

# How good do we think we are?: A survey of staff working in the Emergency Department

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## Background:

The aim of this study was to ascertain whether the self-assessed abilities of staff in the Emergency Department of the Royal Liverpool and Broadgreen University Hospitals Trust (RLBUHT) are in keeping with the proposed Dunning-Kruger effect. It is likely that the skills of most staff will be around the average level of other team members in their role. Some staff are likely to be above average in their skills and knowledge and this may be balanced out by staff who are performing below average. We wanted to see if the staff's opinions of themselves reflected this. We also wanted to see if there are differences between medical and nursing staff; seniority of doctor or gender.

## Method:

A survey was handed out to doctors and nurses working in the ED over a 4 week period in March and April 2017. They completed demographics on gender and job role. They then answered 4 questions scoring themselves between 0 and 10 on clinical knowledge, clinical skills, communication skills and overall. They were asked clearly to score their performance against others in the same job role. Finally, the staff were asked to mark themselves overall as below average, average or above average. The completed surveys were placed in a sealed box, keeping answers anonymous.

The data from the surveys was analysed. The independent t-test used to calculate statistical

## Results:

80 surveys were collected. Communication skills scored highest (mean 7.64), clinical knowledge scored 6.40, clinical skills scored 7.05 and overall scored 7.03. Only 3.75% (12 of 320) numerical responses were below average (below 5) whereas 34% (110 of 320) scored above 5. 2 people ranked their overall rating as "below average," 25 "above average" and the remaining 53 "average."

In the RLBUHT ED doctors are divided into senior and junior roles with specialist training year 3 and above considered senior. The 36 doctors were split equally between senior and junior roles. Comparing these 2 groups there was no significant difference and no statistical significance.

38 of the participants were female, 35 were male and 7 did not answer. Although for all 4 numerical questions females scored a higher mean, the differences were small and there was no statistical significance in the gender breakdown. 34.2% (13 out of 38) females scored themselves "above average" compared to 31.4% (11 out of 35) males. 5.26% (2 out of 38) females stated they were "below average" whilst no males did.

Figure 1: Pie Chart Showing Overall Ranking of Staff

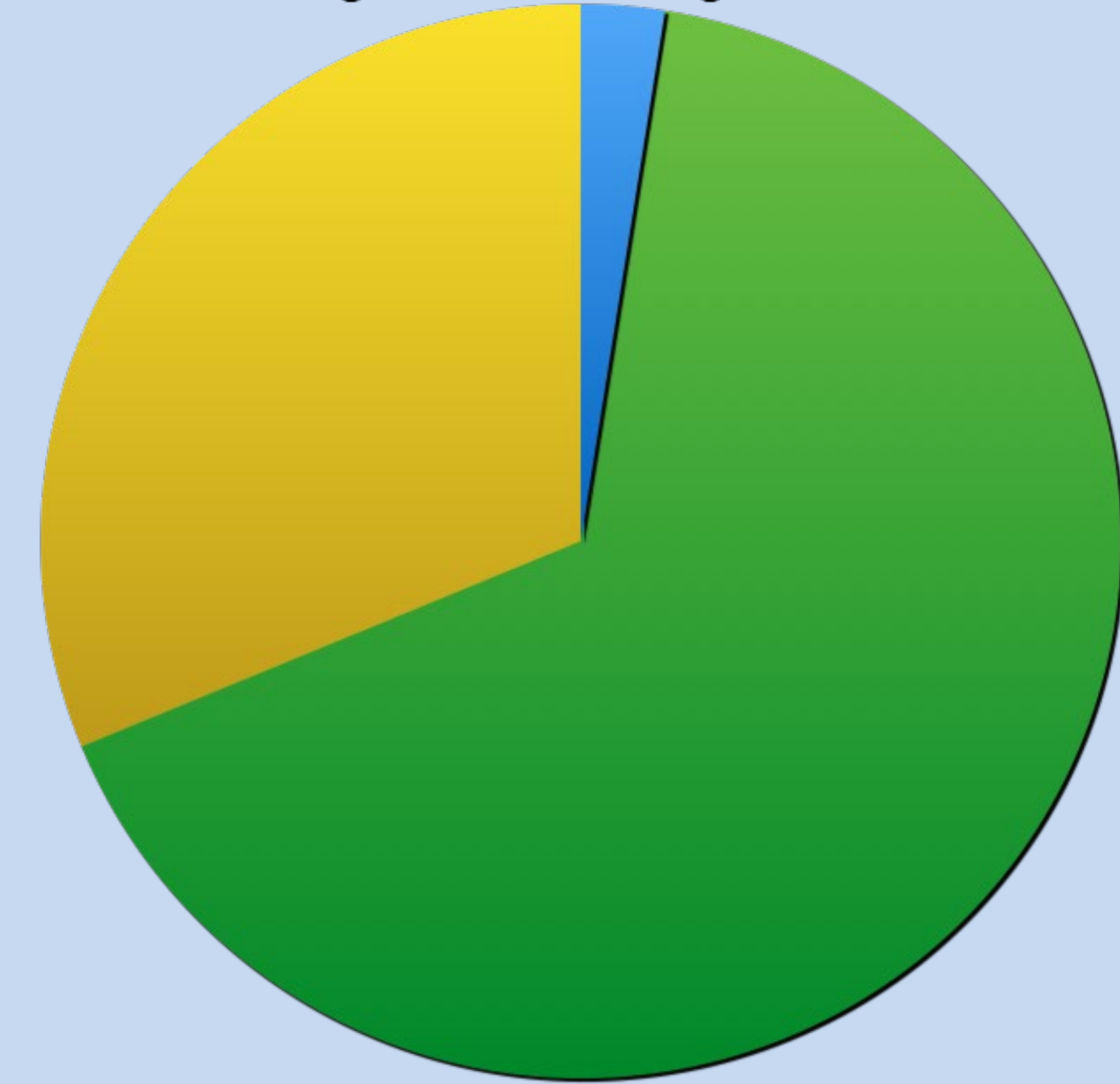
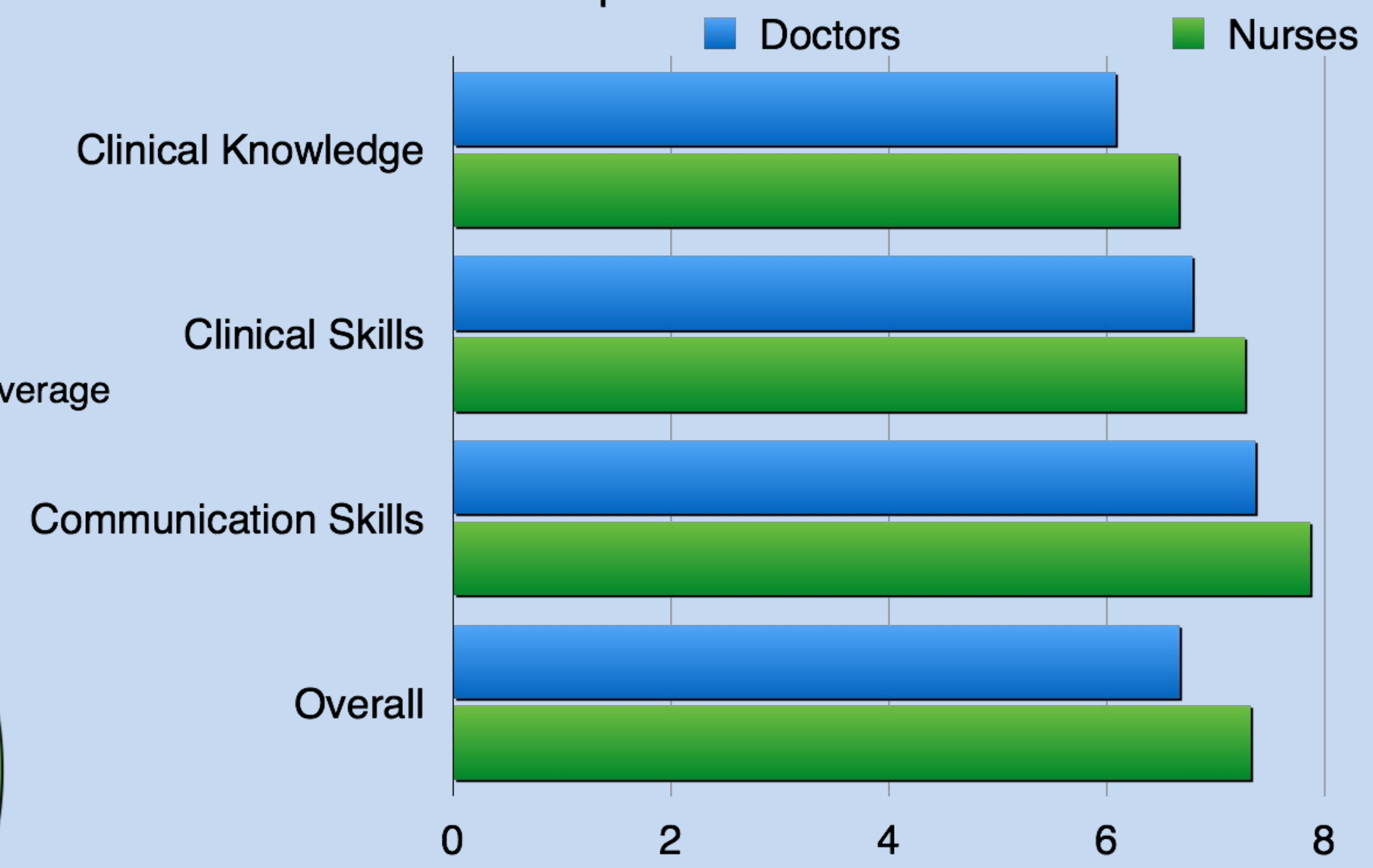


Figure 2: Graph showing the mean responses of doctors and nurses



36 surveys were completed by doctors and 44 by nursing staff. The only numerical question with statistical significance ( $p=0.03$ ) was for overall rating with the mean scores being 6.67 for doctors and 7.32 for nurses.

## Conclusion:

The staff of the RLBUHT ED consider themselves to be above average. Very few staff members self-rated their abilities as below average. This is in keeping with some of the theories of the Dunning-Kruger effect.

Nurses scored themselves higher than doctors overall but whilst this was statistically significant the difference was small. No other statistically significant differences were found between groups.