Combating exam anxiety: an exploratory study among final year students

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Summary
The findings in the paper are the outcome of a cross-disciplinary project between the University of Hertfordshire Business School and the University Counselling Centre. The researchers were myself, a final year marketing tutor and Gail Simmonds, a university counsellor. We worked together in the last nine weeks of the academic year 2002–3 among a group of 65 final-year students in subject-based tutorial groups. The project draws on literature from emotional aspects of learning and teaching. By using participative inquiry the project involved working with students to understand their concerns and anxieties about approaching exams, putting requested sessions in place and reflecting on reactions from the students and the researchers as practitioners. It was concluded that recognition of the need for a learner-centred approach that addresses emotional as well as academic issues in the learning and teaching of modules has a beneficial effect. The exploratory work in this paper suggests a need continually to attend to the 'obvious' by addressing the everyday ordinary interface with students. The recommendation is that issues in teaching undergraduates be considered prior to their final exams. The project also suggests a need for further investigative work to be carried out in connection with final-year students.

Introduction

Business School staff often claim to be overwhelmed by large class sizes and increasing demands from students. Discussions with staff from other departments across the university indicate that this is not just a Business School phenomenon. Exam failure or poor results are disappointing for students and staff. Many staff express concern about this aspect of student assessment and wonder how more help can be given to students. University initiatives to assist students include the introduction of summer revision classes and the current changes to the academic year. This paper focuses on the particular anxieties expressed by students during the time leading up to final exams. It includes a discussion of the role of the final year tutor and work that can be undertaken in class to assist students. It is hoped that staff from disciplines outside the Business School will find it relevant to their own departments.

Current issues concerning student anxiety

Most tutors acknowledge that students demand more personal interaction at certain times of the year. Heyno (1999) suggests that the educational cycle has an important impact on the minds of students. Crisis points throughout the academic year are: starting a new term; the first piece of coursework; January blues; examinations; end of year or leaving.

According to Rana (2000, p. 20) anxiety is defined as an 'emotional state which is accompanied by a number of unpleasant physical sensations and which generally occurs in anticipation of a painful or difficult situation'.

Anxiety can be a response to external forces or it can be internal, a product of our own minds. It is often a mixture of both. The mental health charity Mind (1998) describes the anxious state as when someone feels threatened (imaginary or real), often expressed through severe physical symptoms, repetitive thoughts, an inability to sleep or concentrate and general ill health.

There is increasing concern about students' mental health on a national scale (AUCC 2002). The Oxford Student Mental Health Network (2003) collated a number of studies indicating that the mental health of students is significantly worse than that of the general population, and a study at the University of Leicester (2002), funded by HEFCE, revealed high levels of emotional and psychological distress among its second-year students. In questioning students about where they would seek help, the University of Leicester found that 69 per cent would turn to 'friends and family', 59 per cent to a 'personal tutor' and 34 per cent to 'other academic staff'.

The importance of staff supporting students has been recognised by the University of Hertfordshire Counselling Centre for a long time. Since 1996 it has run a ten-week module to support tutors in their roles. The Student Support and Guidance module (Simmonds 2006) is part of the university's Continuing Professional Academic Development Programme in Learning and Teaching and covers emotional aspects of learning and teaching with an emphasis on the containment role of the tutor. This concept, attributed to the psychoanalysts Wilfred Bion and Melanie Klein, is of particular relevance to this paper, and is explained by Salzberger-Wittenberg et al. (1983, p. 60) as a process in which the tutor addresses students' anxieties alongside them without being as overwhelmed.

Salzberger-Wittenberg et al. (1983, p. 6) further reflects on the containment role of the tutor:

> It will mean that he will experience in himself some of the mental pain
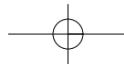
connected with learning, and yet set an example of maintaining curiosity in the face of chaos, love of truth in the face of terror of the unknown, and hope in the face of despair.

Many tutors faced with the phenomenon of an overflowing classroom or lecture hall immediately prior to exams will no doubt recognise the idea of 'mental pain', as the room buzzes with high anxiety.

Exam anxiety
Literature on examination or test anxiety[1] among students in higher education has focused on the character of assessment procedures (Esgate et al, 1996), gender, and examination proximity (Martin, 1997). The usefulness of coping or relaxation techniques has also been studied (Zeidner, 1996; Serok, 1991). Studies use questionnaires to focus on psychological measurements of trait anxiety, or proneness to anxiety. Mackenzie (1994) reviews previous research and concludes that major issues concerning causality in the relationship between performance and test anxiety remain largely unresolved.

Is exam anxiety a bad thing? Rana (2000, p. 20) argues that if it does not become too intense it can be an important source of motivation for exams. However, high anxiety can be immobilising and reduce a student's ability to think. Hembree (1988, p. 48 in Mackenzie 1994, pp. 374–5) carried out a meta-analysis of 562 studies of test anxiety and concluded:

> Test anxiety was directed related to fears of negative evaluation, dislike of tests and less effective study skills. Compared to students who had low test anxiety, those who were highly test-anxious had lower self-esteem; they tended to feel

unprotected and controlled by outside forces; and finally they experienced more encoding difficulty when learning and more cognitive interference when tested.

High test anxiety interferes with students' ability to retrieve information, with many students focused on managing their feelings rather than exam preparation. Studies in the aforementioned literature attempt to link measurement of anxiety to exam performance, with little focus on the benefits of addressing issues such as study skills and student perceptions of the examination process.

In the light of this literature review, Gail Simmonds (university counsellor) and I (module tutor) undertook a qualitative study as co-researchers to understand the experience of final-year students prior to their exams and how they can be assisted.

Methodology
The researchers worked together in tutorials among a group of 65 final-year Business School students from March to May 2003. The double module, Consumer Marketing, included assessment by coursework and a final 'open book' exam. The study covered the last nine weeks of the academic year: five weeks of teaching and four weeks of the Easter break.

The project embodied participative inquiry, advocated by Steier (1995), where both students and researchers are recognised as being integral to the process. A reflective or reflexive approach was adopted. Terms are often used synonymously and I do not intend to enter into a debate about specific definitions. However, Alvesson & Skoldberg (2000, p. 4) comment:

> there are different uses of reflexity or reflection which typically draw attention to the complex relationship between the processes of knowledge production and

the various contexts of such processes as well as the involvement of the knowledge producer.

Reflexity encompasses the notion of 'bending back on itself' (Steier 1995, p. 2), hence the experience of working with final-year students bends back on the tutor and the counsellor. They in turn reflect on their roles, which are socially constructed. This is a circular process involving 'thinking about thinking', interpretation and reflection.

Likewise, Schon (1983 in Moon, pp. 39–53) uses 'reflection in action' and 'reflection on action'. Marshall proposes 'living life as inquiry' (1999, p. 2) where a continual process of questioning, adjusting and 'seeing what emerges' is adopted.

Ten weeks before the final exams, a qualitative questionnaire (no. 1) was given to students. This questionnaire had been used successfully for the previous two years by the module tutor. This paper will focus on the analysis of question 1 from the questionnaire:

Qualitative questionnaire no.1
Q1 If you think about taking all your final year exams in 10 weeks time, please write a phrase that sums up your overall feelings.
Q2 What are you looking forward to most after you have finished your final exams?
Q3 What are you least looking forward to after you have finished your final exams?

Towards the end of the work, the following qualitative questionnaire (no. 2) was used to assess student feedback on the project. This is typical of the conversations with students throughout the project.

Qualitative questionnaire no.2
Q1 What have you found most useful in the tutorials run by Sally and Gail?
Q2 What have you found least useful in the tutorials run by Sally and Gail?
Q3 What do you need more help with NOW?
Q4 How do you want to use the last tutorial?

There was no attempt to replicate any scientific measurement of anxiety as found in the literature. The aim was to explore the nature of anxiety and to reflect what could be put in place to help students. Self-administered questionnaires, the used of open-ended questions and student anonymity allowed feelings to be expressed freely (Proctor, 2000, p. 182).

The results
When asked to sum up their feelings about the forthcoming exams (Questionnaire 1), 39 of 41 students expressed an emotional state linked to a degree of anxiety. Answers included words such as 'stressed', 'scared' and 'worried'. Clearly these words are subjective and can be used interchangeably by students.

Stress has become a commonly used word. Patmore (2006, p. 19) debates the varying uses of the term and problems of agreement over its definition. She points out that in a popular sense: 'stress is a mantra for people feeling bad'. The UK Health and Safety Executive (HSE, 2006) defines it as: 'the adverse reaction people have to excessive pressure or other types of demand placed on them'.

Stress was expressed in the following terms by a student:

'I am becoming increasingly nervous about the exams. I am becoming very stressed and am finding it hard to sleep.'

If anxiety involves a feeling of threat (Mind, 1998), it is important to consider the threat that students feel. Is it the fear of failure? Many students expressed being scared:

'Terrified! I am absolutely terrified of sitting the final exams as I feel so unprepared and there is so much to learn.'

'Afraid to fail due to everything that has gone into me trying to do well at uni.'

'Scared, stressed, worried that my future is dependent on the outcome of the exams.'

Coren (1997, p. 159) argues that success in exams reminds us that we take our place in relation to others: 'Examinations are a continual reminder that there is a first and last, a top and bottom, and that there is a demand that we take our place in relation to being better or worse than others.' Coren further comments that to pass examinations may give us a feeling of wholeness or being complete, yet failure can make us feel flawed and rejected.

Taking final exams involves being judged by others who award final degree classifications. These become an area of obsession for students with phrases like 'I have to get a 2:1 or my parents will kill me/never speak to me' being commonplace. Quotes from students reflect this:

'I am stressed and worried about final degree classification. More pressure than in previous years, too much to do, not enough time. Look forward to finishing.'

'Stressed and worried that three years of university all lies in the final exams and that the results could affect my future career.'

Students' worries were focused on their exams. Phillips (1993, p. 49) points out:
'worries are imaginative creations, small epics of personal failure and anticipated catastrophe'.

What else may be the object of their worries? Completing a programme of degree study is a time of huge transition for students. Is it the ending of an important space between school and work? Heyno (1999, p. 35 in Lees & Vaspe) comments:

leaving university is like having to go through a door they don't feel ready to open. In their imagination, graduating means, as Laufer suggests, that they will also have to grow up, find a partner, get a job and make a home all at once. For some, that prospect is just too daunting.

Initiatives put in place to reduce anxiety
Both the module tutor and the counsellor reflected on the level of worry expressed by students and put various initiatives in place during tutorials. This was an attempt to recognise the containing role (Salzberger-Wittenberg, 1983) of many module leaders with their students, especially at final year level.

Explanation of exam marking
If students understood how exam papers were marked, some of the fear of exams could be reduced. Students were given photocopied anonymous hand-written exam answers from previous years, without the grades, and asked to mark them in groups according to a grading sheet. Students were accurate in their assessments and split the exam papers into two definite groups, A–C and D–F, with accurate spotting of the As and fails. Students rarely see marked exam papers, their own or others. This exercise also helped them to appreciate the huge task of the exam markers.

Many students have a fear of poor performance based on their previous experience. Hembree (1988 in Mackenzie 1994, p. 375) proposes that: 'test anxiety does not lead to poor performance; on the contrary, awareness of poor past performance leads to test anxiety'. Some thought should therefore be given to how staff can give exam performance feedback, apart from just a percentage, to students at levels 1 and 2. A review of practice at other higher education institutions might also be helpful. It is worth noting that A level students can now request the return of their papers. This trend may move into higher education as students gain more consumer power.

Student participation in a mock exam
Many students requested the opportunity to practise exam questions. A voluntary mock exam was set up, yet only half the class took advantage of this opportunity. At the end of the research project, indicative grades from the mock exam were compared with the final exam mark. Virtually all the students who took the mock exam gained better grades or the

Figure 1: Consumer Marketing (3BUS0018) exam results June 2003, 65 students

same grades as predicted. This is shown in Figure 1. Students who did not take the mock exam tended to be those who also achieved lower coursework grades. Perhaps these students are more anxious about their performance and stay away from any situation that reminds them of this.

The graded papers from the mock exam were returned to students one week after the test. Overall comments on the exercise were presented in a lecture. Marking the mock exams involved skim reading and writing positive comments wherever possible, such as:

'A good attempt. You are heading for a C grade but with more reference to theory you are capable of a B.'

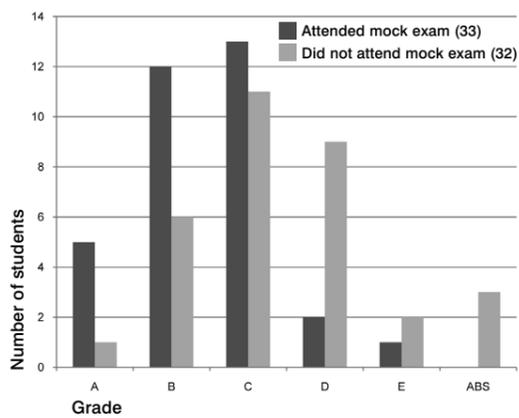For very weak answers, the tutor wrote comments such as:

'If you are not careful you are heading for a fail. You are capable of much higher work than this – start your revision now!'

Students appreciated the individual feedback they gained from the mock exam and this seemed to inspire confidence and help them learn from their mistakes.

Improving study skills
Students in the study felt overwhelmed with too much work to do. A lot of coursework deadlines seem to coincide, which is an increasing problem in the Business School. The rise in student numbers has meant that tutors often plan marking to coincide with vacation periods. Although students were aware of hand-in dates for coursework at the beginning of the academic year, many lacked study skills such as time management and coping strategies for the bunched end-of-term deadlines.

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The researchers ran a study skills session in order to encourage students to adopt a planned approach to their exam revision, yet this was the least popular of the tutorials. At the end of the project, students commented in questionnaire no. 2 that, by this stage in their studies, they have their own individual approaches. The researchers reflected that at this point the students needed staff to contain their panic, rather than trying to teach them new skills. More study skills are now integrated into the curriculum at levels 1 and 2 in the Business School, and an Academic Skills Unit was established in 2005 with three staff offering group and individual support. Since the completion of this research, many study skills have also become available through the My Active Planning System (MAPS) on StudyNet.

Conclusions and recommendations
In terms of exam results, was there an improvement? Compared with the previous year's cohort, there was a reduction in D, E and fail grades and an increase in A–C grades. However, this work was not intended to measure levels of anxiety and link to performance as described in the literature review. There may be many reasons for the year-on-year difference as a result of differences in the cohorts and their capabilities. A scientific study would require a control group with no extra exam preparation input to be compared with a group receiving extra attention. This would be a difficult task. Other problems of measurement would include: combination of student module choices; impact of different tutors; differences in types of exams set.

The concept of containment as used in counselling was intended as the main focus of this project. Academic initiatives leading up to final exams that could help to contain students were put in place. Students' emotional and study needs were jointly addressed in this

project by the tutor and the counsellor. Students in this study found both the mock exam and the exercise studying previously marked exam papers useful. I have offered such support to final-year students on my module since 2003, although numbers have doubled to 120, making it increasingly difficult to be responsive to individual student's needs.

Final exams present particular problems as students perceive them as their final chance to succeed. It is this idea of 'finality' that has been examined in this paper in a reflexive manner by 'bending the nature of the final year back on itself' and examining what many final tutors probably know, but do not say.

The amount of pressure and stress placed upon final-year tutors is huge, yet working with students in their final year can be rewarding. Final-year students approaching a change in their lives require even more containment than at previous levels. It is a time of transition for them as the inner world for many students becomes public through gaining degree classifications. It is this that generates worry among students. More attention could be given to the final-year experience, particularly in relation to exams, by all tutors across the university. Attempts to reduce students' anxieties can be beneficial to students and staff alike. Based on the work in this paper, I recommend the following may contribute to a possible reduction in final-year student anxiety:

- changing the practice of awarding final degree classification based solely on the final year's work
- investigating the reasons for the apparent dominance of exams as the main form of assessment in many departments, especially at final year level
- collating examples of good practice among final-year tutors for exam preparation, stress management, study

skills and employability

• considering how poor performing students and students with low esteem can be helped by tutors. Attendance is poor and they often avoid initiatives such as those described in this paper.

Acknowledgements

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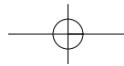
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Biographical notes

Sally Bunce has worked as a marketing tutor in the business school since 1999. Prior to that she spent 25 years in business working in senior marketing roles for organisations such as Marks and Spencer, Granada Television, Book Club Associates and Welwyn Hatfield Council. Her research interests include: emotional aspects of learning and teaching; student support and guidance; supporting staff supporting students.

Endnotes

[1] Test anxiety refers to an individual's affective state in response to a stressor that has as its main characteristic some procedure whereby that individual will be measured against his or her aspirations or against other people's capabilities (Eysenck 1983 in Esgate, A., Whittington, Z. and Silber, K. 1996). A further definition is 'typical anxiety-eliciting situations and conditions in the educational context dealing with training, learning and performance' (Rost and Schermer 1987, p. 227 in Mackenzie 1994, p. 374).