Title

The impact of Social anxiety on Student Learning and Well-being in Higher Education

Abstract

Background

This paper reports findings from two complementary web-surveys conducted in the United

Kingdom, in which 787 university students described their experiences of social anxiety.

Aims

The aim was to explore the impact of social anxiety on student learning and well-being in the context of Higher Education.

Method

Participants self-selected using a screening tool and completed a web-based questionnaire.

Results

The findings are consistent with previous research on social anxiety and suggest that for a significant minority of students, social anxiety is a persistent, hidden disability that impacts on learning and well-being.

Conclusions

The findings highlight the need for enhanced pedagogic support for students with social anxiety.

Background

Social anxiety is a common mental health problem that resides on a continuum of distress and disability. In its mildest form it may present as transient social apprehension, occurring in

response to common social-evaluative situations, whilst it's more severe form is characterised by disabling, pervasive fear and avoidance (Crozier 2001; Liebowitz 2003;Veale 2003).

According to the presentation model, social anxiety occurs when an individual wants to present a favourable public image, but doubts his or her ability to do so (Schlenker and Leary 1982). Such doubt may be fuelled by low self-worth and internalised shame (Gilbert and Procter 2006). Together these can exert a strong, untoward impact through social anxiety on personal identity, social relationships, mental health and success in education (Ameringen 2002; Fehm et al 2005; Keller 2003; Stein et al 1999; Turner et al 1986).

More specifically, Bernstein et al. (2007) found that severity of social anxiety was correlated with deficits in social skills, attention difficulties and learning problems in school settings. Ameringen et al. (2003), found that a significant proportion of patients with social anxiety reported leaving school prematurely due to anxiety and Wetterberg (2004) found that 21% of 17-year old Swedish school students reported impaired functioning due to social anxiety, Further studies have reported significant effects of social anxiety on failure to complete school, increased risk of exam failure (Stein and Kean 2000) and failure to graduate (Wittchen 1999).

Social anxiety is relatively common with typical lifetime prevalence rates of 7-13% for adults and young people (Furmark 2002). Moreover, first onset occurs during mid-late adolescence

3

when many young people are engaged in full or part-time time education (ref). Recent research has revealed like-prevalence rates in Higher Education with Russell and Shaw (2009) and Tillfors and Furmark (2007) documenting clinically significant levels of social anxiety in 10% to 16% in the UK and Sweden respectively.

Despite these findings, relatively little is known about the effects of social anxiety on students studying in higher education. To address this, two complimentary studies surveys were conducted to explore how university students experience and manage their social anxiety whilst engaged in learning activities.

Method

Two complementary surveys were carried out at Plymouth University (UOP) and the University of the West of England (UWE). These two institutions have combined student populations in excess of 60000 drawn from diverse, urban and rural areas of South West England.

The surveys were administered on-line via internal, student intranets and Student Union websites using *Pegasus* and *Survey-Monkey* software.

The survey tool was structured to reflect three domains that are frequently used to assess social anxiety in clinical research; performance fears (e.g. public speaking), social interaction fears and avoidance behaviour (Menin et al 2002). Likert-type scale questions were used to capture frequency data and free-text questions were employed to gather experiential data about the impact of social anxiety on learning, student coping responses and ideas for improving support.

Participants were self-selected from the universities' general populations and a brief screening tool, adapted from the Mini-SPIN (Connor et al 2001), was used to screen the target populations. This scale has excellent discriminant properties and can accurately detect 90% of people diagnosed with social anxiety (Anthony and Coons 2006).

Participants were provided with information about the aims of the project and measures were taken to ensure confidentiality and anonymity in data management. In case of personal distress, links were provided to university counselling services and self-help organisations. The UOP survey was conducted first and minor changes were then made to the UWE survey, to capture additional frequency data relating to key themes that emerged from the UOP survey

Ethics

Ethical permission was granted by the participating universities' research-ethics committees and account was taken of guidance issued by the *British Psychological Association* and the *Association of Internet Researchers*. Information supplied by participants was made anonymous and downloaded to password-protected files. Individual data sets were only available to the researchers and collaborating colleagues.

Descriptive data

Sample size

787 students completed the survey, representing approximately 2.0% of the total UOP and UWE student populations.

Participant characteristics

The majority of respondents were female with a ratio of approximately 2:1, which reflects epidemiological trends for social anxiety (Furmark 2002). Over 90% of the sample was aged between 16 and 30 with the remaining 10% aged between 31 and 60 (table 1).

Table 1: here

The majority of students were in years 1-3 of their studies, with a small proportion in year 4, post-graduate studies or 'other' forms of study (table 2).

Table 2: here

Frequency Data

Anxiety in common learning situations

A Likert-type scale was used to gauge how frequently students experienced social anxiety (defined as embarrassment, anxiety or inhibition) in common learning situations (figure 1). The scale employed three parameters - 'none', 'occasional' and 'frequent'. Slightly more than 80% of UoP and UWE students reported that presentations were associated with frequent social anxiety, with lower ratings for seminars (range 45-52%), group work (25-26%), lectures (26-14%), sharing IT facilities (13-8%).

Figure 1 here

Emotional distress

Given the known association between social anxiety and co-morbidity for mental health problems students were asked if they had experienced common forms of emotional distress in the six months preceding the survey. Figure 2 shows that approximately 50% of students reported frequent stress and anxiety (range 55-52%). Reported rates for frequent depression, panic and anger were all similar (24-21%). Thoughts of frequent self-harm or suicide were comparatively rare (7-4%).

Figure 2 here

Social difficulties

Social anxiety has been variously associated with social inhibition, discomfort in social settings and difficulty forming relationships. Hence, students were asked to report whether they had experienced social difficulties. The responses (figure 3) indicate that frequent loneliness, inhibition and discomfort in social settings was reported by approximately one third of students (range 29-39%) with slightly lower numbers of students reporting frequent difficulty forming relationships and discomfort in social settings (18-36%).

Figure 3 here

Seeking help

Students with mental health problems are often reluctant to seek professional help. Hence, students were asked to identify the main sources of support they had used in the past. Figure 4 shows that friends and family were the most frequently reported sources of support (range 69-66%). Only a small proportion of students reported seeking help from their personal tutor (range 17-14%), student counselling (9-13%) or health/medical centre (3-13%).

Figure 4 here

Coping strategies

Additional data from the UWE survey provided frequency estimates of the chief means of managing social anxiety around learning activities. These are shown in Figure 5. The use of safety behaviours (e.g. acting to minimise conspicuousness and rehearsal) was the single most commonly reported strategy (74%). Avoidance of learning activities was reported by 37% of students with 64% reporting diverse coping strategies (e.g. taking 'calms', using relaxation techniques, drinking alcohol to calm nerves, etc).

Figure 5 here

Qualitative findings

In order to gain insights into the experiences of students with social anxiety, UoP participants were invited to provide free-text responses to three, key areas of interest:

How social anxiety impacted on engagement in learning activities

How the students coped with these events

What changes the university could make to improve their experiences The findings were initially sorted into emergent themes. Following this, Relational Analysis (Palmquist, Carley, & Dale, 1997) was used to explore the semantic relationships inherent in the themes. The findings are presented in the following section together with a selection of supporting quotes from students (unedited and in italics).

How social anxiety impacted on engagement in learning activities

The impact of social anxiety during learning activities was found to cluster around three main themes: anticipatory anxiety with assumptions about failure, embarrassment and disabling effects.

In keeping with the frequency data, anxiety was most commonly linked to taking part in learning activities that involved (or had the potential to involve) public speaking during presentations, seminars and lectures. The period prior to such events was characterised by anticipatory anxiety (*"I often feel embarrassed and worry greatly before contributing as I am mainly afraid of getting things wrong and looking stupid"*). These periods could be protracted (*'I get really worried when I have to do a presentation and I worry about it for ages*)

beforehand"). In some cases, anticipatory anxiety was severe enough to impact on student well-being (*"Very nervous before presentations, feeling sick and loosing sleep... I dread them")* or to cause them to exit the learning setting (*"When waiting to take part in a debate or having to present some findings to a class I feel fidgety and dizzy. In the past I have walked out of the room due to very high levels of anxiety").*

Participants' also reported that anxiety was linked to a priori assumptions of failure and fear that events would expose personal shortcomings and invite ridicule ("*I feel anxious and often find it difficult to be myself and communicate with others*. *I think that the anxiety comes from being afraid that I won't be good enough and that people will judge me badly*").

Participation in learning events involving public speaking was characterised by embarrassment ("Feel embarrassed and nervous about how people are going to react to what I say ") and physical impairment ("I have problems speaking out in front of people and develop a stutter and my voice clearly shows nervousness, especially in presentations"). Impairment due to high levels of anxiety also extended to cognitive effects, including thought-blocking ("I feel unable to relax, which prevents me from gaining understanding of the information being received"). In addition, excessive self-preoccupation detracted from task performance ("I feel anxious and very self-conscious when 'put on the spot' my mind goes blank, even if know the answer!") and was linked to self-consciousness about excessive blushing ("I always go bright red!! I absolutely hate it; I clam up and develop a really bad stammer").

How students coped

Students used learning strategies, such as memorising and rehearsal to buffer anticipatory anxiety and to increase knowledge and personal confidence ("For presentations I find that if I spend a lot of time preparing I become more confident and am usually ok"). In clinical terms, such strategies are referred to as 'safety behaviours' and some of those employed resulted in, at best, partial participation in learning activities. Some students, for example, would get others to do the speaking ("I sit with a group of friends who are more than happy to answer questions on behalf of the group, so I don't volunteer to answer any"). Or they would offer to do certain group tasks in order to avoid having to speak out ("I avoid presentations etc if I can minimise my input in the standing up part by doing extra research"). Alternatively they would hide at the back of the class or sit behind someone tall to avoid being conspicuous ("As soon as I walk into the room, I check it out and devise a place to sit where I have the least attention on me and avoid eye contact so that a lecturer won't pick on me to answer a question"). In more extreme cases, safety behaviours constituted avoidance (escape) from the feared situation or event ("I do not go to lectures if I know I have to give presentations. I have swapped modules several times to avoid presentations").

Some students indicated that they were aware of the potential impact of avoidance and safety behaviours on their learning and marks, but were resigned to the outcome ("I do not attend classes where I will have to do a presentation. I avoid them at all cost event it means losing ten percent of a grade"). Others asserted the need to tackle issues head on ("I used to try and avoid situation where I could be put on the spot, but it never worked and it sometimes magnified the negative feelings....now I just try and get on with it and if I'm making a presentation I don't hide that I'm nervous). In the worst instances avoidance was pervasive and almost certainly harmful in both social and educational terms ("Avoiding all classes – learning only through lecture notes").

Student views on support for social anxiety

The role of the institution

Whilst many students pointed to the role of the institution (e.g. Faculty or Programme) in helping students to develop new social networks, this was juxtaposed with a liberal measure of 'yes-but' thinking. For example, students drew attention to the importance of early integration (*"When people come to uni, its either make or break in their first year, so you have to get them out of their shells early before they have a chance to start worrying about socialising"*). Yet, they also portrayed themselves as members of a discrete group, averse to socialising through 'normal' student activities (*"More in terms of getting students together when they first arrive, not only socials set up for drinking and partying"*). Offering a

'solution' to this conundrum, one student suggested that the university should have a discrete society for people with social anxiety, whilst dryly noting that "*a society for socially anxious people could be good…..but then you have the problem of people being too anxious to run it or show up*".

Barriers to support

Students identified various barriers to support that were grouped under the themes invisibility, stigmatisation and lack of confidence.

Frustration was expressed that the problems they faced were unrecognised and seemingly invisible. This was reflected in pleas for lecturers to know and understand more about social anxiety and its impact in learning situations ("If I had a magic-wand I would make tutors take into consideration the amount of difficulty I face when I am the centre of attention during debates and presentations").

Whilst students recognised the potential value of seeking help for their social anxiety, fear of ridicule (*"I haven't tried the uni facilities yet as there is nothing physically wrong with me ... I would feel daft coming in saying that I am scared of coming in ")* and stigmatisation were readily identified as barriers that inhibited help-seeking from personal tutors and university counsellors (*"I think how I feel is directly related to my confidence and self-esteem. If I was to attend some services available to me I would probably feel a lot better, But I don't want others to label me for attending")*.

Elsewhere, comments reflected frustration about what was regarded as the prevailing assumption that all students are inherently confident ("*There seems to be a lot of emphasis on social aspects, group work and it feels like it is taken for granted that everyone is really confident. It would be nice if there was more understanding that just being in a lecture theatre is a real big achievement for some people*"). Flowing from these concerns, calls were made for extra support to improve self-esteem and confidence in public speaking ("*Offer more opportunities in training and development programmes that continue through the module programmes so that people have the ability to speak confidently in public*").

Discussion

As far as the authors are aware this is the first survey to explore the impact of social anxiety on learning and well-being in students studying in higher education and the picture revealed is one of emotional distress, impairment and mixed coping responses.

Emotional distress was evident in the high frequency of reported stress and anxiety with about one third of students experiencing depression, loneliness and difficulty with social relationships. These findings are not dissimilar from other reports on student mental health (e.g. Royal College of Psychiatrists; 2003 and 2011; University of Leicester 2001). The findings also show that students believed their learning and performance in the classroom was affected by associated thought-blocking, excessive self-focused attention and physical effects, such as blushing and stammering. These beliefs are given broad credence by research, which shows that both memory performance and attention to task content is reduced in high threat conditions (e.g. public speaking) for social anxiety sufferers (Fox, Russo et al 2001; Wenzel and Holt 2003). In addition, student fears appeared to be underpinned by *a priori* assumptions about personal inadequacy as predicted by Schlenker and Leary's (1982) presentational model of social anxiety.

Students also believed that their achievements in the learning domain were likely to be hampered by their safety behaviours, the most obvious of which was avoidance of learning situations. However, research has also drawn attention to the insidious effects of gaze aversion and verbal inhibition on teachers' judgments of intellectual ability, social maturity and leadership (Alden 2001; Evans 2001).

Despite obvious distress and anxiety, many students felt unable or unwilling to seek help, citing fear of stigmatization or worry that their problems would not be taken seriously by their personal tutor due to lack of understanding. Their reticence is graphically demonstrated via the frequency data, which shows that, at best, less than 1:5 students reported seeking help from their personal tutor or student counsellor. Again similar findings have been reported elsewhere. Most notably in the 2001 Leicester University surveys. However, the pattern of help-seeking pattern was complex. In some cases, students received professional support from outside of the university, whilst the majority of students reported receiving help from friends and family.

Recommendations for support

The Clarke and Wells model (Wells 2000) predicts that socially anxiety is maintained through a negative feedback loop, consisting of poor self-expectations - anticipatory anxiety cognitive impairment - poor performance and reinforcing negative self-beliefs that may be positively interrupted through social and clinical interventions tailored to improve personal confidence, self-awareness and social-skills. Drawing on this model, we believe it is normally in the best interests of the socially anxious student to promote engagement in public-speaking and group interaction in order to develop confidence and skills in public speaking and anxiety-management. It should be noted, however, that in the absence of supportive approaches the anxious student may simply vote with his or her feet and avoid presentational activities all together.

Pedagogic interventions for social anxiety should be cognisant of the dual problems of fear of stigmatization and enhanced self-other sensitivity displayed by people with social anxiety. Hence, we think it is desirable to couch support activities within a normative framework developed for the general student population; such activities might include small group support for public speaking and the use of *Powerpoint*. Via these activities other aspects of social, personal and academic skills training may then be introduced (such as the importance

16

of maintaining eye contact, the use of relaxation techniques to control stress, the importance of effective preparation and rehearsal, etc). Such interventions would benefit not only students with social anxiety, but also the wider student population.

To reduce invisibility and to improve awareness of social anxiety in the classroom, we suggest that staff should be helped to recognize social anxiety and to be cognisant of the causes and effects of safety and avoidance behaviours on student performance and student-teacher impression formation.

We do not believe it is realistic for teaching staff to be able to discriminate between normal 'shyness' and social anxiety. This is primarily because their behavioural manifestations overlap so markedly that to try and do so would require treading into the therapeutic domain. We suggest a more pragmatic approach is for the teacher to consider how general pedagogic approaches may be employed in the classroom to reduce potential performance anxiety and embarrassment for *all* students. These may include, graded exposure for public speaking tasks, the promotion of small group teaching and activities, peer-support for self-disclosure and exposure in class and avoiding asking questions of students in large groups unless it is clear the information is being freely volunteered.

Finally, authors such as Yorke and Longden (2008) and Simpson (2004) have drawn attention to the importance of early integration and proactive interventions in supporting students and preventing withdrawal from university. In particular, Simpson refers to the need

17

to engage with the 'quiet 'student', who may fail to come forward for help and advice. This has a particular resonance given the low rates of help-seeking reported in this survey.

Conclusion

This exploratory study has highlighted the need to enhance pedagogic support for students that experience social anxiety. It is evident that learning activities, particularly those that involve public speaking, can cause great anxiety and it is incumbent upon teachers to reflect that self-confidence is an attribute that needs to be nurtured in a small, but significant minority of students.

References

Alden, L. (2001). Interpersonal perspectives on social phobia. In Crozier, R. and Alden, L.

(Eds). International Handbook of Social Anxiety. Chichester; John Wiley.

Ameringen, V.A., Mancin, C. and Farvolden, P. (2002) The impact of anxiety disorders on educational achievement. Journal of Anxiety Disorders . Volume 17, Issue 5, 2003, Pages 561-574.

Bernstein G.A., Bernat, D.H., Andrew, A.D., Layne, A.E. (2007). Symptom presentation and classroom functioning in a nonclinical sample of children with social phobia. Depression and Anxiety, 0,1-9.

Anthony MM., Coons MJ., et al. Psychometric properties of the social phobia inventory: further evaluation. Behaviour Research and Therapy. 2006 Aug; 44 (8):1177-85.

Connor, K.M., Kobak., K.A, Churchill, L.E., Katzelnick, D. & Davidson, J.R.T. (2001).

Mini-SPIN: A brief screening assessment for generalised social anxiety disorder. Depression and Anxiety, 14 (2), 137-140.

Crozier, R. (2001). Shyness: Development, consolidation, and change. In Crozier, R. and Alden, L. (Eds). International Handbook of Social Anxiety. Chichester; John Wiley.

Evans, M. A. (2001). Shyness in the classroom and home. In Crozier, R. and Alden, L.

(Eds). International Handbook of Social Anxiety. Chichester; John Wiley.

Fehm, L., Pelissolo, A., Furmark, T, & Wittchen, H. U. (2005). Size & Burden of Mental

Disorders in Europe. European Neuropsychopharmacology, 15 (4), 453-462.

Fox, E., Russo, R., Bowles, R. & Dutton, K. (2001). Do threatening stimuli draw or hold visual attention in subclinical anxiety? Journal of Experimental Psychology, 130 (4), 681-700.

Furmark, T. (2002). Social phobia: overview of community surveys. Acta Psychiatrica Scandinavica, 105, 84-93.

Gilbert, P. and Procter, S. (1986). Compassionate mind training for people with high shame and self-criticism. Clinical Psychology and Psychotherapy. 13, 353-379.

Keller, M.B. (2006). Social anxiety disorder clinical course and outcome: review of
Harvard/Brown Anxiety Research Project (HARP) findings. Journal of Clinical Psychiatry,
67, Supplement 12, 14-9.

Liebowitz, M.R. Guidelines for using the Liebowitz Social Anxiety. Version Date June 5th 2003.

Menin, D.S., Fresco D.M., Schneier F.R., Davies S.O., and Liebowitz, MR. (2002).Screening for social anxiety disorder using the Liebowitz Social Anxiety Scale. Journal ofAnxiety Disorders. 16: 661-673.

Palmquist, M. E., Carley, K.M., and Dale, T.A. (1997). Two applications of automated text analysis: Analyzing literary and non-literary texts. In C. Roberts (Ed.), Text Analysis for the Social Sciences: Methods for Drawing Statistical Inferences from Texts and Transcripts. Hillsdale, NJ: Lawrence Erlbaum Associates. Royal College of Psychiatrists (2003). The Mental Health of Students in Higher Education. Royal College of Psychiatrists: London.

Royal College of Psychiatrists (2011). Younger people with psychiatric symptoms least

likely to seek help from GP. Royal College of Psychiatrists press release.

http://www.rcpsych.ac.uk/press/pressreleasearchive/pr671.aspx. Accessed November 2nd, 2011.

Schlenker, B.R. and Leary M.R. (1982). Social anxiety and self-presentation: A

conceptualisation and model. Psychological Bulletin, Vol. 92, No. 3, 641-669.

Simpson, O. (2004). The impact on retention of interventions to support distance learning students. Open Learning, Vol. 19, No. 1, February, 79-95.

Stein, M.B., McQuaid, J.R., Laffye. C, and MCCahill, M.E. (1999). Social Phobia in the primary care medical setting. Journal of Family Practice. 48: 514-519.

Stein, M.B. & Kean Y.M. (2000). Disability and quality of life in social phobia:

Epidemiologic findings. American Journal of Psychiatry, 157(10), 1606-13.

Tillfors, M. & Furmark, T. (2007). Social phobia in Swedish university students: Prevalence, subgroups and avoidant behaviour. Social Psychiatry and Psychiatric Epidemiology, 42 (1), 79-86.

Turner. S.M., Beidel, D.C. and Wolff, P.L., (1986). Is behavioural inhibition related to anxiety disorders? Clinical Psychology Reviews. 16, 157-172.

Wells, A. (2000). Modifying social anxiety: A cognitive approach. In W. R. Crozier (Ed.),Shyness: Development, consolidation, and change (pp. 186-206). New York: Routledge.Wheeler, P. (2001). The Myers-Briggs Type Indicator and applications to accountingeducation and research. Issues in Accounting Education, 16(1), 125-150.

Wenzel, A. and Holt, C.S. (2003). Social-evaluative threat and cognitive performance in socially anxious and non-anxious individuals. Personality and Individual Differences, 34 (2), 283-294.

Wetterberg, L. (2004).Social anxiety in 17-year-olds in Stockholm, Sweden - A questionnaire survey. South African Psychiatry Review, 7 (2).

Wittchen, H.U. and Fehm, L. (2003) Epidemiology and natural course of social fears and social phobia. Acta Psychiatrica Scandinavica, 108 (417), 4-18.

University of Leicester (2001). Student psychological health project: Research results.

http://www.lea.ac.uk/edsc/sphp/results.html

Veale, D. (2003) Treatment of social phobia. Advances in Psychiatric Treatment 9, 258–264.

Yorke, M, and Longden, B. (2008). The first year experience of education in the UK. The

Higher Education Academy.

http://www.heacademy.ac.uk/assets/documents/resources/publications/FYEFinalReport.pdf.