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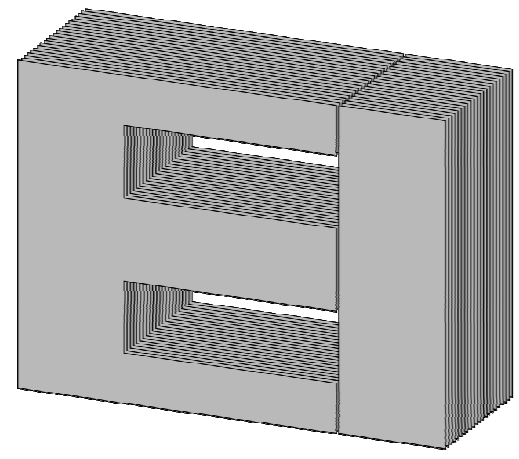
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# Trait Emotional Intelligence of Student Sonographers: Is it learnt or inherent?

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## INTRODUCTION

This poster presents the findings of a study undertaken in partial fulfillment of the BSc (Hons) Diagnostic Radiography award.

Despite the increasing popularity of both research and practice on emotional intelligence (EI), it remains a debateable psychological construct. The definition of the construct differs widely under different theoretical frameworks, with some models defining EI as a related set of abilities and some models defining EI as a mixture of behaviours, motivations, beliefs, and attitudes (MacCann et al. 2014).

For many years the EI intelligence of student sonographers has been a stumbling block for the introduction of undergraduate/direct entry ultrasound programmes. With this in mind, the main focus of this study was whether or not EI can be taught to student sonographers, or whether it is an individual's intrinsic ability?

## METHODOLOGY

**Participants** - First and second year student sonographers were invited to complete a demographic survey to collate personal variables such as; age, gender, profession and area of clinical study. In addition to this, the respondents were asked to complete the Trait Emotional Intelligence Questionnaire (TEIQue-SF), a self-report measure.

**Measure** - The short form of the Trait EI questionnaire was used. The 30-item questionnaire yielded scores on global Trait EI and its four factors; Well-being, Self-control, Emotionality and Sociability.

**Procedure** - Distribution of the survey and (TEIQue-SF) to the students was via email and face to face. A pilot study was undertaken with the preliminary data. Ethical approval was obtained from Sheffield Hallam University prior to the start of the survey.

**Analysis** - By using the analysis of variance (ANOVA), it enabled the researcher to consider the differences in results by the specific variables.

## RESULTS

### Well-being

- radiographers scored a mean of 6.88
- nurses scored a mean of 4.25
- midwifery scored a mean of 5.83.

For the overall population the range of well-being trait factors was 3-7, with a mean of 5.47, standard deviation of 1.171.

Year 1 respondent's range was 3-7, with a mean of 5.62, and a standard deviation of 0.70.

Year 2 respondent's range was 4-6, with a mean of 4.75, and a standard deviation of 0.29.

### Self-control

- radiographers scored a mean of 4.72
- nurses scored a mean of 4.0
- midwives scored a mean of 3.91.

For the overall population the range of self-control trait factors was 3-7, with a mean of 4.45, standard deviation of 0.854.

Year 1 respondent's range was 3-7, with a mean of 4.42, and a standard deviation of 1.33

Year 2 respondent's range was 3-6, with a mean of 4.33, and a standard deviation of 0.97.

### Emotionality

- radiographers scored a mean of 5.6
- nurses scored a mean of 4.56
- midwifery, scored a mean of 5.75

For the overall population the range of well-being trait factors was 4-6.5, with a mean of 5.4, standard deviation of 0.717.

Year 1 respondent's range was 4-6, with a mean of 5.43, and a standard deviation of 1.32.

Year 2 respondent's range was 4-6, with a mean of 5.25, and a standard deviation of 1.24

### Sociability

- radiographers scored a mean of 5.33
- nurses scored a mean of 3.42
- midwifery scored a mean of 4.58.

For the overall population the range of well-being trait factors was 1-7, with a mean of 4.75, standard deviation of 1.297.

Year 1 respondent's range was 1-7, with a mean of 4.8, and a standard deviation of 0.97.

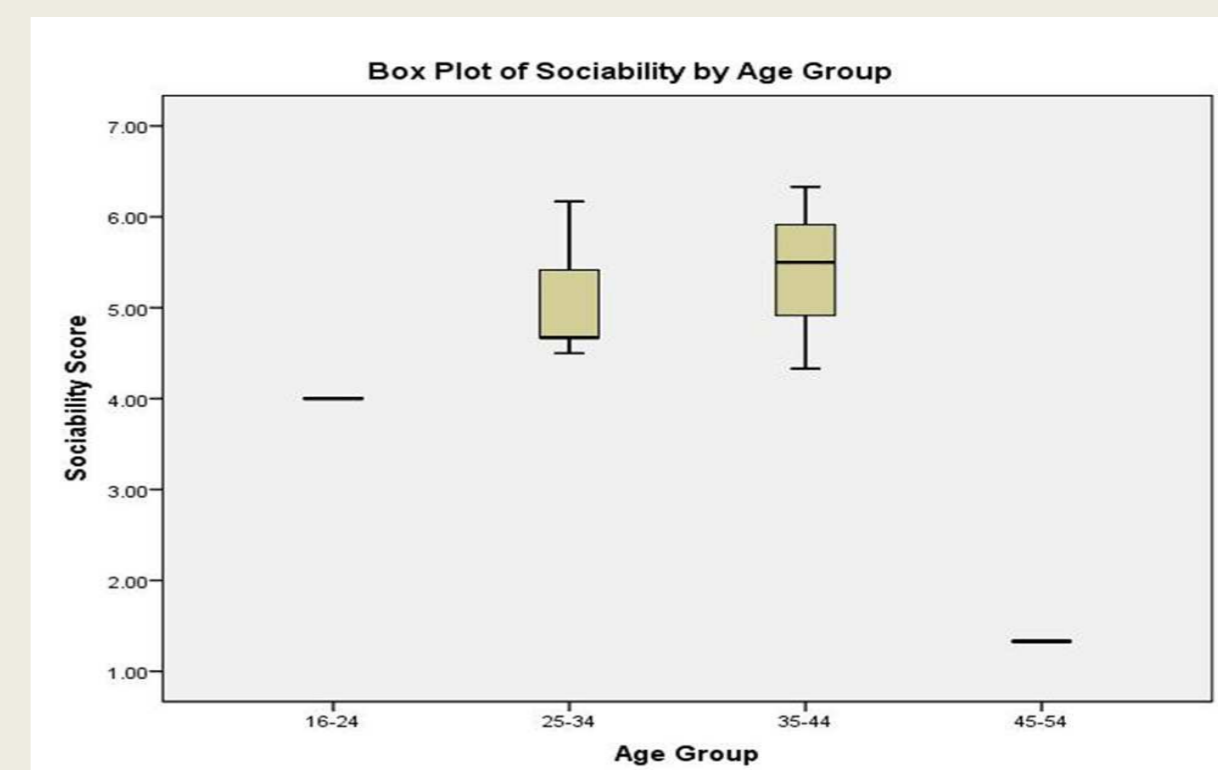
Year 2 respondent's range was 4-5, with a mean of 4.5, and a standard deviation of 1.21

**Obstetric student sonographers had a higher overall mean EI score than the Abdominal student sonographers**

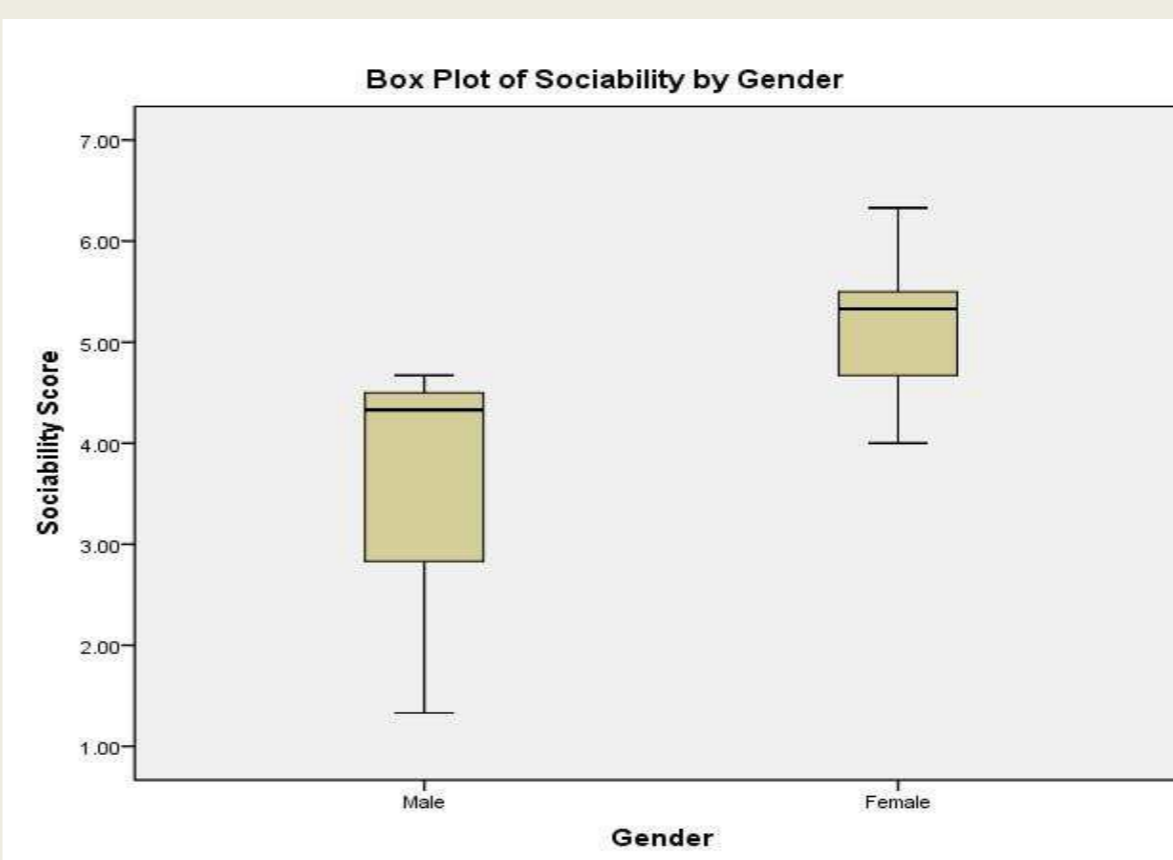
## DISCUSSION

Throughout this study, the researcher's aim was to explore Emotional Intelligence amongst student sonographers and try to attempt to add some statistical significance to an already vast amount of research. Whilst studying the relevant literature of Emotional Intelligence, key themes emerged from the papers, themes such as; age, gender and professions. As a result of that, this primary study focussed on those prominent themes in order to endeavour to construct answers within the topic area. From the results demonstrated within this study, it is evident that the main statistical significances stem from the independent variables of age group and gender.

The study's findings are supported by Van Rooy et al. (2005) who also examined the relationship between Emotional Intelligence and age using an Emotional Intelligence scale, finding there was a significant positive correlation. Emotional Intelligence, especially the facet Sociability does have a positive correlation with age.



Moreover, the connection between Emotional Intelligence and gender is particularly strong as indicated in this study. Naghavi and Redzuan (2011) carried out research that also identified the relationship between differences in emotion regulation and gender.



It has been demonstrated that females obtain higher scores at emotional conception test than males with possible reasons for these results being argued to be due to differences in socialisation such as parents being more likely to discuss emotional feeling more openly with their daughters than their sons thereby suggesting that females are more successful at articulating their feelings (Kafetsios (2010); Palmer et al (2002);

## CONCLUSION

- Results from this study suggested that perhaps Emotional Intelligence could be learnt over time
- Whilst females have proved to be more capable and successful at encompassing Emotional Intelligence, it could be inferred that this is due to family social interactions or the expectation of society itself and thereby learnt.
- Studies have suggested that EI, as a part of the personality, is inherent in the person suggesting EI could be improved if that facet in your personality is present.
- The study indicated that obstetric sonographers scored higher in the EI test than the Abdominal sonographers which suggests a possible role for EI testing as an indicator for recruiting to specific ultrasound practice where higher EI is preferred.

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