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## A Survey of Emotional Well-being Among Irish Third Level Educators

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# EMOTIONAL WELL-BEING AMONG IRISH THIRD LEVEL EDUCATORS

A Survey of Emotional Well-being Among Irish Third Level Educators

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### Abstract

This study aimed to gain baseline scores of perceived levels of work-related stress, self-efficacy, emotional intelligence and well-being for Irish third level educators. A questionnaire was designed to achieve this, including an open-ended question asking participants to note their attitudes and beliefs towards training in the area of social and emotional skills. The questionnaire received 494 responses, 185 (37%) university, 238 (48%) institute of technology, 59 (12%) college of education and 18 (3%) other. Statistical analysis using a one-way ANOVA found a significant difference, with higher levels of work-related stress being reported by university lecturers in comparison to institute of technology lecturers. Content analysis of the open-ended question indicated that participants made most frequent references to organisational culture, the breadth of work in the role of a lecturer, aspects of social support and opinions regarding coaching. The findings indicate that the changing nature of higher education appears to have an adverse impact on stress levels for staff in this sector.

*Keywords:* emotional well-being, stress, organizational culture, college, university, attitude, beliefs, training, comparison

## A Survey of Emotional Well-being Among Irish Third Level Educators

### 1. Introduction

Higher education (HE) in Ireland is currently undergoing several transitions. Current socioeconomic circumstances have led to policy changes implemented across the HE sector, as was seen in the Croke Park (2010) and Haddington Road agreements (2013). These plans outline several changes deemed necessary for the public sector to contribute to the regrowth of the Irish economy following one of the most severe recessions the country has experienced. Key features of these agreements include the reduction of staff numbers, reduction of salaries, cuts to funding, increased working hours and an increase in workload.

Simultaneously, the HE sector committed to undergoing further transformations as outlined in the *National Strategy for Higher Education to 2030* (2011). Three core areas were identified as being the focus of change: teaching and learning, research and engagement with the wider community. According to the report, these elements must be addressed for HE to successfully evolve to meet the future demands of a changing society.

An emphasis was placed on the changing dynamic of social and cultural trends and how HE must be prepared to meet the needs of future students. By addressing the three core areas, it is suggested that these amendments will keep Ireland at the international forefront of HE (*National Strategy for Higher Education to 2030*, 2011).

Furthermore, the Irish HE sector will have to be adequately prepared for new trends of Irish students studying abroad and the increase of international students coming to Ireland to study. This process involves collaboration with institutions on a global scale. In summary, this strategy committed HE to undergo several transformations at both local and global levels.

It is generally agreed that the suggested changes are necessary for both national economic growth and to further progress the HE sector, however, many implications arise from such policy changes and academic institutions have had to adapt and change their

organisational culture to implement such rigorous developments. In recent years, the importance of human capital has been emphasised and it has been argued that one of the roles of HE is to educate and prepare graduates to meet future labour market demands (McGuinness, Bergin & Kelly, 2012).

Given the changes to HE policy and structure in Ireland, it is possible that this has caused an adverse impact on staff working within the education sector. A recent study found that third level educators in Ireland are reporting very high levels of perceived stress at work (Kenny, 2015). Using a work-related stress measurement tool developed by the UK Health and Safety Executive, the study found that its population sample (n=1,131) reported various issues such as excessive workload, unrealistic deadlines and lack of support provided by management to be contributing to their increased levels of work-related stress (Kenny, 2015).

Work-Related Stress (WRS) is defined as an individual's response to their work environment which causes them to feel unable to cope with the demands placed on them (HSA, 2016). The World Health Organisation (WHO) have carried out numerous studies, which have consistently found WRS to be associated with poor physical and psychological health as well as having an adverse impact on overall well-being (WHO, 2016).

Research conducted by the European Agency for Health and Safety (2013) investigated what aspects of work contribute most to WRS. Based on 16,622 interviews, the three leading causes for WRS were identified as job reorganisation or job insecurity (72%), excessive workload (66%) and inappropriate behaviour due to bullying or harassment (59%), additionally, 50% of respondents reported that stress is not managed well at their organisation (EU OSHA, 2016). Furthermore, the EU OSHA's 2014/2015 statistical report states that the cost of WRS to the EU is around €240 billion per annum, of which €1.5 billion relates to Ireland, in direct medical costs and indirect costs such as absenteeism and sick leave. In

addition to this, their report states that approximately a fifth of staff turnover may be due to stress in the workplace (EU OSHA, 2016).

The impact of WRS is economically very costly, as can be seen from the figures above. Additionally, the impact it has on the individual may become pernicious and can cause a serious threat to their mental well-being (WHO, 2016). The findings of Kenny's (2015) survey showed very high levels of work-related stress in lecturers. However, it only focused on staff working within the Institute of Technology (IOT) sector of Ireland. As with all institutions, there are differences in organisational policies. For example, staff within Irish universities are required to lecture 24 hours across a 12-week period for each 5-credit module they teach. The full workload associated with delivering modules is understood to be inclusive of preparation of lectures, contact time with students outside of the classroom, setting and correcting course assignments, setting and correcting examinations and supervising and visiting externally placed students. In addition to this, allowances are made for research such that the overall teaching load is ordinarily reduced for lecturers who are research active and the option of sabbatical leave is also available to staff (HEA, 2014).

In comparison, staff in IOTs are required to lecture 16/18 hours (lecturers/assistant lecturers) per week over a 35-week period. Some IOTs have increased the required lecturing hours to 18/20 under the Croke Park agreement (2010). There are no provisions offered in academic contracts for research or external engagement for staff in IOTs. However, this may be provided on a local level within specific institutions. In addition to this, tasks related to setting and correcting of exams and coursework are considered to be outside of the typical working day; academic staff are compensated separately for undertaking these activities. There is no option to take sabbatical leave within an IOT (HEA, 2014).

As is shown by the EU OSHA (2016) research the adverse consequences of WRS can severely impact both the individual and the organisation. Therefore, it is important to

examine all factors, across all education sectors, which could be contributing to perceived levels of work-related stress. Kenny's (2015) study was significant as it was the first of its kind to focus on staff within the HE sector in Ireland. However, it was also commissioned by the Teachers' Union of Ireland, which is the only union that represents staff of IOTs. In order to gain a full understanding of the effects of WRS within the education sector research must be inclusive of staff from all types of institutions.

It is not only necessary to report levels of WRS, but it is of utmost importance to critically assess interventions, which may be of benefit to reduce WRS and increase overall well-being for educators in HE. Furthermore, under Irish health and safety law, it is the responsibility of employers to ensure that all workplace hazards are assessed, and adequate strategies are put in place for their prevention (HSA, 2016).

One intervention which is worthy of assessment is the application of theory from the field of emotional intelligence (EI) using coaching psychology methods. EI enables the accurate emotional appraisal of others and ourselves. With this skill an individual can then appropriately express those emotions (Salovey & Mayer, 1990). To date, there are three models of emotional intelligence. The first views EI as an ability, similar to cognitive intelligence (Salovey & Mayer, 1990). The second places emotional and social intelligence in the taxonomy of personality (Petrides, 2011), and the third uses a mixed methods approach blending the conceptualisation of the ability and trait models (Bar-on, 2004).

The mixed theory of EI has an overall aim to increase the well-being of individuals by focusing on social skills development. The importance of this approach has been demonstrated by its predictive validity of human performance and its teachable qualities. Studies have found that it can be utilised to raise individuals' self-awareness of their emotional and social skills and harness their strengths to improve certain areas of their lives (Bar-On, 2004; Devine, Meyers & Houssemand, 2013). It has been used in a wide array of

educational and organisational settings to increase individual effectiveness, self-actualisation, well-being and performance (Anand, 2010; Bond & Manser, 2009; Chatterjee & Kulakli, 2015).

Research within an educational context has found that teachers with higher levels of EI have increased levels of self-efficacy (Penrose, Perry & Ball 2007) which in turn can lead to reduced levels of WRS and increased job satisfaction (Dicke, Parker, Holzberger, Kunina-Habenicht, Kunter & Leutner, 2015; Raveendran & Manikandan, 2012; Reilly, Dhingra & Boduszek, 2014). However, to date research in this area has focused on the provision of EI coaching to teachers working in the primary and secondary sectors and this has yet to be assessed in a third level context.

Studies have found emotional intelligence (EI) and its application in the workplace may have benefits for the individual. A meta-analysis of 19,815 articles reviewed the existing literature on the plausibility of EI being an indicator of health. Results found a highly significant, positive relationship exists between EI and both physical and mental health (Martins, Ramalho & Morin, 2010). It has also been found that EI training or coaching may be an effective intervention to reduce work-related stress and consequently improve well-being (Littlejohn, 2012). Coaching psychology has become a robust method of helping individuals to achieve optimal states of functioning, increase their overall wellbeing and improve their levels of emotional intelligence (Boniwell, Kauffman & Silberman, 2014; Seligman, 2007).

A randomised control study investigating the benefits of coaching using quantitative measures found that short-term coaching may increase resilience, workplace well-being, goal attainment and reduce depression and stress when compared to a control group (Grant, Curtayne & Burton, 2009). The same study also used qualitative methods which indicated that participants believed coaching helped increase their self-confidence, self-awareness and



interpersonal skills. These results suggest that short-term coaching may be an effective way to improve well-being and relieve work-related stress, particularly at a time of organisational change (Grant et al., 2009).

This study aims to address this knowledge gap by analysing results of a questionnaire which sought to establish baseline levels of work related stress, well-being, emotional intelligence and self-efficacy across all sectors of HE in Ireland. The results of this analysis will provide data as to the levels of these variables and how they are affected across different educational sectors. A content analysis of an open-ended question will also provide insight into the current attitudes and beliefs of teaching staff in HE institutions towards coaching in the area of social and emotional skills.

A study of this kind has the potential to behove higher education institutions to embrace and explore all avenues, which may potentially improve the well-being of their employees. Additionally, the findings may be used to design and implement appropriate interventions that higher education institutions might use to protect their employees against the negative impact of WRS.

## **2. Method**

### **2.1 Participants**

Participants were recruited nationally by email from all higher education institutes in Ireland. The response rates were 37% university, 48% institute of technology, 12% college of education and 3% other. Participants were contacted by email addresses obtained from their institution's online staff directory and were invited to take part in an online survey regarding their emotional well-being.

## 2.2 Materials

The online questionnaire was created using Survey Monkey. It consisted of four scales: work-related stress (HSE, 2005), the Teachers' Sense of Teacher Efficacy Scale (TSTES) (Tschannen-Moran & Hoy, 2001), The Warwick-Edinburgh mental well-being scale<sup>1</sup> (Tennant et al., 2007) and a scale designed to measure perceived levels of emotional intelligence (questions constructed from EQi 2.0 and competency definitions). The survey also included an information sheet which informed participants of the nature of the research, an electronic consent form, questions regarding their demographic information and their current working hours. Finally, some questions were included regarding participants' interest in receiving coaching in the areas of emotional and social skills. This aimed to elicit data regarding their attitudes and willingness to participate in coaching sessions.

**2.2.1 Scales.** Levels of work-related stress (WRS) were assessed using a questionnaire developed using the HSE indicator tool. It consists of 35-items which are classified into seven subscales relating to the primary stressors: demands, control, manager's support and peer support, relationships, role and change. Participants are required to respond to statements such as "I have unrealistic time pressures" using a five-point Likert scale where 1= never, 5= always. The overall reliability coefficient for the 35 items is 0.92 (Brookes, Limbert, Deacy, O'Reilly, Scott & Thirlaway, 2013). The wording of some items was altered to reflect appropriate terminology for the higher education sector.

Tschannen-Moran and Hoy (2001) developed the short form of the TSTES in 2001. It is a 12-item scale in which participants are presented with a question relating to their levels of efficacy in their teaching skills, e.g. "how much can you do to help your students' value learning?" They are then asked to respond on a nine-point Likert scale where 1= nothing, 9=

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<sup>1</sup>The Warwick-Edinburgh Mental Well-being Scale was funded by the Scottish Government National Programme for Improving Mental Health and Wellbeing, commissioned by NHS Health Scotland, developed by the University of Warwick and the University of Edinburgh, and is jointly owned by NHS Health Scotland, the University of Warwick and the University of Edinburgh.

a great deal. It consists of three subscales: engagement, instruction, and management. It has a high overall reliability coefficient of 0.91 total score and 0.86, 0.86, 0.81 respectively for the three subscales. The wording of some items was altered to reflect third level teaching, as this scale was designed to assess efficacy in primary and second level settings.

The Warwick-Edinburgh mental well-being scale (WEMWBS) measures both hedonic and eudaimonic aspects of mental well-being. WEMWBS consists of 14 positively worded items which relate to subjective well-being and psychological functioning. Participants are required to reflect on the frequency of positive experiences over the previous two weeks. Answers are recorded on a five-point Likert scale where 1= none of the time, 5 = all of the time. Validation analysis of this tool has found it has high internal consistency with a Cronbach's alpha coefficient of 0.89 (Stewart-Brown & Janmohamed, 2008).

Insight into perceived levels of emotional intelligence was gleaned using a scale consisting of 19 questions based on the competencies outlined in the EQi 2.0 Bar-On model of emotional intelligence. Participants indicated their responses to questions such as “Do you feel it is easy to remain hopeful and resilient despite occasional setbacks?” on a five point Likert scale where 1=never, 5 = always. It is important to note that this is not a psychometric scale; it is only intended to provide data on perceived levels of emotional intelligence. It does not measure abilities or traits with regards to emotional intelligence.

### **2.3 Procedure.**

The questionnaire went live on 15<sup>th</sup> of April 2016. A cover email containing information about the research and a link to the survey was nationally distributed to teaching staff at higher education institutions. When participants clicked on the link in the email, they were brought to an information sheet, which explained the nature and purpose of the study, how data would be collected and stored anonymously. The next page of the survey contained an electronic consent form. Email addresses were obtained from institutions websites via

their online staff directory. Some institutions required the research to be cleared by their internal ethics committees. After being cleared, the questionnaire was then distributed to staff.

Data from Survey Monkey was downloaded in SPSS and Microsoft Excel file formats. Initial cleaning of the raw data involved changing written responses to numerical format (this included responses for number of years lecturing and number of hours worked per week, etc.). Two responses were excluded as the individuals did not lecture. Responses that were collected after 30<sup>th</sup> June 2016 were excluded (n=3). This resulted in a total sample of 489 responses. For the current analysis only mean WRS<sup>2</sup> was considered. Responses with 10% or more of the WRS answers missing were excluded (n=68)<sup>3</sup>. The final sample for WRS analysis was then 421.

Educational sector information was coded based on respondent's current work location into the following categories: University, Institute of Technology, College of Teacher Education and 'Other'. Where a current work location was not supplied educational sector was determined from the respondent's selection for their sector. Descriptive statistics for mean WRS by sector are shown in Appendix 2.

An optional feedback comment box was included at the end of the survey. Respondents were asked if they would like to provide any additional comments or feedback regarding emotional and social skills or the provision of coaching in an open-ended comment box. There were 93 (19%) responses recorded on which qualitative analysis was carried out.

## 2.4 Data Analysis

**2.4.1 Statistical analysis.** After obtaining baseline scores for the four scales, a one-way ANOVA was employed to compare means across the different education sectors.

**2.4.2 Content analysis.** A combination of quantitative and qualitative content analysis was carried out on the responses (n=93). Beginning with the quantitative content

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<sup>2</sup>The original WRS instrument from the HSE measures across a range of subscales, but for results here an overall mean was taken for each respondent's answers.

<sup>3</sup>65 out of the 68 of these had no WRS responses.

analysis, this involved reading through the responses several times to become familiar with the data. The data was organised using an Excel spreadsheet. Initial codes were recorded while reading through the data. These were then refined to provide categories for the construction of a coding frame. This process was carried out several times until a robust coding frame was produced which accounted for all variations in the data. Units of the data were then allocated to their appropriate category within the coding frame.

The final aspect of the quantitative element of this analysis involved quantifying the amount of units per category within the coding frame. This process produced basic descriptive statistics, which were then presented in bar charts. Rigour and plausibility of the analysis were then ensured by inter-coder reliability in which a second researcher coded the data. Where some discrepancies were found, the researchers discussed and evaluated the codes until a mutual agreement was met.

To decode the meaning and values within the data, qualitative content analysis was then used. The addition of this form of analysis allowed for any individual statements to be included, as the results are not intended to be generalised. Rather it is inclusive of opinions and thoughts provided in the data, which may have only occurred once. Without this form of qualitative content analysis, these important details may have been overlooked.

The use of qualitative content analysis uses the constructionist assumptions that the researchers own experiences and opinions are critical to the analysis process (Elo & Kyngäs, 2008). To prevent these aspects affecting the validity of results, the researcher employed reflexivity in the form of journal notes while going through the analysis. This involved being constantly aware of the preconceptions brought to the analysis and attempting to approach the data with an open mind at all times. Transparency of results will also be provided in the next section to allow readers to see how conclusions were drawn.

### 3. Results

#### 3.1 Statistical Results

A one way between sectors ANOVA of mean WRS found a statistically significant difference in mean WRS<sup>4</sup> across sectors ( $F(3, 417) = 4.125, p = .007$ , effect size  $\eta^2 = .029$ ). See Table 1. Levene's test for homogeneity of the variances indicated that there was insufficient evidence to reject the hypothesis of equal variances across sectors ( $F(3, 417) = 0.839, p = .473$ ). Both a Shapiro-Wilk's test and a normal QQ plot on the model residuals indicated that residuals were potentially normally distributed ( $W(421) = .996, p = .463$ ). Post hoc comparisons using the Tukey HSD test suggest that mean WRS for university responses ( $M = 3.22, SD = 0.32$ ) were significantly different than mean WRS for institute of technology responses ( $M = 3.12, SD = 0.31$ ),  $t(338) = 2.90, p = .021, d = 0.32$ . There were no other statistically significant differences. For descriptive and post hoc results see Appendices 2 to 4.

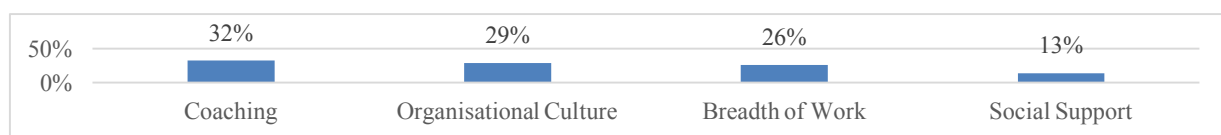
Table 1. *Results from one way ANOVA*

**ANOVA**  
Mean WRS

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.279	3	.426	4.125	.007
Within Groups	43.112	417	.103		
Total	44.392	420			

#### 3.2 Content Analysis

Figure 1. *Categories and frequency of codes*



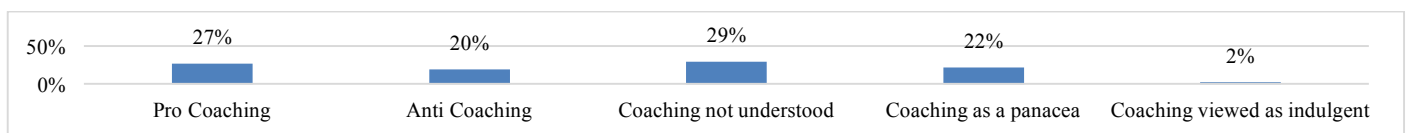
The main categories, identified within the data as a result of the content analysis, were references to *coaching, organisational culture, breadth of work and social support*. The

<sup>4</sup>Technically it is mean "mean WRS", but this is avoided for the sake of simplicity.

proportion and frequency of these codes being referred to throughout the data can be seen in Figure 1. Due to the limited scope of this paper, only the highest frequency codes will be illustrated with qualitative examples, for references to all codes please see Appendix 1.

**3.2.1 Coaching codes.** The category ‘coaching’ was generated by any codes in which coaching or training was referred to. The main sub categories were *pro or anti coaching*, *coaching not understood*, *coaching being used as a panacea* and *coaching being viewed as indulgent*.

Figure 2. *Coaching category and frequency of codes*



As can be seen from Figure 2, the nature of coaching not being understood occurred most frequently (29% of the time). It was evident from the data that coaching was viewed by respondents as being systematic and in favour of the organisation. Qualitative analysis of the coding provides further examples of how this code was generated:

*I think coaching as a 'solution' implies the problems lie with me and my abilities to cope. I regard myself and many of my colleagues as very resilient and adaptable etc. The structural changes within the IOT work context and the poor management capacities are where I think problems lie. I will not engage in processes that attempt to make me 'deal with' these things.*

This code was further demonstrated in the following extract:

*Not knowing the manner in which 'coaching' is envisaged I cannot be sure if this is an apt observation but it appears that the idea of coaching someone to improve their emotional skills is fraught due to the conflict between individual specificity and a universalising coaching framework within which there is invariably a 'right' answer or approach.*

However, although the nature of one to one coaching was not fully understood, participants were in favour of coaching more often than they were opposed. This is demonstrated in the (27%) pro-coaching codes versus (20%) anti coaching:

*Emotional and social skills would be very beneficial for the workplace. I often find that people overreact when asked to do something at work due to an emotional problem which they have and they are mis-directing this anger at the person in front of them. This is not acceptable and maybe if people had training in this area they would realise this. I find there are people at work who you have to tiptoe around and end up carrying their workload as well as your own as they are bringing their personal problems to work. Coaching could really help.*

Another interesting perspective on coaching was the view of it being used as a panacea or a universal fix for all that is wrong in higher education. Respondents expressed their concerns that management would use coaching as their way to fix issues with work related stress as opposed to addressing the real causes. This code appeared frequently throughout the data (22%). The final code addressed in the coaching category was the view of coaching being indulgent (2%):

*Not interested, too much self-indulgence, not enough resilience.*

The expression ‘indulgent’ in this context is interesting and demands further interpretation.

The comment below by one participant expands on this interpretation:

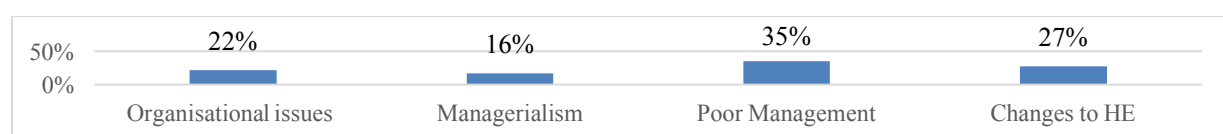
*Often when I'm feeling stressed the last thing I have time for is indulging myself which is what coaching sounds like! Increasingly I find myself sleeping badly because of pressure of work, getting ill etc. - I cannot see how coaching would impact on this as it is systemic. The pace of work has increased dramatically for everyone in my organisation, including management, and I don't see how this can be improved in the short-term.*



This again demonstrates a lack of understanding of the nature of coaching as it aims to increase resilience and the frequency of positive emotions. It is worth noting here that research on the effect of short term coaching has demonstrated its potential to increase well-being and resilience.

### 3.2.2 Organisational culture.

Figure 3. *Organisational Culture and frequency of codes*



The category ‘organisational culture’ was developed to house all the codes in which references were made to *organisational issues*, *managerialism*, *poor management* and *the impact of changes to HE*. The category most frequently commented on was aspects of ‘poor management’ (35%) within institutions. The extracts below indicate how management is viewed in a negative manner:

*My department head circles the classrooms to see that I am where I am supposed to be. A 15 year old child would object to the lack of autonomy. I am frustrated. I feel like I am a production line worker, paid the salary of a professional. None of the above is being done to improve education. The purpose appears to be linked to an attitude of keeping lecturers in line and not the promotion of learning.*

The adverse impact of poor managerial and leadership skills on staff members is portrayed below:

*Morale and energy and commitment are at an all-time low in the institution where I work and it is very disheartening. Employees, both academic and non-academic, are treated very poorly and there is little or no support from management, especially for those who are pursuing additional postgrad degrees or trying to write/do research.*

The code that had the second highest number of referrals was changes to higher education (27%). Here, participants mentioned how changes to the structure of HE was having an adverse impact on their well-being. This code included references to the change of pace and work load over the past four years and how these have increased dramatically:

*Lecturing is full on during the academic year and with each passing year more and more additional tasks are becoming part of the role. There are higher emotional demands on lecturers now than any time in the past. I am currently capable of coping, luckily I don't have many external pressures. However, I notice an increase in stress levels among many staff members with each year; I think the provision of such coaching sessions is necessary.*

References to organisational issues occurred at a rate of (22%), these codes included lack of job security due to temporary contracts, few opportunities for promotion and competition among staff:

*There are very few opportunities for promotion, so the competition among staff is extremely strong. This is a fact of life for the academic career in Ireland and all the coaching in the world won't change this.*

Finally, the code of managerialism contained nuances in relation to the prioritisation of efficiency, commercialisation, cost effectiveness and productivity:

*In the context of changing institutional cultures I place the challenges fairly squarely within globalised performativity culture and it is assumed that the individual can adapt, sometimes it is not good to adapt...some things are radically wrong in higher education and the individual cannot change that. Coaching and individualised training are used as ways of coping and offered by institutions but that does not alter the fact that higher education has become factory like.*

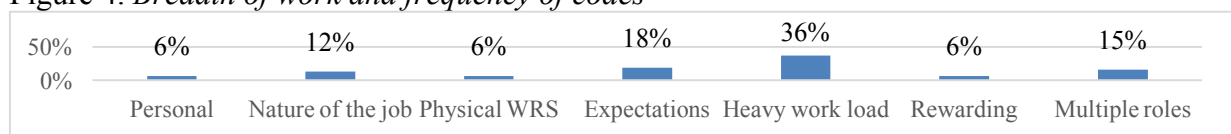
This point was further demonstrated by the following comment:

*What is being suggested 'emotional and social skills' by the research q/a is important & commendable. Empathy had diminished in the past decade in the workplace, being replaced with pseudo-efficiency & pseudo-managerial-ism, creating unpleasant working environments.*

Further examples of these codes can be found in Appendix 1.

### 3.2.3 Breadth of work.

Figure 4. *Breadth of work and frequency of codes*



There were frequent mentions of the breadth of work of a lecturer and the responsibilities that come with the job. As can be seen from Figure 4, even the attempt to narrow down and group the codes was difficult, emphasising the non-prescriptive nature of academia. However, the most voiced concern within this category was the heavy work load (36%) faced by staff members and how this has increased in recent years:

*...need a recognition of the demands of the lecturing job, and the removal of mutually conflicting demands e.g. the requirements of course co-ordination, mentoring students, developing courses, assessment and continuous professional development in my own area (not teaching or other workshops, but training in industry standards for my role as lecturer in \*\*\*\*\*). The increased workload has taken a huge toll on my colleagues in the sector - this is not going to be improved by coaching and needs to be rectified urgently.*

It is evident from this extract that variety of jobs within the role of a lecturer is taking its toll.

It is this factor that is cited as being a direct cause of work related stress. Understandably, the task of engaging in coaching is seen as yet another demand on an already stretched work

schedule. Other codes which occurred in this category included the pressure of high expectations placed on academic staff in a range of areas (18%):

*I have done quite a bit of work in the area of emotional and social skills on a personal and professional level. However I do not feel that there is enough attention to this area for lecturers in third level institutions. Because of the academic nature of the work, emotions are attended to and respected less than rational and cognitive inputs. I feel that colleagues in third level institutions experience a lot of stress in this area. Much of it is also due to the excessively high expectations of lecturers on a range of levels, and the juggling of tasks that is necessary in this regard.*

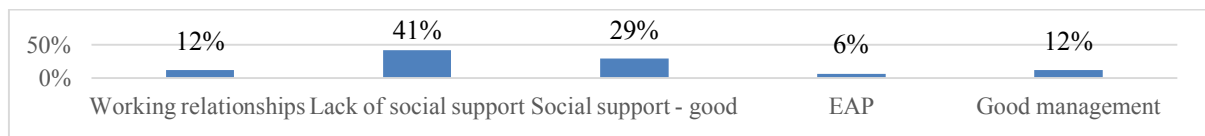
Also mentioned within the data were references to the nature of a job which has pressure and performance embedded in its structure (12%), how personal issues affect work and work related stress (6%), and the multiple roles which lecturers play in relation to being a teacher, mentor and informal counsellor to students (15%):

*The contemporary student is quite complex & it can be very difficult to adapt to each & every situation as it develops. It appears that supports for dealing with this contemporary phenomena are lacking, & this is having a detrimental effect on both lecturing staff & students.*

For full examples of these codes please see Appendix 1

### 3.2.4 Social support.

Figure 5. *Social support and frequency of codes*



The final category that emerged from the data was *social support*. This category varied in terms of some respondents reporting social support in work as significantly diminishing (41%). The extract below is indicative of how a combination of heavy workloads and pressured timetables can leave little room for socialising and developing collegiality among teaching staff:

*Staff with personal mental or emotional issues are not supported at all in my opinion. Very little comradeship between staff members - some just come in and go straight to class and never mix or talk to anyone. Lecturing can be very lonely and isolating. Very little outside socialising takes place so after 7 years I don't still know everyone's name in the department of approx 30 people.*

The experiences of isolation are further portrayed in the following extract:

*I'm not sure if work on emotional and social development or work on how to manage within the work environment is more relevant. Heavy workloads and the number of things packed in a day make it difficult to stop and check in with colleagues, so I think that can increase feelings of isolation, though I personally have good emotional supports. Multiple demands for performance across teaching, research and community engagement combined with intrinsic internal motivations to perform & do well, can threaten collegiality. Also when people across a team are under pressure to get things done, it can cause people to batten down the hatches, look after their own patch in order to survive. I just need to leave work and leave work behind.*

However, others did report having strong social networks in work and referred to them as being a source of stress relief and reliability (29%). Only 12% reported having great support from management and indicated that this also relieved work related stress and made their working environment more pleasurable. Please see Appendix 1 for references to these codes.

#### **4. Discussion**

The results from this study are supportive of Kenny's (2015) finding that third level educators are reporting high levels of work-related stress. However, these results build on the previous research, as it represents participants across all higher education sectors in Ireland. A significant difference was observed in mean WRS scores, showing greater levels in university staff in comparison to staff from institutes of technology. Further statistical analysis will be required to attempt to determine the details behind the sector effect, as sector could be confounded in some way, such as with age, or years of lecturing, which may interact. These were not investigated for the current study. However, drawing on results from the qualitative analysis, it is possible that certain differences in contract requirements between sectors may be responsible for the effect observed. For example, although allocated more time for research, there is possibly more demand and pressure to publish in top-tier journals, as suggested in the qualitative data. This may have a direct impact on WRS. In addition, this study supports previous research by the EU OSHA (2014) indicating that the principle causes for WRS include workload and organisational issues such as job security and elements of social support.

An insight has been gained into the beliefs and attitudes of lecturers towards coaching in the area of social and emotional skills. The findings illustrated that coaching, for the better part, is either misunderstood or misinterpreted. The nature of emotional intelligence coaching is designed to be a one to one session, in which the aim is to increase the individuals overall

well-being by focusing on their strengths and looking at areas of improvement. It is not a group coaching session similar to training or up-skilling programmes run by organisations.

One to one coaching is quite a personal experience, in which sessions take a person-centred approach, and focus on the individuals' unique emotional intelligence profile. They are not intended to be a one size fits all solution, or to exclusively focus on stress management. This was a possible oversight on the researcher's behalf by not providing an adequate explanation of what EI coaching entails and the nature of its delivery. It is important to address this issue, as previous research has found that coaching has the potential to increase resilience, goal attainment and work place well-being. It may also be an effective tool to reduce depression and stress in a time of organisational change (Grant et al., 2009).

Furthermore, it is evident that coaching is viewed as a panacea undertaken by management to address issues at an organisational level. The WHO (2016) identify 'Organisational Culture' as the norms and ways of doing things within a workplace, as having a significant effect on the levels and risks associated with WRS. Organisational culture stems from managements' organisation of work, processes, practices and procedures. Results from this study and previous research highlight the implications of changes to organisational culture and how this is affecting levels of WRS on staff in this sector. It is important for management to understand these factors as addressing them may reduce levels of WRS for their staff.

There were several limitations to this study, which should be improved for future research. It is important to note the timing of the questionnaire concerning the above results. The questionnaire was distributed at the end of the 2015/2016 academic year. This is a particularly stressful time for all academic staff. However, staff in IOTs may have some time off in the summer months, whereas academic staff in a university are expected to work on their research throughout this period. Secondly, the use of a validated emotional intelligence

scale would have provided more robust data. However, most scales available are expensive to administrate, and those that are free for research purposes have publication limitations.

Future research is planned to analyse the relationship between self-efficacy, work related stress, well-being and emotional intelligence to investigate the effect that each variable has on one another and if positive correlations exist. This may be informative to the critical analysis of interventions, aimed at reducing work related stress.

The results of this study support previous research that academia is non prescriptive, suggesting that a more localised approach should be taken to further understand this research topic. A possible area of interest for future research would be to employ a more in-depth qualitative approach, using semi-structured interviews to further analyse the impact of WRS and changes to HE and how this is affecting lecturers' well-being. Another area which could be examined is why certain individuals would be opposed to coaching in the area of emotional intelligence, despite reporting high levels of WRS.

Higher education in Ireland is undergoing significant changes, and as per the plans outlined in the *National Strategy for Higher Education to 2030* (2011) it is evident that it will continue to do so. Interventions such as coaching will evidently not be a solution to structural issues. However, there is a wealth of evidence to suggest it can reduce work-related stress and improve overall welling (Bar-On, 2004; Littlejohn, 2012; Martins et al., 2010). If HE is to make a successful transition, it is important that the faculty at its core are offered ways to improve their health and well-being. It is the responsibility of such institutions both on a legal and ethical level to begin to investigate and critically research appropriate interventions, which can be delivered to staff members in the higher education sector.



## References

- Anand, R. (2010). Emotional intelligence and its relationship with leadership practices. *International Journal of Business and Management*, 5(2), 65–76.  
<https://doi.org/10.1108/02683940910922546>.
- Bar-On, R. (2004). The Bar-On emotional quotient inventory (EQ-i): Rationale, description and summary of psychometric properties. . In G. Geher (Ed.), *Measuring emotional intelligence: Common ground and controversy* (pp. 111-142). Hauppauge, NY: Nova Science Publishers. Retrieved from <http://psycnet.apa.org/psycinfo/2004-19636-006>.
- Bond, B., & Manser, R. (2009). *Emotional intelligence interventions to increase student success*. Ontario: Higher Education Quality Council of Ontario. Retrieved from <http://www.yorku.ca/retentn/rdata/Emotionalintelligence.pdf>.
- Boniwell, I., Kauffman, C., & Silberman, J. (2014). The positive psychology approach to coaching. In T. Bachkirova, E. Cox & D. Clutterbuck (Eds.), *The Complete Handbook of Coaching* (2<sup>nd</sup> ed., pp. 157–169). London: Sage Publications.
- Brookes, K., Limbert, C., Deacy, C., O'Reilly, A., Scott, S., & Thirlaway, K. (2013). Systematic review: Work-related stress and the HSE management standards. *Occupational Medicine*, 63(7), 463–472. <https://doi.org/10.1093/occmed/kqt078>.
- Chatterjee, A., & Kulakli, A. (2015). An empirical investigation of the relationship between emotional intelligence, transactional and transformational leadership styles in banking sector. *Procedia - Social and Behavioral Sciences*, 210, 291–300.  
<https://doi.org/10.1016/j.sbspro.2015.11.369>.
- Devine, M., Meyers, R., & Houssemand, C. (2013). How can coaching make a positive impact within educational settings? *Procedia - Social and Behavioral Sciences*, 93, 1382–1389. <https://doi.org/10.1016/j.sbspro.2013.10.048>.

- Dicke, T., Parker, P. D., Holzberger, D., Kunina-Habenicht, O., Kunter, M., & Leutner, D. (2015). Beginning teachers' efficacy and emotional exhaustion: Latent changes, reciprocity, and the influence of professional knowledge. *Contemporary Educational Psychology, 41*, 62–72. <https://doi.org/10.1016/j.cedpsych.2014.11.003>.
- Elo, S., & Kyngäs, H., (2008). The qualitative content analysis process. *Journal of Advanced Nursing 62*(1), 107–115. <https://doi.org/10.1111/j.1365-2648.2007.04569.x>.
- European Agency for Health & Safety at Work (2016). *Cost of work-related stress to business and key warning signs*. Bilbao: European Agency for Health & Safety at Work. Retrieved from <https://osha.europa.eu/en/tools-and-publications/infographics/cost-work-related-stress-business-and-key-warning-signs>.
- Grant, A. M., Curtayne, L., & Burton, G. (2009). Executive coaching enhances goal attainment, resilience and workplace well-being: A randomised controlled study. *The Journal of Positive Psychology, 4*(5), 396-407. Retrieved from <http://www.solutions-centre.org/pdf/Grant-et-al-Executive-coaching-enhances-goal-attainment-resilience-and-workplace-well-being-a-randomised-controlled-study-JOPP-20092.pdf>.
- Health & Safety Authority (2016). *Work-related stress a guide for employers*. Dublin: Health & Safety Authority. Retrieved from [http://www.hsa.ie/eng/Publications\\_and\\_Forms/Publications/Occupational\\_Health/Work\\_Related\\_Stress\\_A\\_Guide\\_for\\_Employers.pdf](http://www.hsa.ie/eng/Publications_and_Forms/Publications/Occupational_Health/Work_Related_Stress_A_Guide_for_Employers.pdf).
- Health & Safety Executive (2005). *Tools and templates*. Liverpool: Health & Safety Executive. Retrieved from <http://www.hse.gov.uk/stress/standards/downloads.htm>.
- Higher Education Authority (2014). *Review of workload allocation models in Irish higher education institutions*. Dublin: Higher Education Authority. Retrieved from [http://www.heai.ie/sites/default/files/review\\_of\\_workload\\_allocation\\_models\\_in\\_irish\\_higher\\_education\\_institutions.pdf](http://www.heai.ie/sites/default/files/review_of_workload_allocation_models_in_irish_higher_education_institutions.pdf).

- Kenny, A. (2015). Work-related stress : Survey of academic staff in the Institutes of Technology Sector. *DIT Level 3, 13*, 0–30. Retrieved from <http://arrow.dit.ie/cgi/viewcontent.cgi?article=1032&context=bescharcart>.
- Labour Relations Commission (2010). *Croke park agreement*. Dublin: Labour Relations Commission. Retrieved from <http://www.per.gov.ie/en/croke-park-agreement/>.
- Labour Relations Commission (2013). *Haddington road agreement*. Dublin: Labour Relations Commission. Retrieved from <http://www.per.gov.ie/en/haddington-road-agreement/>.
- Littlejohn, P. (2012). The missing link: using emotional intelligence to reduce workplace stress and workplace violence in our nursing and other health care professions. *Journal of Professional Nursing : Official Journal of the American Association of Colleges of Nursing*, 28(6), 360–8. <https://doi.org/10.1016/j.profnurs.2012.04.006>.
- Martins, A., Ramalho, N., & Morin, E. (2010). A comprehensive meta-analysis of the relationship between Emotional Intelligence and health. *Personality and Individual Differences*, 49(6), 554–564. <https://doi.org/10.1016/j.paid.2010.05.029>.
- McGuinness, S., Bergin, A., & Kelly, E. (2012). *A study of future demand for higher education in Ireland*. Dublin: Economic & Social Research Institute. Retrieved from <https://www.esri.ie/pubs/RS30.pdf>.
- Penrose, A., Perry, C., & Ball, I. (2007). Emotional intelligence and teacher self-efficacy: The contribution of teacher status and length of experience. *Issues in Educational Research*, 17(1), 107-126.
- Petrides, K. V. (2011). Ability and trait emotional intelligence. In T. Chamorro-Premuzic, S. von Stumm & A. Furnham (Eds.). *The Wiley-Blackwell handbook of individual differences*. Oxford, UK: Wiley-Blackwell Publishing. <https://doi.org/10.1002/9781444343120>.

- Raveendran, R. B., & Manikandan, K. (2012). Self-efficacy and job stress among teachers: A meta-analysis. *International Journal of Physical and Social Science*, 2(10), 69–82.
- Retrieved from  
[https://www.academia.edu/5740928/Self\\_Efficacy\\_and\\_Job\\_Stress\\_among\\_Teachers\\_A\\_Meta\\_Analysis](https://www.academia.edu/5740928/Self_Efficacy_and_Job_Stress_among_Teachers_A_Meta_Analysis).
- Reilly, E., Dhingra, K., & Boduszek, D. (2014). Teachers' self-efficacy beliefs, self-esteem, and job stress as determinants of job satisfaction. *International Journal of Educational Management*, 28(4), 365-378. <https://doi.org/10.1108/IJEM-04-2013-0053>.
- Report of the Strategy Group (2011). *National strategy for higher education to 2030*. Dublin: Department of Education and Skills. Retrieved from  
[http://www.hea.ie/sites/default/files/national\\_strategy\\_for\\_higher\\_education\\_2030.pdf](http://www.hea.ie/sites/default/files/national_strategy_for_higher_education_2030.pdf).
- Salovey, P., & Mayer, J. D. (1990). Emotional intelligence. *Imagination, Cognition, and Personality*, 9(3), 185–211. [https://doi.org/10.1016/S0962-1849\(05\)80058-7](https://doi.org/10.1016/S0962-1849(05)80058-7).
- Seligman, M. E. P. (2007). Coaching and positive psychology. *Australian Psychologist*, 42(4), 266–267. <https://doi.org/10.1080/00050060701648233>.
- Stewart-Brown, S., & Janmohamed, K. (2008). *Warwick-Edinburgh mental well-being scale (WEMWBS). User Guide Version 1*. Warwick and Edinburgh: University of Warwick and NHS Health Scotland. Retrieved from  
<http://www.mentalhealthpromotion.net/resources/user-guide.pdf>.
- Tennant, R., Hiller, L., Fishwick, R., Platt, S., Joseph, S., Weich, S, Parkinson, J., Secker, S., & Stewart-Brown, S. (2007). The Warwick-Edinburgh mental well-being scale (WEMWBS): Development and UK validation. *Health & Quality of Life Outcomes*, 5(63), <https://doi.org/10.1186/1477-7525-5-63>.

Tschannen-Moran, M., & Hoy, A. W. (2001). Teacher efficacy: Capturing an elusive construct. *Teaching and Teacher Education*, 17(7), 783–805.

[https://doi.org/10.1016/S0742-051X\(01\)00036-1](https://doi.org/10.1016/S0742-051X(01)00036-1).

World Health Organisation (2016). *What is work-related stress?* Geneva: World Health Organisation. Retrieved from

[http://www.who.int/occupational\\_health/topics/stressatwp/en](http://www.who.int/occupational_health/topics/stressatwp/en).

## Appendix 1

## Examples of Initial Coding, Sub-codes and Categories

	<b>Coding</b>	<b>Sub coding</b>	<b>Categories</b>	
Emotional and social skills would be very beneficial for the workplace. I often find that people overreact when asked to do something at work due to an emotional problem which they have and they are misdirecting this anger at the person in front of them. This is not acceptable and maybe if people had training in this area they would realise this. I find there are people at work who you have to tiptoe around and end up carrying their workload as well as your own as they are bringing their personal problems to work. Coaching could really help. Thanks :-)	Impact of others emotions increases work load Pro coaching	Pro coaching	Coaching	C
I am not interested. This is something I would seek out in a non-work related context if I was interested.	Not interested - Outside of work	Anti-coaching	Coaching	C
I think coaching as a 'solution' implies the problems lie with me and my abilities to cope. I regard myself and many of my colleagues as very resilient and adaptable etc. The structural changes within the IOT work context and the poor management capacities are where I think problems lie. I will not engage in processes that attempt to make me 'deal with' these things.	Cause of stress Managerialism Coaching not understood	Coaching not understood	Coaching	C
... pre-suppose that emotional difficulties I may feel in relation to work can be solved just by coaching in how to deal with emotional difficulties, rather than any actual solution to the problems which caused the stress in the first place.	Coaching used to place blame on individual	Coaching as a panacea Managerialism	Coaching	C
Not interested, too much self-indulgence, not enough resilience.	Anti-coaching, self-indulgent	Coaching viewed as self-indulgent	Coaching	C
Coaching for emotional or social skills would take time out of my day that i cannot afford. I have a young child and so i cannot work more than 45 hours a week. There are very few opportunities for promotion, so the competition among staff is extremely strong. This is a fact of life for the academic career in Ireland and all the coaching in the world won't change this.	Few opportunities Difficult to progress in academia Organisational structure	Organisational issues	Organisational culture	O
I feel that my emotional and social stress in work is largely a product of conflicting work demands, sudden or unreasonable deadlines, and lack of consultation on issues which directly or indirectly affect me. As such, I would prefer solutions towards alleviating these to focus on addressing the causes rather than upskilling me to cope with difficult situations.	Work demands Work load lack of communication Management Solution to the cause of stress	Managerialism	Organisational culture	O
Morale and energy and commitment are at an all-time low in the institution where I work and it is very disheartening. Employees, both academic and non-academic, are treated very poorly and there is little or no support from management, especially for those who are pursuing additional postgrad degrees or trying to write/do research.	Morale at an all time low No support from management	Poor management	Organisational culture	O
In the context of changing institutional cultures I place the challenges fairly squarely within globalised performativity culture and it is assumed that the individual can adapt, sometimes it is not good to adapt...some things are radically wrong in higher education and the individual cannot change that. Coaching and individualised training are used as ways of coping and offered by institutions but that does not alter the fact that higher education has become factory like.	Globalised performativity Work load sociology of education Individual cannot change HE factory like	Changes in HE	Organisational culture	O
My emotional and social skills have been developed outside of work, resilience created as a result of life experience as the mother of a severely disabled child and spiritual practice and growth due to that experience rather than as a result of work place experience. i don't think you can separate work and life in this way.	Can't separate life/work Personal	Personal	Breadth of work	B

Often when I'm feeling stressed that last thing I have time for is indulging myself which is what coaching sounds like! Increasingly I find myself sleeping badly because of pressure of work, getting ill etc. - I cannot see how coaching would impact on this as it is systemic. The pace of work has increased dramatically for everyone in my organisation, including management, and I don't see how this can be improved in the short-term.	Lack of sleep Pressure physical WRS Coaching viewed as indulgent	Physical WRS	Breadth of work	B
I have done quite a bit of work in the area of emotional and social skills on a personal and professional level. However I do not feel that there is enough attention to this area for lecturers in third level institutions. Because of the academic nature of the work, emotions are attended to and respected less than rational and cognitive inputs. I feel that colleagues in third level institutions experience a lot of stress in this area. Much of it is also due to the excessively high expectations of lecturers on a range of levels, and the juggling of tasks that is necessary in this regard. I think Universities have increasing expectations in terms of workload, pressure to publish etc.	Not enough attention to SES Nature of the organisation High Demands Demands	Nature of job/organisation of the	Breadth of work	B
I am a full time PhD Student so I think that adds pressure to the working environment. In my experience part time lecturers would experience more stress juggling two / three jobs or job and research than full time so having done both I feel coaching should be tailored to part time and full time.	Workload Pressure to publish No work life balance work load Part-time lecturing Work demands Coaching tailored Multiple roles	Expectations  Heavy Workload	Breadth of work  Breadth of work	B  B
Thank you for investigating these issues. I would be interested in seeing the findings. Lecturing can be tough, isolating and challenging as well as immensely rewarding. I love my job and am passionate about the subjects I lecture. I believe it comes across to my students. However the administration and management side of this job is soul destroying sometimes. Management can be dictatorial and don't listen to the expertise and insight into academic matters that lecturing staff can provide. My colleagues are like my partners in group therapy. We keep each other sane during the tough and contentious times. I'm grateful for my friends and colleagues support. And they have mine.	Lecturing difficult isolating Rewarding Passionate for work workload and management Support from colleagues	Rewarding Poor management Working relationships Social support - good	Breadth of work	B
The contemporary student is quite complex & it can be very difficult to adapt to each & every situation as it develops. It appears that supports for dealing with this contemporary phenomena are lacking, & this is having a detrimental effect on both lecturing staff & students.	Students complex difficult to adapt No support effecting both staff and students	Multiple roles	Breadth of work	B
I'm not sure if work on emotional and social development or work on how to manage within the work environment is more relevant. Heavy workloads and the number of things packed in a day make it difficult to stop and check in with colleagues, so I think that can increase feelings of isolation, though I personally have good emotional supports. Multiple demands for performance across teaching, research and community engagement combined with intrinsic internal motivations to perform & do well, can threaten collegiality. Also when people across a team are under pressure to get things done, it can cause people to batten down the hatches, look after their own patch in order to survive. I just need to leave work and leave work behind.	Heavy workloads Isolation Busy workload - no communication with colleagues	Work Relationships	Social support	S
Staff with personal mental or emotional issues are not supported at all in my opinion. Very little comradeship between staff members - some just come in and go straight to class and never mix or talk to anyone. Lecturing can be very lonely and isolating. Very little outside socialising takes place so after 7 years I don't still know every ones name in the department of approx 30 people.	Mental or emotional issues Not supported No social support Isolating Work relationships	Lack of social support	Social support	S
Thank you for investigating these issues. I would be interested in seeing the findings. Lecturing can be tough, isolating and challenging as well as immensely rewarding. I love my job and am passionate about the subjects I lecture. I believe it comes across to my students. However the administration and management side of this job is soul destroying sometimes. Management can be dictatorial and don't listen to the expertise and insight into academic matters that lecturing staff can provide. My colleagues are like my partners in group therapy. We keep each other sane during the tough and contentious times. I'm grateful for my friends and colleagues support. And they have mine.	Lecturing difficult isolating Rewarding Passionate for work workload and management Workload Communications Support from colleagues SES	Social support - good	Social support	S

<p>We have had a bullying manager who made grown women cry. She destroyed our team and it is fractured and I feel completely unsafe at work. I use the counselling facilities through HR and find them really helpful.</p>	<p>Poor management bullying Uses EAP</p>	<p>Poor Management Bullying EAP</p>	<p>Social Support</p>	<p>S</p>
<p>My work is demanding and I work beyond the hours for which I am paid. Regardless my work is not stressful because of the strong support I receive from the Head of School. I believe that a supportive, flexible and understanding management is the key to a successful working environment.</p>	<p>Support from head of department Supportive management Successful working environment</p>	<p>Good management</p>	<p>Social support</p>	<p>S</p>



## Appendix 2

## Mean WRS descriptive statistics

## Descriptives

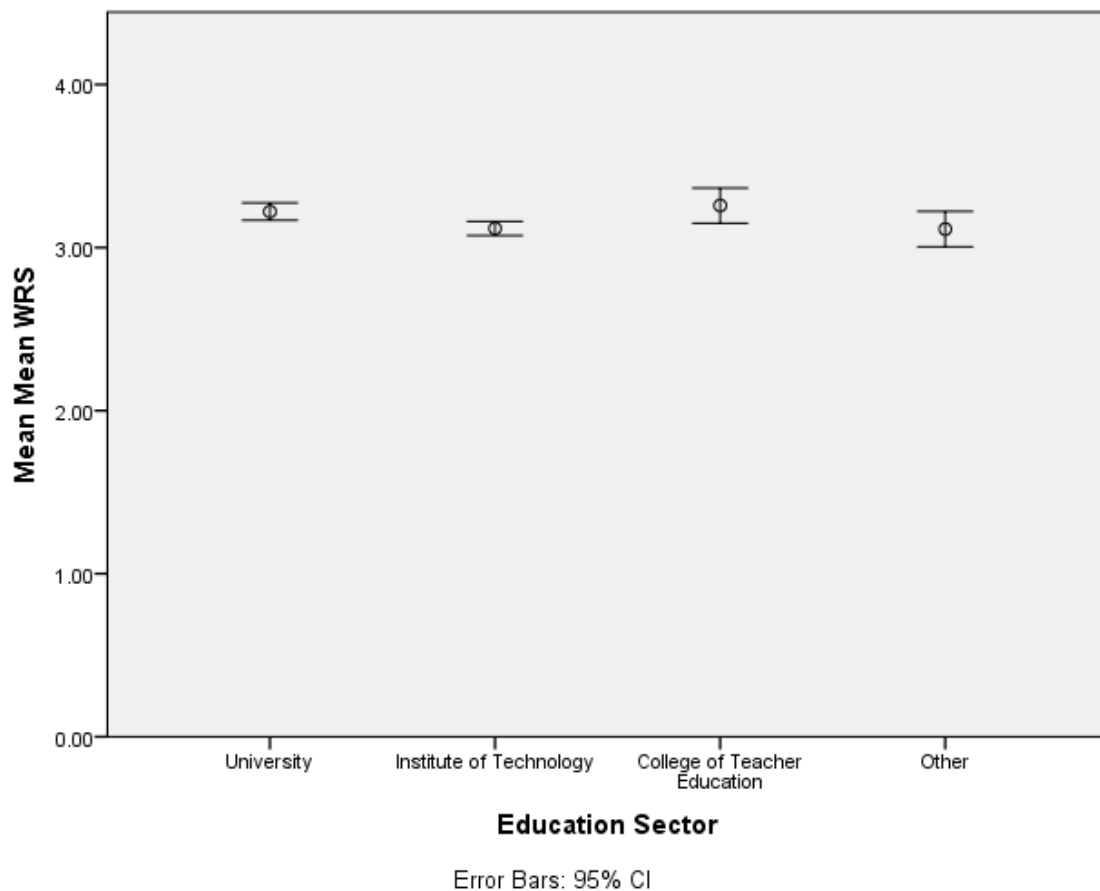
## Mean WRS

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Min.	Max.
					Lower Bound	Upper Bound		
University	136	3.2207	.31644	.02713	3.1671	3.2744	2.34	4.14
Institute of Technology	204	3.1176	.31401	.02199	3.0743	3.1610	2.38	3.91
College of Teacher Education	32	3.2579	.29930	.05291	3.1500	3.3658	2.63	3.91
Other	49	3.1136	.37640	.05377	3.0054	3.2217	2.26	3.86
Total	421	3.1611	.32511	.01584	3.1300	3.1923	2.26	4.14

## Appendix 3

## Confidence intervals for mean WRS across sectors

Graph 1. Mean of mean WRS per sector, with 95% confidence interval.



## Appendix 4

Mean WRS ANOVA by **education sector** post hoc statistics

## Multiple Comparisons

Dependent Variable: Mean WRS

Tukey HSD

(I) Education Sector	(J) Education Sector	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
University	Institute of Technology	.10309*	.03559	.021	.0113	.1949
	College of Teacher Education	-.03714	.06317	.936	-.2001	.1258
	Other	.10716	.05357	.189	-.0310	.2454
Institute of Technology	University	-.10309*	.03559	.021	-.1949	-.0113
	College of Teacher Education	-.14023	.06114	.101	-.2979	.0175
	Other	.00407	.05115	1.000	-.1279	.1360
College of Teacher Education	University	.03714	.06317	.936	-.1258	.2001
	Institute of Technology	.14023	.06114	.101	-.0175	.2979
	Other	.14431	.07308	.199	-.0442	.3328
Other	University	-.10716	.05357	.189	-.2454	.0310
	Institute of Technology	-.00407	.05115	1.000	-.1360	.1279
	College of Teacher Education	-.14431	.07308	.199	-.3328	.0442

\*. The mean difference is significant at the 0.05 level.