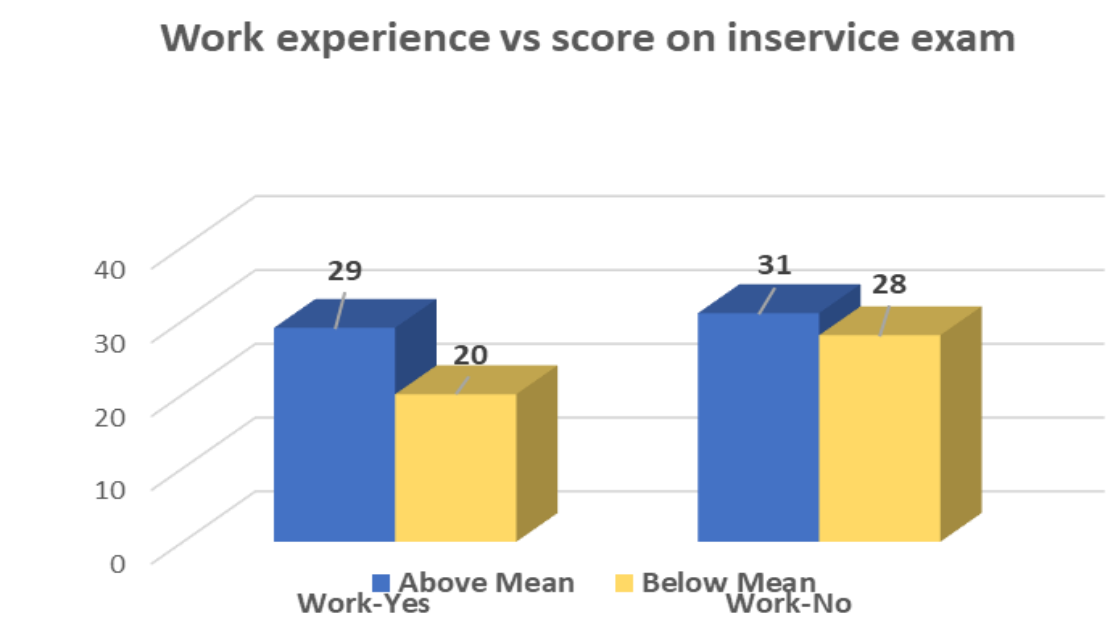
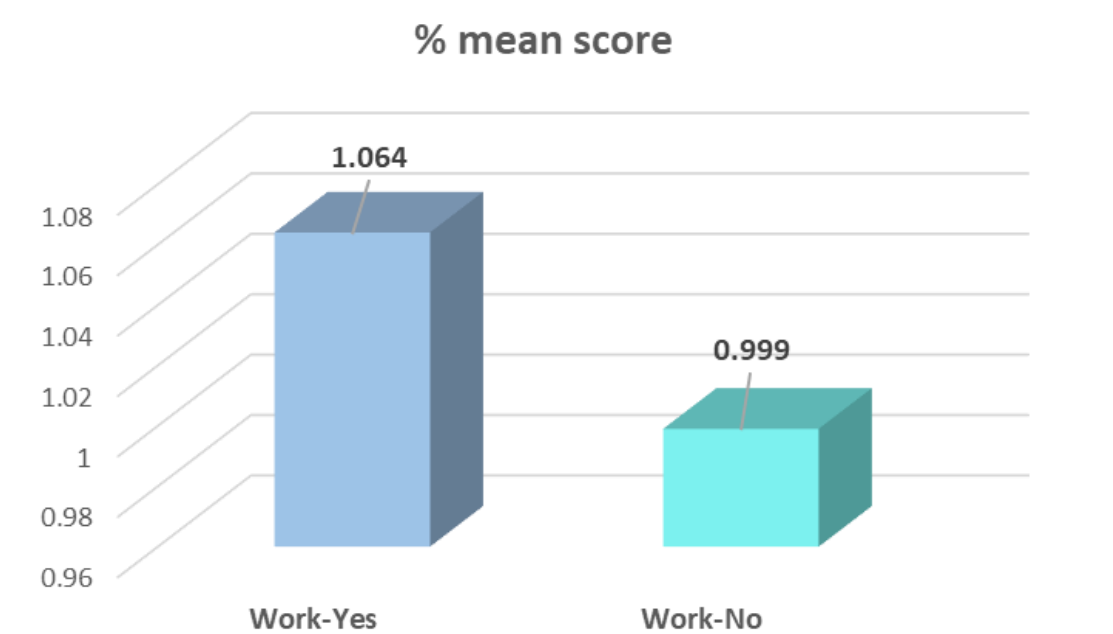


Figure 3



DISCUSSION

Although the scores were slightly higher for students with previous clinical experience but were not significant, this could be assumed because of the reason that the AAPD in-service exam being well balanced and tests the knowledge on both clinical and didactic competencies.

There are some limitations to this study as the sample size was relatively small and was limited to the incoming residents of pediatric dentistry program at TAMU. Additionally, the type and duration of clinical experience was not considered.

While clinical experience didn't seem to have a statistically significant effect on the scores for the incoming in-service exam, it however may have a stronger effect on the assimilation of knowledge throughout the program and on the outgoing in-service exam and ultimately the ABPD board exams.

CONCLUSIONS

1. Clinical experience did not have a statistically significant impact on incoming in-service exam scores
2. A larger sample size, including data from other programs may have more power and yield different results.