Workplace stress and the student learning experience

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Abstract

Purpose – To investigate the possible effects of workplace stress in academics on the student learning experience.

Design/methodology/approach – Questionnaires were designed and distributed to all academic staff at a Scottish Higher Education Institute. This measured perceived levels of stress amongst academic staff and the possible impact of this on the learning experience of students.

Findings – Stress can be seen to impact both negatively and positively on the student learning experience. However, over half of respondents considered themselves to be considerably or extremely stressed and similar levels perceive that stress causes their teaching to be "below par" thus impacting negatively on the student learning experience.

Research limitations/implications – The research was carried out in one institution and hence results cannot be generalised to cover the whole higher education sector.

Practical implications – The findings, together with a growing awareness of the impact of employee stress on organisations, emphasise the need for the institution, and individuals within it, to control stress levels to ensure the student learning experience does not suffer. The paper does not address the growing phenomenon of e-learning which may act as a stressor: further research is recommended in this area.

Originality/value – This paper highlights that the detrimental effect of stress does not only impact upon members of staff; stress may also impact negatively on the student learning experience.

Keywords Stress, Learning, Workplace

Paper type Research paper

Glossary

HSE   Health and Safety Executive
SHEI   Scottish Higher Education Institute

Introduction

According to the Health and Safety Executive (HSE, 2004), different measures of stress are not comparable, consequently it is difficult to state, with any degree of accuracy, what trends are emerging in the area of work-related stress. The situation is exacerbated by the contradictory findings reported on stress, for example, the response to stress by gender: some research indicates that women are more prone to stress than men; other research indicates that men are more prone to stress than women (HSE, 2004).

This paper investigates the trends by seeking to replicate an earlier study by one of the authors almost a decade after the original survey (Harper, 1994). The original study coincided with a number of changes in the organisation, not least of which was that the Institution had obtained university status in 1992. The replicate study examined the effects of stress in academics in a Scottish Higher Education Institute (SHEI) and the subsequent perceived impact on the student learning experience. Since, 1994, the Institution has embraced the practice of stress-reducing, personal development sessions. The institution also underwent major changes, ranging from physical relocation for some academic departments to varying degrees of restructuring in others. All departments were affected to some extent. Coupled with these changes was increased activity in the area of quality assurance to ensure the best possible learning experience for students; this too caused changes in systems and procedures. Finally, changes in teaching methods included the move to information technology solutions in the form of computer presentations, online revision and assessment, faculty intranets and the introduction and subsequent increase of e-learning.

Stress
Stress is widely accepted to have two opposite effects on individuals – positive and negative. Broadly, acceptable levels of stress help to improve the individual's performance whilst excessive amounts of stress can lead to a decreased performance. The perception of the individual determines whether or not the stressor has a detrimental effect; i.e. whether it causes physical or psychological symptoms of stress in the individual. Statt (2004, p. 86) explained this as follows:

> When we look at the psychological effects of stress we will find positive, negative and neutral aspects of the term used, illustrating once more that in psychology, so much depends on the context of the phenomenon in question and the nature of the individual's perception of it.

Effects of negative stress on the individual vary, but Siegrist (1998) demonstrated a link between high amounts of occupational stress and ill health in individuals.

In terms of the organisation, stress levels should be such that they do not cause deterioration in employee performance. In higher education, deterioration in performance not only affects the performance of the individual and the organisation, it can have a direct impact upon the learning experience for students. Generally:

> ... negative effects (of stress) include reduced efficiency, decreased capacity to perform, dampened initiative and/or a lack of concern for the organisation and colleagues (Fairbrother and Warn, 2003, p. 9).

Finlayson (2003, p. 18) explained the consequences of this for the education sector:

> Unless the wellbeing of teachers in Scotland is improved, standards of education and the educational experience of young people will suffer.

Kyriacou (1987) cited in Overland (2004, p. 5) also indicated that:

> Stress and burnout may significantly impair the working relationship a teacher has with his pupils and the quality of teaching and commitment he is able to display.

Overland (2004, p. 6) also agreed that, despite contrary evidence on the effect of stress on teaching performance:

... pupils being taught by teachers under stress are at a disadvantage through no fault of their own.

Added to this is the fact that the capability of the "people structuring and delivering the learning process" (Joy-Matthews *et al.*, 2004, p. 101) could have a positive or negative impact upon the learning process; a lecturer using the right skills to the best of their ability is more likely to have a positive effect, but ineffective or improperly used skills could have a detrimental effect on the learning experience. It may be that the student learning experience depends upon stress levels of teaching staff: the HSE (2004, p. 3) reported that occupations with "significantly higher rates of self-reported stress, depression or anxiety" included teaching professionals.

Positive aspects of stress

Many commentators noted that the "flight or fight" syndrome associated with stress could increase the performance of the individual by providing adrenaline to increase the capacity of the body to cope; this is further described by Buchanan and Huczynski (2004, p. 158) as "eustress" which has a good or positive effect and "distress" which is "the unpleasant, debilitating and unhealthy side of stress". This belief meant that some organisations have fallen into the trap of trying to provide optimal levels of stress to enhance performance. This practice according to LeFevre *et al.* (2003, p. 726) is counter-productive and runs the risk of "a real threat to quality of life for employees".

The question is: do the negative aspects of stress outweigh the positive aspects in terms of the student learning experience?

Stressors

Buchanan and Huczynski (2004, pp. 157-8) summarised some of the "typical stressors likely to arise in an organisational context"; these included:

> ... inadequate physical working environment; inappropriate job design; poor management style; poor relationships; uncertain future; divided loyalties.

Tehrani (2002, p. 8) also reported stressors as:

> ... unsympathetic organisational culture, poor communication between managers and employees, lack of involvement in decision making, bullying and harassment, continual or sudden change, insufficient resources, conflicting priorities and lack of challenge.

It is not just in the workplace that stress occurs, but of some interest for this study is the recognition that:

> ... the conflict between home and work, and the work impact on personal relationships, is stressful (Sparks and Cooper (1999) cited in Fairbrother and Warn (2003, p. 9)).

A typical example of this would be working long hours at the expense of family/domestic relationships.

Allan and Lawless (2003) identified that online students could experience stress as a result of online collaboration, but the stress associated with e-learning was not restricted to students; similarly Crouch and Montecino (1997) reported on "cyberstress" experienced by online tutors. This particular "new" stressor was not reported in the study, but will be considered in any further research undertaken by the authors as online tutoring may blur the boundaries between home and work.

Coping strategies

Pretrus and Kleiner (2003) suggested stress should be managed. They identified a threefold approach to managing workplace stress, which involved assessing the workplace in order to identify factors which could cause harmful stress, implementation of measures to reduce these, and ongoing monitoring and adjustment of the programme.

Managing workplace stress is not optional in the UK; the HSE (2004) stated:

> Work-related stress is a serious problem for organisations ... (they) can ... prevent and control work-related stress. The law requires organisations to take action.

Nevertheless, referring to Statt's (2004) statement, "individuals also have a role to play" Rees (1997, p. 36) stated:

> Suggestions, such as the need to change an autocratic style of management, even if heeded, are difficult to accomplish. Consequently, the organisational reality is often that individual managers may need to work out their own salvation.

These forms of "salvation," vary from one person to another, but, according to Buchanan and Huczynski (2004, pp. 159-60): "... consciousness raising to improve self-awareness; exercise and fitness programmes; self-help training[1], in biofeedback, meditation and coping strategies; time management training; development of other social and job interests" are emotion-focused strategies which rely on individuals to find ways to help themselves overcome feelings of inadequacy or anxiety that have been caused by stress. These contrast with problem-focused strategies, such as those proposed by Pretrus and Kleiner (2003), which are more under the control of the organisation: this includes assessing the workplace for factors that increase stress, taking steps to manage these factors and continually monitoring the effects of the interventions to determine their adequacy.

Methodology

In order to determine the extent of tutor stress, questionnaires were designed, piloted and subsequently issued, via internal mail, to all members of academic staff at lecturer and senior lecturer level (full and part-time) in a SHEI in 1994. For the follow-up survey in 2003, the same questionnaire and method of distribution was adopted for the purpose of comparison. The questionnaire covered the following areas: background information, general attitudes, support from colleagues, perceived stress levels, perceived stressors, perceived effects of stress and positive aspects of stress. Analysis of responses utilised the statistical package for social scientists where frequencies, cross-tabulations and tests for significance were calculated. Qualitative data were analysed using content analysis.

Limitations

This study used a case study approach, and whilst many in the sector will be able to identify the demands and challenges faced by staff of the SHEI, the particular circumstances are unique, so the results cannot be generalised across the sector. However, readers may well empathise with the findings. The researchers' desire to replicate the original study meant that they failed to recognise significant factors which may be new stressors in 2003 compared to 1994. As a result, no specific

questions were asked on the introduction of e-learning, for example. These are identified in the literature as possible stressors; any ongoing work by the researchers will address this aspect.

Findings and analysis

Of the 443 questionnaires issued, 124 were completed and returned, representing a response rate of 30 per cent compared to a 331 issued and 151 (45.6 per cent) returned in 1994 (Table I). About 78.5 per cent (67.3 per cent in 1994) of the questionnaires were issued to lecturers with the remaining 21.5 per cent (32.6 per cent)[2] issued to senior lecturers. Response rates reflected this breakdown with 25 per cent (33.6 per cent) of responses from senior lecturers and 75 per cent (65.6 per cent) from lecturers. About 51.6 per cent of respondents were male and 48.4 per cent were female. This was one of the most notable contrasts with the original survey; in 1994, 27.2 per cent of respondents were women, a figure which was representative of their participation in the SHEI at that time.

Results by faculty, detailed in Table II, illustrate a disproportionate rate of returns, with the faculties of health and social care and management returning far higher rates than design and technology. These two faculties could arguably be considered to have undergone far more changes recently, having relocated in one instance, and relocated and undergone major restructuring in the other.

As can be seen from Table III, in 2003, the majority (87.9 per cent) of respondents enjoyed being a member of their profession and 64.5 per cent liked their place of work. Almost half were satisfied with their salary, but conversely, just over half were not. In terms of stress, 76.6 per cent "put undue pressure on themselves". This could lead to increased levels of stress that are under the control of the individual, rather than

Respondent details	2003 (per cent)	1994 (per cent)
Overall	30	45.6
Lecturers		
As a percentage of those issued	78.6	67.3
Returned	75	65.6
Senior lecturers		
As a percentage of those issued	21.5	32.6
Returned	25	33.6
Females	48.4	27.2
Males	51.6	72.8

Table I.
Response rates

Faculty	Issued	Percentage of total issued	Returned	Percentage of total returned	As a percentage of issued
Management	117	26.4	45	36.3	38.5
Health and social care	161	36.3	53	42.7	32.9
Design and technology	165	37.2	23	18.5	13.9

Table II.
Response by faculty

the SHEI. This particular aspect is worthy of further investigation as individuals may put undue pressure on themselves because of pressure from other sources.

The majority of respondents reported that they were "considerably" or "extremely" satisfied with their jobs (Table IV). Job satisfaction[3] was primarily considered by 71.7 per cent of respondents to be due to "students" (Table V). Respondents quoted a range of activities which contribute to this, ranging from "helping students grasp a difficult theory" through to seeing graduates succeed in their chosen field. These findings suggest that many tutors are motivated to assist students, which implies that they consider the student learning experience to be an important aspect of their role. This concern is illustrated by a respondent who states:

> I might consider giving up teaching... However, for the sake of my students, I would not give up my present position happily.

The institution is encouraging more tutors to become actively involved in research and 24.2 per cent cited this as the most satisfying aspect of their job.

Respondents were asked "How stressful do you find your job?" Analysis of responses (Table VI) indicated that fewer people found it extremely stressful (11.3 per cent compared to 17.2 per cent in 1994), considerably stressful (44.4 per cent compared to 47.7 per cent) and not at all stressful (4.0 per cent compared to 4.6 per cent),

Strongly agree/agree with statement	2003 (per cent)	1994 (per cent)
Enjoy being a member of profession	87.9	84.1
Like place of work	64.5	62.3
Satisfied with their salary	49.2	43.7
Put undue pressure on themselves	76.6	73.5
Thought about leaving profession	43.6	45.0
Satisfactory promotion opportunities	29.9	23.1
Think hours of work are scrutinised	30.6	25.9

Table III. Background information

How satisfying is your job?	2003 (per cent)	1994 (per cent)
Extremely satisfying	20.0	14.6
Considerably satisfying	50.0	53.6
Slightly satisfying	25.8	28.5
Not satisfying at all	4.0	3.3

Table IV. Job satisfaction

Factor	2003 (per cent)
Students	71.7
Research	24.2
Teaching	22.5
Colleagues	15.3
CPD	8.9
Duties	7.7
Industry practice	6.5

Table V. Factors contributing to job satisfaction

These figures suggested a general lessening in the perception of stress in the SHEI since 1994; however, they still indicated that 55.7 per cent perceived stress to be considerable or extreme, suggesting that there was no room for complacency.

There were also changes noted in the stressors in the respondents' current job (Table VII). At first glance, these results seemed positive in that many of the factors were perceived by fewer people to fall into the moderately/extremely stressful category, but the change in rank indicated a new hierarchy of stressors. The two stressors concerned with communication and participation (not being informed and not being consulted) had moved further up the hierarchy (from 4 and 5 to 1 and 3, respectively). This is despite the fact that the SHEI is unionised and consultation and negotiation does take place between union representatives and management.

The three top stressors identified by respondents were on the list of stressors identified by Tehrani (2002, p. 8):

> . . . poor communication between managers and employees, lack of involvement in decision making, insufficient resources.

Additionally, the considerable changes experienced by staff may have contributed to these findings. Staff were given the opportunity to elaborate on many of the areas through open questions. Qualitative results include the following comments, typical of those made by a number of respondents when discussing the causes and effects of stress:

- coping with constant change without consultation is poor management and bad for morale;
- constant climate of change; and
- restructuring.

How stressful do you find your current job?	2003 (per cent)	1994 (per cent)	
Extremely	11.3	17.2	
Considerably	44.4	47.7	
Slightly	40.3	30.5	**Table VI.**
Not at all	4.0	4.6	Levels of perceived stress

	2003		1994		
Moderately/extremely stressful	Per cent	Rank	Per cent	Rank	
Not being informed	81.4	1	76.9	4	
Too little time to cover work	80.6	2	84.1	2	
Not being consulted	79.1	3	74.2	5	
Using own free time	72.5	4	77.5	3	
Meeting deadlines	70.9	5	84.7	1	
Too little credit	59.7	6	66.2	6	
Monitoring student progress	50.0	7	58.9	7	
Accountability	45.1	8	57.6	8	**Table VII.**
Dealing with students	25.0	9	23.9	9	Stressors 1994 and 2003

Meeting deadlines as a source of stress dropped from 1 to 5. Ranked at 2 in both surveys, "too little time to cover work" was still viewed by a significant majority as moderately/extremely stressful.

This lack of time to cover work may partly be explained by the finding that 84.7 per cent (compared to 86.6 per cent in 1994) of respondents believed their workload had increased over the previous two years. This might also have a detrimental impact upon the student learning experience as tutors may have less time to prepare for class; "My work is very satisfying, but I am not given enough time or clerical support".

Qualitative information (Table VIII) allowed some respondents to comment on other stressors and issues which had contributed to the time shortage: "Administrative workload" "Admin should be here to support staff and NOT the other way around". These confirm Tehrani's (2002, p. 8) "conflicting priorities" as a stressor; the quality assurance systems currently in use by the SHEI require meticulous record keeping (RGU, 2002), but students need to be taught and assessed; time pressures and an increasing workload may mean that the two are not always compatible.

"Using own free time" was cited as moderately/extremely stressful by 72.5 per cent (compared to 77.5 per cent in 1994). Again this confirms Sparks and Cooper's (1999) findings, illustrating that it was not only the individual's working life that was affected; but the domestic circumstances of the individual may also suffer as a result, with a consequent impact on their emotional energy and ability to deal with students.

Category and indicative comments	Number of responses
SHEI operational factors: QA; irrelevant beaurocracy; lack of administration/general support; reduced staffing; and overseas working	12
Other: parking; and intranet	6
Change: constant change; restructuring; and new roles	4
Teaching: increased student numbers	3
People: internal staff issues; pressurised not to take holidays	2
Self: inability to multi-task; and inability to deal with issues	2

Note: Data not available for 1994

Table VIII.
Other factors contributing to stress (2003)

The result of stress is sometimes/frequently	2003 (per cent)	1994 (per cent)
Teaching below par	54.0	67.6
Too much alcohol	30.7	33.1
Conflict with colleagues	36.3	41.0
Taken medication	21.7	21.1
Sought work elsewhere	20.2	21.9
Consulted GP	20.1	24.5
Conflict with students	14.6	20.6
Absent from work	8.1	11.3

Table IX.
Result of stress

Results of stress

Generally, there was a downward trend in perceptions of the results of stress with a lower percentage of respondents reporting various behaviours as a result of stress. This is illustrated in Table IX.

Here results indicated that the most frequently reported effect of stress was teaching below par. This has a direct detrimental effect on the students' learning experience (Joy-Matthews *et al.*, 2004, p. 101) as did conflict with students. However, some of the other reported behaviours can have an indirect effect on the quality of the learning experience. Absence from work usually results in another lecturer having to teach what may be an unfamiliar subject at short notice or perhaps even cancellation of a class. Although 43.6 per cent considered leaving the profession (Table III) only 20.2 per cent actually sought work elsewhere. Nevertheless, had they been successful, this too could have a major detrimental effect on the learning experience of students as 82.3 per cent had more than four years of teaching experience in higher education and intotal, 42.8 per cent had more than ten years experience.

It has already been acknowledged that stress may have a positive effect, from which students could benefit. This is perhaps best summed up by the respondent who stated "Lecturing to a large class brings out the best in my lecturing". About 21 per cent reported stress helped improve performance and 26.6 per cent said that it enforced deadlines. About 13.7 per cent reported "no positive aspects" of stress as shown in Table X.

Coping strategies

One factor that had changed over the nine years between the two studies was the Institution's recognition of the detrimental impact that stress can have on employees. A respondent in 1994 stated:

> Stress or admittance to stress is seen as a weakness by many members of staff; it is therefore unfortunately not discussed or acknowledged.

The institution now runs stress awareness sessions as part of its staff development programme and has recently committed to achieving Scotland's Health at Work Award.

About 88.7 per cent of staff had not attended the SHEI's stress awareness sessions and of the 11.2 per cent who had, less than half found them helpful. However, not all respondents reported high levels of stress: this would suggest that they were finding ways to deal with this on a daily basis. Stress relieving tactics as shown in Table XI included: support and discussion with spouse, family, colleagues and friends

Aspect	2003 (per cent)
Enforces deadlines	26.6
Improved performance	21.0
No positive aspect	13.7
Helps focus	9.7
Motivator	9.7
Other	3.2
Goal achievement	2.4
Enjoy stress	1.6

Table X.
Positive aspects of stress

(79 per cent); exercise (47.6 per cent); reading/writing/music (24.2 per cent); taking time out – everything from long baths through to family holidays (21 per cent); and work-related actions (13.7 per cent) such as refusing to work overtime or take on extra responsibilities. Rees (1997) also found the need for individuals to be pro-active in managing their own stress levels and illustrates utilisation of emotion-focused strategies.

Conclusions and recommendations

Changes in the SHEI since 1994 on the whole, were mildly beneficial, e.g. slightly more staff were satisfied with work and a lower percentage of staff were experiencing moderate or extreme levels of stress. Nevertheless, there is no room for complacency in dealing with this subject, not only because of the potentially detrimental effect on the health and well-being of staff, but also due to the possible adverse effects on the learning experience of the students. The role of the individual in managing stress cannot be ignored; the individual has to manage the workload and find ways to ease the stress. Nevertheless, the employer has a legal responsibility to undertake risk analyses and provide problem-focused strategies to ensure that the levels of stress do not have a direct negative impact upon the health and well-being of staff; or just as importantly, an indirect negative effect upon the student learning experience.

In almost a decade, there has been a change in some of the factors causing stress, but the relatively slight decreases in the perception of factors like "too little time to cover work" as a stressor also indicate that more could be done by the SHEI to help employees manage their working day. This could be through development activities on time management, for example, but should also necessitate different management styles to allow increased levels of participation and consultation with academic staff. The Information and Consultation Directive was agreed by the European Union in 2002. By 23 March 2005, all organisations with 150 or more employees must have systems in place, if employees require it, to inform and consult with the workforce on matters affecting the organisation. Careful and considered implementation of this directive into the SHEI should help alleviate some of the problems associated with lack of consultation reported by employees, notwithstanding the current efforts of the trade unions recognised by the SHEI, representatives of which are also dealing with increased levels of demand upon their time.

For staff in this SHEI, it was apparent that the negative effects outweighed the positive effects of stress with a range of behaviours arising that could have been detrimental to the student learning experience. The incidence of behaviours such as "teaching below par" "absence from work" "conflict with students" and "seeking work elsewhere" have been shown to occur regularly and the possible effect on the student

Strategy	Utilising percentage 2003
Support and discussion (spouse, family, colleagues and friends)	79.0
Exercise	47.6
Reading/writing/music	24.2
Time out	21.0
Work-related	13.7
Attending SHEI stress awareness sessions	11.2

Table XI.
Coping strategies

learning experience identified, although it is accepted that further work needs to be carried out in this area. It should be noted that it is difficult to state how students perceive their learning experience, and it may be that the dedication of staff helps to ensure that the impact of stress on the student learning experience is less negative than might be expected. One area for further research would be to survey students on the consistency of approach by individual members of academic staff over a period of time.

The SHEI's response to the Information and Consultation Directive and their efforts in obtaining a Scotland's Health at Work Award may be considered as part of a problem-focused strategy to manage stress in the workplace, and new developments also need to be considered to identify potential stressors and take positive steps to help staff deal with these issues. The success of these will be determined by the degree to which this and other SHEI's recognise the extent of the effects of stress on academic staff and the consequent impact on the student learning experience.

Notes

1. Self help techniques include: Biofeedback – training the individual to control autonomous body functions by concentrating on the desired outcome. Decreasing the rate of breathing, for example, may help avoid feelings of stress. Meditation – to calm the mind. Coping strategies – tactics that individuals can use to relieve their own stress, including exercise, support from friends, saying "no" to increased workload or taking a holiday.

2. Figures in brackets denote 1994 survey results.

3. Job satisfaction – employees' perceptions of how far they see their jobs in a positive light. Factors contributing to this include the extent to which the actual rewards from the job meet employees' expectations of the rewards (financial and non-financial) they should obtain for doing the job.

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