

The Effect of Smartphone Apps on Graduate Student's Stress

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Problem

- Unmanaged stress during graduate healthcare programs led to ineffective coping mechanisms and overuse of smartphone applications (apps), resulting in decreased emotional intelligence and self efficacy.
- Resources such as books or notes are difficult to bring into clinical areas to reference during patient care.

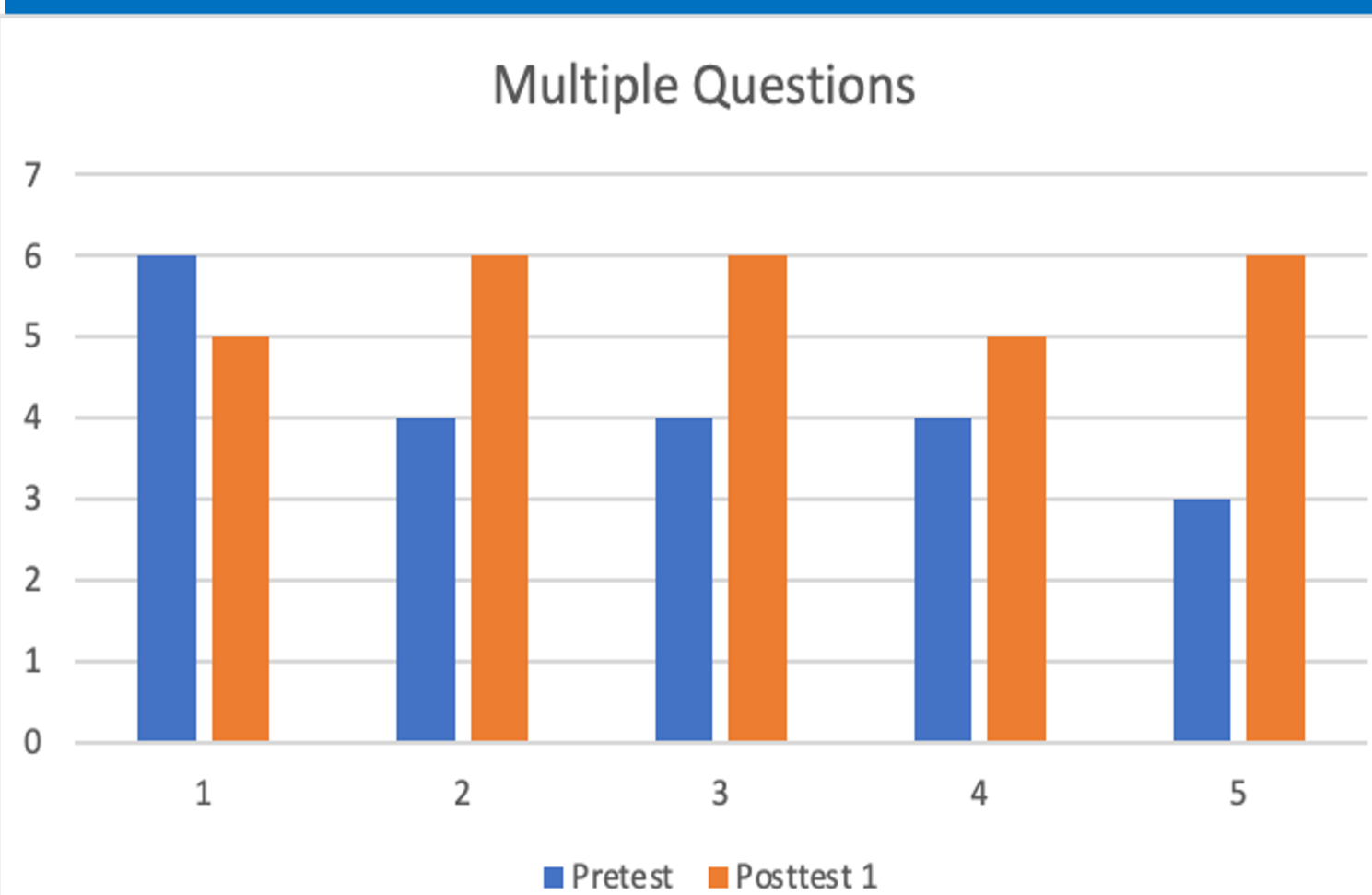
Literature Review

- Smartphones apps are used by graduate students for educational resources, communication, and entertainment.
- Smartphone apps were used as an unhealthy coping mechanisms and decreased emotional intelligence.
- Use of clinical resources increased self efficacy.
- Medical apps can offer peer reviewed resources on many subjects including evidence-based practice and pharmacology.

Methods

- UpToDate chosen for its versatility across professions.
- Pretest was conducted obtaining baseline stress levels, and UpToDate usage. Participants then watched a 60 min. voiceover PowerPoint presentation
- Post-test was conducted 4 weeks after PowerPoint presentation assessing stress levels, and UpToDate usage.
- Wilcoxon signed rank test to compare tests and Spearman Rho test for the correlational analysis.

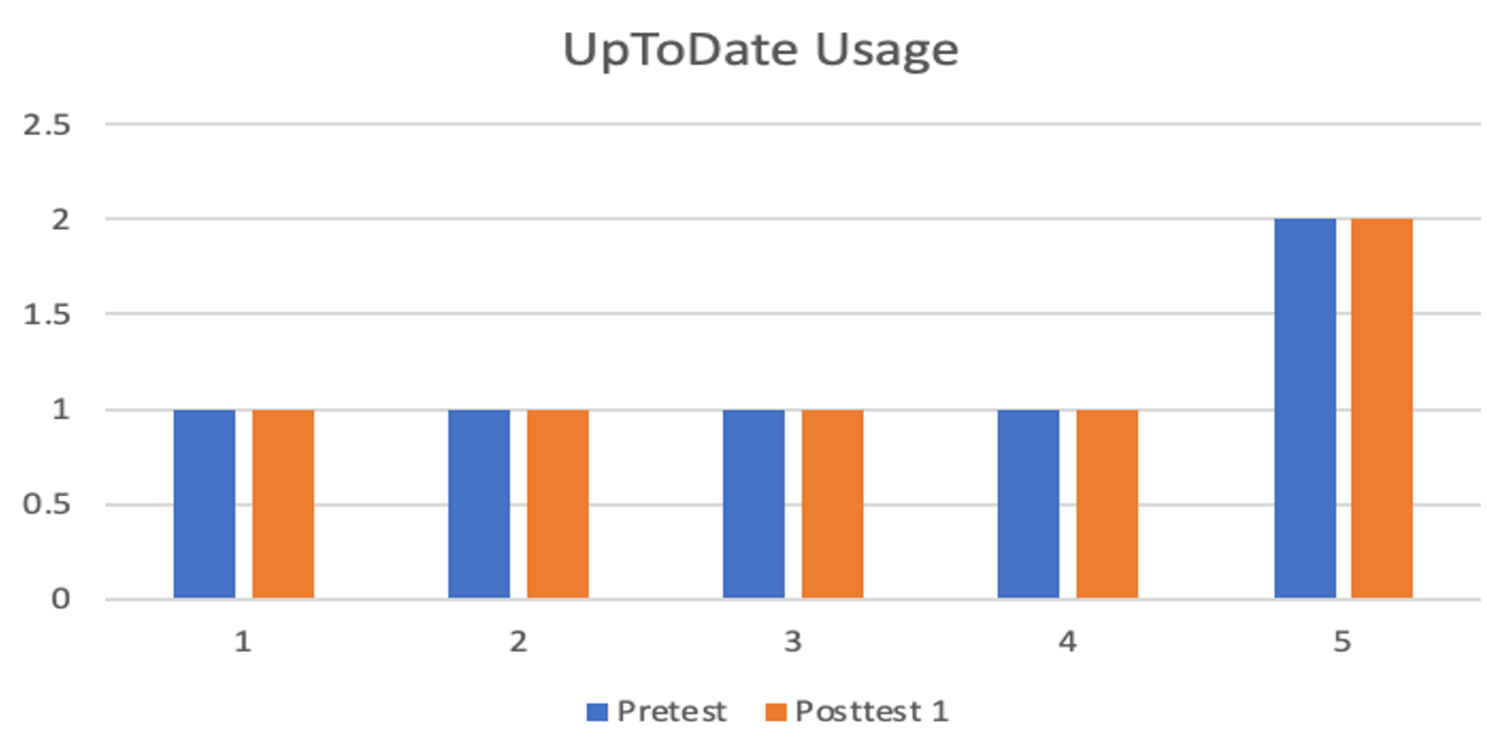
Illustration



Results

- Four of five graduate students improved their knowledge of appropriate usage of the app “UpToDate”.

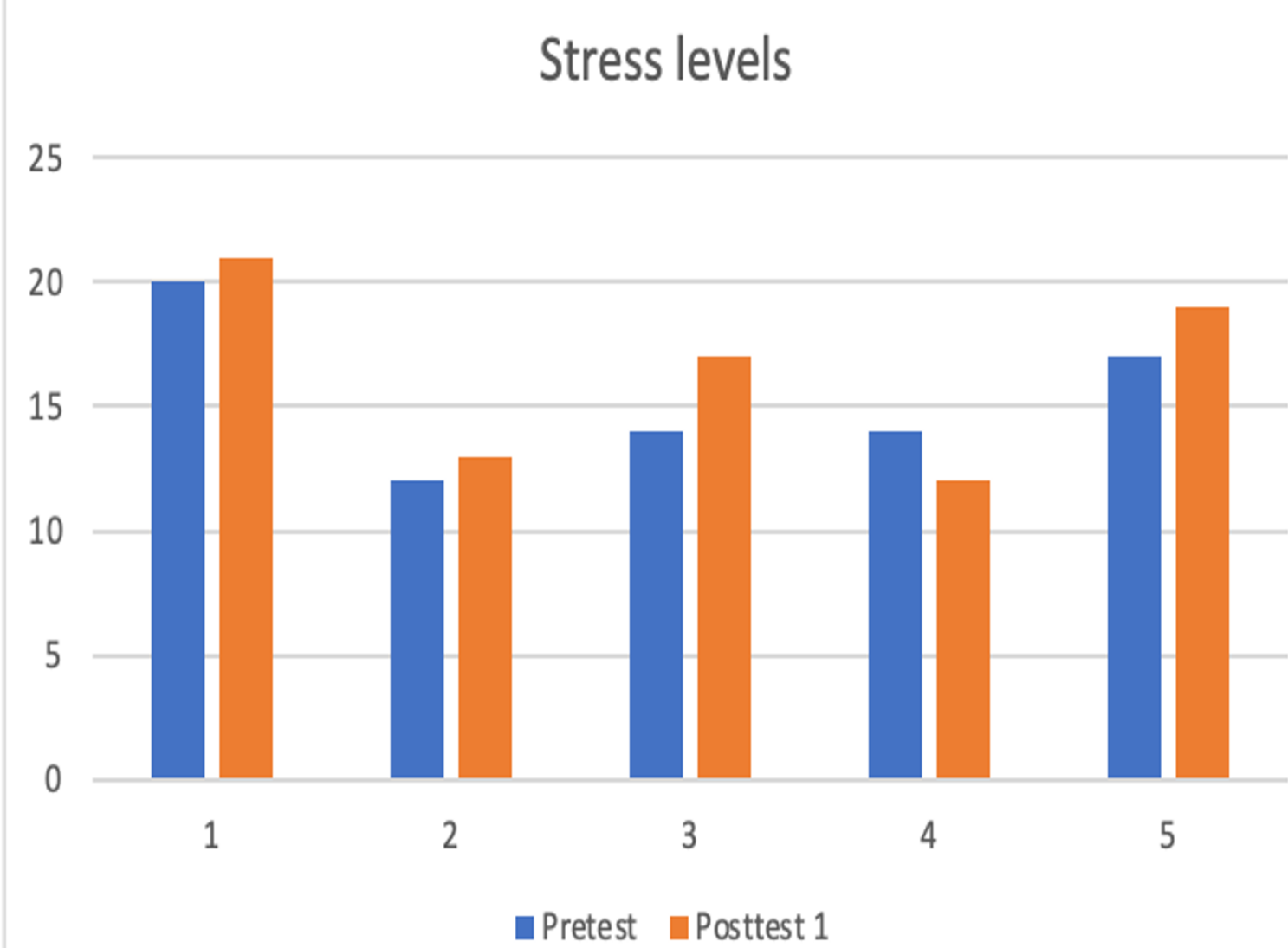
Illustration



Results

- There was no change in the usage of UpToDate app in the clinical setting.

Illustration



Results

- There was no correlation between stress and the education presentation multiple questions.

Discussion & Implications

- Medical resource apps are becoming more welcomed, especially during times of crisis or for preparation before patient care.
- Possible stigma of smartphone use during patient care and differing opinions by faculty or preceptors.

Conclusions

- Project affected by COVID-19
- Did not meet participation numbers to produce significant data
- More research specifically in the U.S. is needed.
- More education needed on smartphones, and resource apps.

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