**Examining the relationship between emotional intelligence, leadership attributes, and workplace experience of Australian chief radiographers**

**Introduction:** Emotional intelligence (EI) is a person’s ability to control their emotions and be empathetic, and influences how a person interacts with others. EI has been linked to strong job performance parameters such as leadership and is an important attribute for health leaders including chief radiographers. This study aimed to investigate the relationship between EI scores and leadership attributes of Australian chief radiographers.

**Methods:** A pilot study with a cross-sectional survey design was used. A convenience sample of potential participants (n=70) were contacted and given unique codes to access the United Kingdom’s National Health Service Leadership Self-Assessment Tool (LSAT) and the Trait-EI Questionnaire Short-Form (TEIQue-SF). Demographic information was collected on age, years of experience, and hospital size. In total, 22 chief radiographers from NSW and Victoria from a variety of medical imaging departments completed the TEIQue-SF, and 18 completed both questionnaires. Spearman’s rank-order correlation and Kruskal-Wallis H-test were used for analysis.

**Results:** Chief radiographers from larger hospitals (>500 beds, n=6) had lower scores for the TEIQue-SF Sociability factor than smaller hospitals (p=0.057, n=22). Chief radiographers with less than 10 years’ experience (n=6) had higher scores for the LSAT ‘Developing Capability’ dimensions than those with more experience (p=0.043, n=18).

**Conclusions:** This study demonstrated relationships between years of experience, hospital size, EI and leadership behaviours of Australian chief radiographers. Overall, increasing years of experience as a chief radiographer was associated with a reduction across some EI and LSAT factors. The findings could be used as a starting point to provide increased support to senior leaders of the profession to aid leadership and job performance.

**Introduction**

Emotional intelligence (EI) refers to the ability of a person to control and manage their emotions, self-evaluate and be empathetic.1-3 It is known as the practical quality of intelligence. The EI Trait model is centred on the self-perception of one’s emotional abilities and is independent of cognitive abilities and competencies.4 It combines emotional self-perceptions with emotional traits, which together form part of people’s personalities.4,5 Emotionally intelligent leaders will incorporate positive changes and build interpersonal relationships in the workplace while remaining empathetic and supportive to the concerns of their staff.5,6 Leadership positions with more relational components are said to require higher levels of EI.3 Leadership styles that do not require understanding of other people’s emotions or empathy have little to no relationship with EI.7 Leadership in health involves cognitive and technical skills, but a large component of leadership roles is centred on communication and understanding others, their emotions and competencies.8

EI and leadership studies have found a strong EI relationship with leadership qualities of idealised influence,7 individualised consideration,7 inspirational motivation7,9, contingent rewards7,10 and self-awareness.11 Specifically in health, EI had a significant correlation with performance12 and effectiveness13 in nurses, and leadership outcomes had significant relationships with transformational leadership traits and contingent reward in occupational therapists.14

Diagnostic radiography is an allied health profession, and in Australia, the head radiographer of a department or practice is commonly referred to as a “chief”, “director” or “manager”. These radiographers are usually responsible for managing the clinical and financial aspects of their department or practice.15 Recent radiography research has benchmarked EI scores among different radiography specialties and seniority levels, with preliminary data suggesting higher EI scores are related to leadership status. A United Kingdom (UK) study by Mackay et al. (2012)16 found that radiography leaders had higher levels of trait EI than radiographers at lower industry or professional gradings and this was most evident in the Sociability factor of trait EI. In an Australian study by Lewis et al. (2017),17 chief radiographers scored significantly higher levels of Well-being, a factor of trait EI, compared with diagnostic radiography (DR) students, radiographers with one to five years of experience, and radiographers working as an academic. The cause for trait EI differences between sub-specialities and seniority in radiography is not clear and further traits need to be investigated to understand these variations.

Understanding the leadership character and EI profile of those in healthcare leadership positions allows people in each profession to develop strategies to strengthen workplace culture. Working towards improving the work environment helps to increase collaboration with employees, help leaders become more empathetic and supportive and create a more open workplace, which all contribute to improve the success of an organisation.1 Whilst there have been studies that have explored EI and leadership styles for various health disciplines, the roles of chief radiographers may be unique from other health management roles because of rapidly changing technology, quality assurance of equipment, medical dominance and business performance.18 Chief radiographers are seen as leaders of their dynamic healthcare profession and hence effective leadership is required to ensure the success of patient care and health services.

This pilot study aimed to investigate the relationship between EI scores and leadership attributes of Australian chief radiographers. It also aimed to explore whether age, years of experience as a chief, and hospital size play a role in EI and leadership scores.

**Methods**

A cross-sectional survey design was used to explore links between EI and leadership traits in chief radiographers and ethical approval was granted by the institution's Human Research Ethics Committee (2017/1005) on February 12, 2018.

***Instrumentation***

The trait EI measurement tool has two forms, a short and long version, developed from the EI Trait model by psychologist Petrides,4,19 The TEIQue-SF is the short version and is appropriate for this study as the participants were asked to complete two surveys that were estimated to take 30 minutes to complete. The TEIQue-SF is a self-report questionnaire consisting of 30 questions and is a recommended tool for a quick measurement of trait EI.20 It is a compressed version of the TEIQue full form which consists of 153 items, but remains a validated tool for measuring trait EI.20 The TEIQue-SF has been validated as a physiological tool and has shown internal consistency (see <http://psychometriclab.com/>).20 The questionnaire uses a series of statements where responses were recorded on a seven-point Likert scale. All 30 questions are used to score the Global EI, and the questionnaire also yields four factor scores for Well-being, Self-control, Emotionality and Sociability. Well-being refers to feelings of positivity and fulfilment, and Self-control is about having a good degree of control over desires and impulses, stress management, and being flexible.21 Emotionality is centred on communicating emotions to others accurately and clearly, and recognising one’s own emotional state, whilst Sociability focuses on social relationships, interactions, and influence.21 Further questions were added in the beginning of the TEIQue-SF to collect demographic data on age, gender, years as a chief radiographer and hospital size which was based on bed numbers.

The Leadership Self-Assessment Tool (LSAT) is a nine-item questionnaire, developed from the National Health Service (NHS) Healthcare Leadership Model.22 The model was developed by the UK’s NHS Leadership Academy through extensive primary and secondary research into healthcare leadership across various disciplines.22,23 It is an evidence-based model and was tested with healthcare staff across different health disciplines and different work levels.22 In the LSAT, each question addresses a dimension from the model, asking users to select a level of behaviour out of five in a Likert scale format that best describes their actions and attitudes. The dimensions are ‘Inspired Shared Purpose’, ‘Leading with Care’, ‘Evaluating Information’, ‘Connecting our Service’, ‘Sharing the Vision’, ‘Engaging the Team’, ‘Holding to Account’, ‘Developing Capability’ and ‘Influencing for Results’. Table 1 summarises each of the LSAT dimensions.

***Procedure***

Information about the study were emailed to a convenience sample of chief radiographers who were listed with the institution’s clinical database. The clinical medical imaging departments from the database are diverse, and include rural imaging departments, hospitals and private practices. The majority of sites are located in New South Wales (NSW), but there were several sites from Victoria, Queensland, and the Northern Territory. The recruitment email included a link to access the Trait EI Questionnaire Short-Form (TEIQue-SF),19 and a login for the NHS LSAT,22 both of which are self-report measures used for trait EI and leadership respectively. Each email gave the participants a unique login and password. Consent was obtained at the beginning of the TEIQue-SF questionnaire as this was the first survey presented to the participants. The consent statement referred to participation in both surveys, and consent was also implied when submitting the questionnaires. The TEIQue-SF also had a question asking for the LSAT login name so that the data from both surveys could be paired.

In total, 70 personalised emails were sent to potential participants and reminder emails were sent three weeks later. The study remained opened for two months.

***Statistical Analysis***

Descriptive statistics for demographic features were calculated, and the data was grouped depending on years as a chief radiographer and hospital bed number. The Statistical Package for the Social Sciences (SPSS) version 24 was used for the statistical analysis, and the significance level was set at p=0.05. Based on the outcome of the Shapiro-Wilk normality test, several of the variables had a p-value less than 0.05, hence non-parametric statistical tests were used. The demographic data was used in statistical tests as both categorical and continuous data, except for age which was only used as a continuous variable because the majority of the chief radiographers’ ages were grouped together. Years as a chief radiographer were grouped into <10, 10-20 and >20 years, and hospital size was determined using hospital bed numbers which were grouped into <200, 200-500, and >500 beds. Chief radiographers from private practices were included in the <200 category.

The Kruskal-Wallis H-test was used to compare the categorical demographic variables with the TEIQue-SF and LSAT scores. Mann-Whitney U was used as a post-hoc test. The Spearmans’ rank order correlation was used to calculate the associations between the demographic data, the TEIQue-SF scores and LSAT values. Cohen’s standard was used to determine the effect size strength.

**Results**

In total, 22 chief radiographers completed the TEIQue-SF (31% response rate), and 18 of them completed both questionnaires (26% response rate). The majority of participants were chief radiographers from hospitals or in NSW, while only a few were from private practices or from Victoria. Figure 1 presents the demographic features for both samples. Table 2 shows the mean values for Global EI and the four factor scores across categories of years as a chief radiographer and hospital bed numbers (n=22).

The Kruskal-Wallis H-test showed a statistically significant difference in the LSAT dimension of ‘Developing Capability’ across the three different groups of years as a chief radiographer (Gp1: <10 yrs, Gp2: 10-20 yrs, Gp3: >20 yrs), p=0.043. Using the Mann-Whitney U-test as a post-hoc test, it was found that chief radiographers with less than 10 years in their leadership role recorded a statistically significant higher median score for ‘Developing Capability’ than those with 10-20 years’ experience (p=0.03, r=0.511) and those greater than 20 years (p=0.031, r=0.507). The Sociability TEIQue-SF factor had a p-value of 0.057 across the three different categories of bed numbers (Gp1: <200, Gp2: 200-500, Gp3: >500). Using the Mann-Whitney U-test, it was found that chief radiographers in hospitals with more than 500 beds recorded a statistically significant lower median score for Sociability than those in hospitals with less than 200 beds (p=0.033, r=0.454) and 200-500 beds (p=0.045, r=0.428).

Spearman's Rank Order Correlation was used to investigate the relationship between age, years as a chief and bed number with the TEIQue-SF and LSAT factors (see Table 3). There was a strong negative correlation between increased years as a chief radiographer with the LSAT dimensions of ‘Sharing the Vision’ (rho=–0.507, p=0.032) and ‘Developing Capability’ (rho=–0.583, p=0.011). There was a moderate negative correlation between years as a chief radiographer with the LSAT dimension of ‘Influencing for Results’ (rho=–0.416, p=0.086), and a moderate negative correlation between hospital bed size with the Sociability TEIQue-SF factor (rho=–0.397, p=0.083).

Spearman's Rank Order Correlation was used to investigate the relationship between the TEIQue-SF and LSAT factors (see Table 4). There was a strong positive relationship between Global EI and the LSAT dimensions of ‘Connecting our Services’ (rho=0.586, p=0.011) and ‘Sharing the Vision’ (rho=0.511, p=0.030). There was a strong relationship between Well-being and the LSAT dimension of ‘Connecting our Services’ (rho=0.522, p=0.026), ‘Engaging the Team’ (rho=0.554, p=0.017), ‘Holding to Account’ (rho=0.578. p=0.012) and ‘Developing Capability’ (rho=0.558, p=0.016). Additionally, there was a strong positive relationship between Emotionality and the LSAT dimension of ‘Connecting our Services’ (rho=0.599, p=0.009), and a strong positive relationship between Sociability and the LSAT dimension of ‘Sharing the Vision’ (rho=0.545, p=0.019).

**Discussion**

There were several significant associations found between the work variables of years as a chief radiographer, and hospital size with the TEIQue-SF and LSAT factors. There were no significant associations between age and gender with the TEIQue-SF and LSAT factors. In the literature, there are mixed results when it comes to age and gender with multiple variables taken into account24,25 but these are hard to compare with the findings of this study considering that no information was collected on responsibilities, and workplace and personal stressors.24

There were no significant differences found across the Global EI value and four factor scores for chief radiographers of varying years of experience (<10, 10-20 and >20 years) and hospital size (<200, 200-500 and >500 beds) excluding Sociability. This is not surprising considering that in a previous Australian study undertaken by Lewis et al. (2017), there were no observed significant differences between chief radiographers and radiographers of varying years of experience (0-5, 6-10, 11+ years) for any TEIQue-SF factors.17

**Years as a Chief Radiographer and Leadership Dimensions**

Increased years as a chief radiographer saw a reduction in performance across the TEIQue-SF and LSAT factors. Of these, there were strong negative correlations between years as a chief radiographer with the LSAT dimensions of ‘Sharing the Vision’ and ‘Developing Capability’. Even between categories of years as a chief (<10, 10-20 and >20 years), chief radiographers serving less than ten years had statistically significant higher median scores than the other two groups. This overall higher performance level among newer chiefs could be due, in part, to a greater drive to perform well among newer managers.26

In a qualitative phenomenological Australian study by Thompson and Henwood (2016), the initial experience of radiographers into management roles were explored and found that initiative, drive, perseverance, resilience and optimism were behaviours employed to establish oneself as ‘chief’ and to cope with new workloads.26 The initial perception of becoming a chief radiographer revolved around leading by example, providing opportunities for their staff and maintaining technical competency. The LSAT ‘Developing Capability’ dimension is centred on providing learning opportunities for individuals and progressing organisations,22 and the significant correlation for this dimension with newer chief radiographers in this study concurs with the phenomenology study. Similarly, the ‘Sharing the Vision’ dimension focuses on how a leader presents themselves as credible and communicates a clear direction,22 and with new managers tending to lead by example it is not surprising that the LSAT dimension was more dominant in newer chief radiographers in this study.

***Hospital Size and Sociability***

Between the hospital size categories (<200, 200-500, >500), chief radiographers in hospitals with more than 500 beds scored significantly lower Sociability scores than the other two categories. There was also a moderate negative correlation between increased hospital bed numbers and Sociability. In comparing hospital size and Sociability, a Canadian study by Ginsburg et al. (2010) found that hospital size was negatively correlated to learning from patient safety events, and their related dissemination and communication requirements.27 Smaller hospitals had greater engagement in communication activities for patient safety, and the results were attributed to a more visible and proximal leadership in these hospitals, where leaders are more in touch with staff.27 Though the study was looking at hospitals as a whole, the leadership involvement trend could be applied to a radiography context, and may explain why Sociability was significantly higher among chief radiographers in smaller hospitals. The Sociability factor covers social interactions, communication and networking.21 There is an expected alteration in communication and leadership behaviours depending on hospital size because in smaller hospitals there are greater constraints and limitations on resources which requires more collaboration between leaders and staff.27 Considering that smaller hospitals showed greater engagement in communication activities,27 it could be expected to find greater Sociability levels among leaders in comparison to larger hospitals.

Both increasing hospital size and years of experience as a chief radiographer had several negative associations with the TEIQue-SF and LSAT factors. Australian studies exploring burnout among radiographers have found that emotional exhaustion, depersonalisation, low levels of self-reported personal achievement and stress were higher among radiographers working overtime and with increased workloads.28,29 Hence, lower TEIQue-SF scores among chief radiographers from larger hospitals could be a result of ongoing stress and burnout. In previous studies, radiographers identified staff support as one of the major causes of stress,29 and lower burnout levels were found amongst radiographers who were well-supported and received guidance.30 These findings from both the current study and previous research highlight the need to ensure that chief radiographers are given enough support particularly those working in larger hospitals and those that have been chiefs for a long period of time.

***Global EI and Leadership Dimensions***

There were significant positive associations between Global EI, Emotionality and Sociability with the LSAT dimensions of ‘Connecting our Services’ and ‘Sharing the Vision’. Leaders with higher EI, particularly Emotionality and Sociability, tend to encourage positive emotions, collaboration and trust among their staff.5,13 Hence, in this study there was an expectation to find significant positive associations between the LSAT dimensions of ‘Connecting our Services’ and ‘Sharing the Vision’ with the TEIQue-SF factors. Radiology departments are constantly exposed to changing equipment and techniques, and collaborative teamwork is essential to maintain patient care whilst learning new protocols and system features. A similar finding was found among Australian radiation therapists, where increasing Sociability was associated with higher levels of employment and education, and attributed to the need for greater social skills with increasing seniority.31

***Well-being and Leadership Dimensions***

The Well-being TEIQue-SF factor had strong and moderate positive correlations with seven LSAT dimensions. Staff well-being is important for services in that their attitudes, whether positive or negative, can transfer to their colleagues and patients, which is sometimes referred to as 'emotional contagion'.21 With higher levels of EI and Well-being, leaders are often confident, satisfied with life and optimistic.21 This in turn helps to create a positive work environment, which lead to better staff engagement and performance, and patient and customer satisfaction.23 The NHS Leadership Academy has acknowledged the importance of the well-being of leaders on the performance of their staff and service,22 and it is not surprising to find several significant correlations between the Well-being factor and LSAT dimensions.

***Strengths, Limitations and Future Research***

Only 26% of invited chief radiographers completed both questionnaires, and with this low response rate, future studies should employ other methods of advertising the study to reach more chief radiographers across the country. Only chiefs from NSW and Victoria responded even though chief radiographers from multiple states were invited to participate in the study, including Queensland and the Northern Territory. The majority of the participants in this study worked in public hospitals, which limited the study samples’ representation of Australian chief radiographers. Although approximately 30 chief radiographers from private practices were invited, only 2 participated. Chief radiographers also self-selected to participant in the study, and were contacted by email as they were part of the institution’s clinical database. The method of sampling limited the variety and randomisation of the study sample, and future studies should aim to have more equal and representative numbers across the demographic qualities such as public or private employment sector, hospital size and years of experience. The results of the study should be treated with caution because of the small sample size, and even when there were no significant differences found, this may be due to a type 2 statistical error. Some participants completed only one questionnaire, however there was little variation in the demographic data between those who completed one or both. Some participants may have only completed one questionnaire because the two questionnaires were on separate links and the LSAT questionnaire had more steps involved to begin the questionnaire.

It can be considered a strength that the TEIQue-SF used in the study is a validated and a recommended tool for the assessment of trait EI.20 However, both questionnaires used are self-report measures which is another limitation in the study. The use of self-reported measurement tools of both EI and leadership performance may give rise to social desirability issues and is difficult to overcome. Self-reported measures are also prone to biases based on a person’s ethnic backgrounds, where people from individualistic societies, particularly Western cultures tend to score themselves higher than people who have collectivistic values, such as Eastern cultures.32 This variation between different cultural values has been found in studies exploring trait EI and personality factors.32 Staff managed by the chief radiographers may hold a different perspective on the attributes of their leader, and chief radiographers may over or under report their skills. However, the TEIQue-SF has remained reliable as a self-report measure for trait EI with good psychometric properties.20 In future studies, a larger sample size more representative of chief radiographers across Australia would allow more accurate examinations of demographic categories and greater generalisability. This would improve confidence in the findings of this study being representative of chief radiographers, who play an important role in healthcare delivery.

**Conclusion**

Whilst other studies have looked at EI among radiographers including chief radiographers,16,17 this pilot study begins to build a base of evidence around the connectedness between EI and leadership. The study requires a greater sample size for better reliability, but the current findings suggest that there are variations in EI and leadership attributes between chief radiographers from different work environments and years of experience. The close relationship between EI and leadership traits supports the use of EI interventions and/or leadership training, and this has been recommended by several studies.10,33-35 Previous studies on emotional intelligence and leadership have recommended the development of interventions to educate both current and potential leaders,33,36 and integrating emotional intelligence training in professions and courses8,35 with the aim of helping staff become more competent, reduce job-stress, and have better well-being34.

This pilot study explored the impact of age, years of experience as a chief and hospital size on both EI and leadership behaviours in Australian chief radiographers. It also explored associations between EI and leadership, and identified several statistically significant correlations between the two. Chief radiographers in increasing hospital size had lower levels of Sociability, and increasing years of experience was negatively associated with ‘Sharing the Vision’ and ‘Developing Capability’ dimensions. There were several strong positive associations between the TEIQue-SF and LSAT factors, primarily Well-being from the TEIQue-SF and ‘Connecting our Services’ and ‘Sharing the Vision’ from the leadership tool. Further work is required to build upon this pilot study’s findings with better representation of chief radiographers across Australia and further research is needed to explore the impact of demographic features on the leadership traits and EI of chief radiographers to help identify where leadership support is needed.

**Footnotes Section**

**Contributors:** All authors contributed to the conception or design of the work, the acquisition, analysis, or interpretation of the data. All authors were involved in drafting and commenting on the paper and have approved the final version.

**Funding:**  This study did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

**Competing interests:** All authors declare: no financial relationships with any organizations that might have an interest in the submitted work in the previous three years; no other relationships or activities that could appear to have influenced the submitted work.

**Ethical approval:** Informed consent was obtained from all participants. Ethical approval was granted by the institution's Human Research Ethics Committee (2017/1005) on February 12, 2018.

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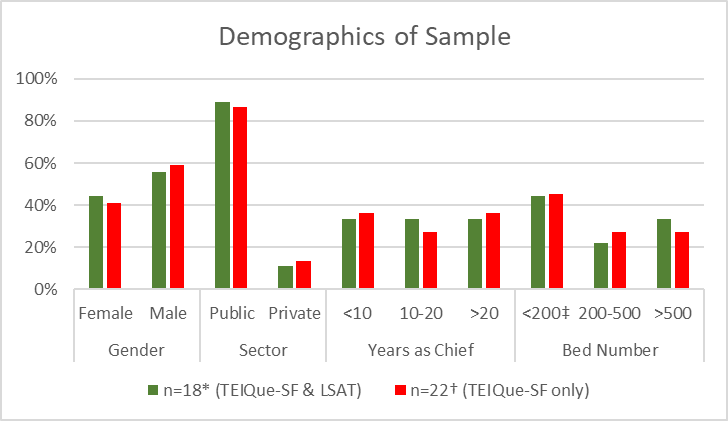
**Table 1**

National Health Service Leadership Model Framework Components Summary

|  |  |  |
| --- | --- | --- |
| **Inspiring Shared Purpose** | **Leading with Care** | **Evaluating Information** |
| Being a role model and taking up challenges to improve services and patient care | Conscious of staff needs and creating a positive environment | Investigating arising issues and incorporating new evidence-based concepts into services |
| **Connecting our Service** | **Sharing the Vision** | **Engaging the Team** |
| Building strategic relationships across health systems, and understanding how things are done in different departments | How a leader presents themselves as credible and communicates a clear direction | Promoting teamwork and recognising individual contributions |
| **Holding to Account** | **Developing Capability** | **Influencing for Results** |
| Setting clear goals, recognise success, and work to improve performance | Providing learning opportunities for individuals and increase capability of department | Stimulating discussion on arising issues, gaining support for ideas, and influencing for positive performance |

**Figure 1**

Demographics of sample

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\* n=18 participants completed both the TEIQue-SF and LSAT

† n=22 participants completed only the TEIQue-SF

‡ <200 category also consisted of chief radiographers in private practices, n=3

**Table 2**

Trait emotional intelligence and factor score averages across years as a chief radiographer and hospital bed numbers

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | n (%) | Global EI | Well-being | Self-control | Emotionality | Sociability |
| Years as Chief | <10 | 8 (36%) | 5.59 | 6.25 | 5.48 | 5.36 | 5.15 |
|  | 10-20 | 7 (32%) | 5.76 | 5.95 | 5.52 | 5.61 | 5.64 |
|  | >20 | 7 (32%) | 5.46 | 5.91 | 5.19 | 5.36 | 5.29 |
| Bed Number | <200\* | 10 (45%) | 5.72 | 5.97 | 5.57 | 5.55 | 5.58 |
|  | 200-500 | 6 (27%) | 5.72 | 6.31 | 5.75 | 5.40 | 5.36 |
|  | >500 | 6 (27%) | 5.28 | 5.92 | 4.78 | 5.30 | 4.94 |
| Total |  | 22 | 5.60 | 6.05 | 5.40 | 5.44 | 5.35 |

\* <200 category also consisted of chief radiographers in private practices, n=3

**Table 3**

Spearman's Rho Correlations between measures of Age, Years as a Chief and Bed Number with Global Emotional Intelligence, the four factor scores and the National Health Service Leadership Self-Assessment Tool Dimensions

|  |  |  |  |
| --- | --- | --- | --- |
|  | Age | Years as Chief | Bed Number |
|  | Rho (p-value) | Rho (p-value) | Rho (p-value) |
| **TEIQue-SF** |  |  |  |
| Global EI | 0.083 (0.712) | -0.164 (0.466) | -0.263 (0.263) |
| Well-being | -0.210 (0.928) | -0.327 (0.137) | -0.054 (0.822) |
| Self-control | 0.180 (0.423) | -0.163 (0.467) | -0.298 (0.201) |
| Emotionality | 0.015 (0.947) | -0.144 (0.521) | -0.121 (0.612) |
| Sociability | -0.068 (0.764) | -0.057 (0.801) | -0.397 (0.083) |
| **Leadership Self-Assessment Tool** |  |  |  |
| Inspired Shared Purpose | -0.137 (0.587) | -0.241 (0.335) | 0.133 (0.624) |
| Leading with Care | -0.131 (0.604) | -0.328 (0.183) | -0.190 (0.481) |
| Evaluating Information | -0.329 (0.183) | -0.396 (0.104) | 0.069 (0.800) |
| Connecting our Services | 0.205 (0.414) | -0.096 (0.704) | -0.173 (0.522) |
| Sharing the Vision | -0.203 (0.418) | -0.507 (0.032)\* | -0.060 (0.825) |
| Engaging the Team | -0.038 (0.880) | -0.155 (0.540) | 0.183 (0.497) |
| Holding to Account | -0.078 (0.758) | -0.296 (0.233) | 0.126 (0.641) |
| Developing Capability | 0.052 (0.839) | -0.583 (0.011)\* | 0.287 (0.282) |
| Influencing for Results | -0.119 (0.638) | -0.416 (0.086) | 0.048 (0.861) |

\* p < 0.05

**Table 4**

Spearman's Rho Correlations between measures of Global Emotional Intelligence and the four factor scores with National Health Service Leadership Self-Assessment Tool Dimensions

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Global EI | Well-being | Self-control | Emotionality | Sociability |
|  | Rho (p-value) | Rho (p-value) | Rho (p-value) | Rho (p-value) | Rho (p-value) |
| Inspired Shared Purpose | 0.289 (0.244) | 0.455 (0.058) | 0.275 (0.270) | 0.290 (0.243) | 0.339 (0.169) |
| Leading with Care | 0.177 (0.481) | 0.319 (0.197) | 0.100 (0.694) | 0.235 (0.348) | 0.057 (0.822) |
| Evaluating Information | 0.079 (0.756) | 0.162 (0.520) | -0.147 (0.561) | 0.154 (0.541) | 0.182 (0.470) |
| Connecting our Services | 0.586 (0.011)\* | 0.522 (0.026)\* | 0.405 (0.095) | 0.599 (0.009)\*\* | 0.490 (0.039)\* |
| Sharing the Vision | 0.511 (0.030)\* | 0.439 (0.068) | 0.348 (0.157) | 0.412 (0.089) | 0.545 (0.019)\* |
| Engaging the Team | 0.367 (0.134) | 0.554 (0.017)\* | 0.104 (0.681) | 0.396 (0.104) | 0.293 (0.237) |
| Holding to Account | 0.216 (0.389) | 0.578 (0.012)\* | 0.277 (0.266) | 0.210 (0.404) | 0.088 (0.730) |
| Developing Capability | 0.158 (0.532) | 0.558 (0.016)\* | 0.152 (0.548) | 0.144 (0.567) | -0.076 (0.765) |
| Influencing for Results | -0.101 (0.689) | 0.103 (0.685) | 0.029 (0.909) | -0.148 (0.557) | 0.032 (0.899) |

\* p < 0.05 \*\* p < 0.01