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# An Assessment of Anxiety Levels in Dyslexic Students in Higher Education

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*Abstract*

*Background:* It has long been hypothesized that children with learning disabilities, including dyslexia, may be highly vulnerable to emotional consequences such as anxiety. However, research has centred on school aged children.

*Aims:* The present study aimed to clarify these findings with dyslexic students in higher education.

*Samples:* 16 students with dyslexia were compared to 16 students with no history of learning difficulties.

*Methods:* Students were asked to complete a verbal questionnaire concerning trait anxiety levels. They were then told that they would be given a timed reading test and their state anxiety levels were measured using the State-Trait Anxiety Inventory (STAI; Spielberger, Gorsuch, & Lushene, 1983). Finally their reading was assessed using the Test of Word Reading Efficiency (Torgesen, Wagner & Rashotte, 1999).

*Results:* Dyslexic students showed slower reading speeds than controls. They also had higher levels of state anxiety and elevated levels of academic and social, but not appearance anxiety.

*Conclusions:* Dyslexic students in higher education show anxiety levels that are well above what is shown by students without learning difficulties. This anxiety is not limited to academic tasks but extends to many social situations. It is

proposed that assessment of emotional well-being should form part of the assessment of need for dyslexic students entering higher education.

*An Assessment of Anxiety Levels in Dyslexic Students in Higher Education*

Dyslexia is a complex neurological condition, occurring in approximately four percent of the population (The National Working Party, 1999). Although the manifestations of the disorder will change throughout an individual's lifetime, its effects are thought to be life-long (Bruck, 1989). Dyslexic individuals will generally display slow, effortful, and often inaccurate reading. Spelling, grammatical and organizational mistakes are common. Unsurprisingly then, coping with the demands of an educational system can be extremely difficult for those with dyslexia.

There is some evidence that children and adolescents with dyslexia show higher anxiety levels than normally developing children. For instance, Paget and Reynolds (1984) found those with 6 to 17 year old children with learning disabilities were more anxious than their non-learning disabled peers, with the anxiety manifesting itself as worry and concentration difficulties. Casey, Levy, Brown and Brooks-Gunn (1992) found children (aged 8-12 years) with learning disabilities displayed significantly lower scores for positive well-being, and were more unhappy and anxious than their non reading disabled peers, even though their parents were well-informed regarding the disability. In a review of research in adolescent populations with learning disabilities, Huntington and Bender

(1993) concluded that learning disabled adolescents may experience higher levels of trait anxiety than their peers.

Willcutt and Pennington (2000) examined the psychiatric difficulties present in a sample of reading disabled twins. They found that anxiety was associated with reading difficulties, but, in contrast to hyperactivity and conduct disorder, was not elevated in co-twins of reading disabled children. This suggests that increased anxiety levels occur as a consequence of literacy difficulties, rather than being caused by the genetic and environmental influences common to both twins. Similar conclusions were drawn in a recent epidemiological study of school age children (Carroll, Maughan, Goodman & Meltzer, in press).

There is a growing body of evidence showing that individuals with literacy difficulties show increased levels of anxiety. However, the area is clouded by two factors. Firstly, many of the studies described above have used heterogeneous groups of children with learning difficulties. While these groups certainly include children with literacy difficulties, they may also include children with low general abilities and highly complex difficulties. More studies using individuals with specific literacy difficulties are required.

Secondly, most of the research is concentrated on school-aged children. It is uncertain what patterns may be found in older individuals. Some research has suggested that anxiety levels tend to decrease in adulthood: Bruck (1989) found that 85% of learning disabled students showed poor overall adjustment in childhood, while just 37% showed comparable ratings in adolescence and adulthood. It seems then that the major psychological secondary problems of those with learning disorders may diminish with age. Bruck suggests that as children develop, eventually leaving the pressures of the educational system, adjustment becomes comparable with that of their peers. Similar results were found in a cross-sectional study of emotional well-being in 6- to 18-year-old dyslexics (Hales, 1994).

It is less clear that this improvement is present in students who choose to remain within the educational system after compulsory schooling. To date, the most thorough study into the relations between anxiety and dyslexia in the undergraduate population is that of Riddick, Sterling, Farmer and Morgan (1999). Sixteen dyslexic students and matched controls completed an essay on their educational experiences, followed by the State-Trait Anxiety Inventory (STAI: Spielberger et al., 1983) and a further questionnaire devised by the research team. In addition, dyslexics took part in a structured interview. Dyslexic

students displayed more anxieties and feelings of academic and written incompetence than matched controls, and there was a nonsignificant trend for dyslexics to show higher levels of anxiety on the STAI. It appears that negative emotions and anxieties associated with dyslexia were greater when at school, diminishing with time. However, those that choose to enter higher education, although reporting lower anxieties, may still report a number of negative feelings due to the competitive environment, and the demand for high literacy skills. The dyslexic students saw themselves as struggling with their studies in comparison to their peers, due to persisting literacy difficulties, even though overall it was believed that the university environment was a big improvement to school, in terms of attitude and support.

This study aims to extend the findings of the study by Riddick et al., (1999), to clarify whether undergraduates registered as dyslexic at University are still vulnerable to high levels of anxiety in comparison to their age-matched peers. The focus will lie on present worries and anxieties, rather than those that may have been experienced at school. State anxiety (an emotional reaction to a specific self-threatening situation; Wolfe, Finch, Saylor, Blount, Pallmeyer & Carek, 1987) may over time become trait anxiety (a relatively stable personality characteristic). State and trait anxiety will be assessed separately, as in the Riddick et al. study



(1999), to see whether anxieties have become stable debilitating traits. It will also be investigated whether the anxieties of dyslexics are specific to academia, or whether these have spread to other domains (as suggested by Chapman, Lambourne & Silva, 1990). Based on the discussed theories, and previous findings, it is expected that dyslexics will show more trait anxiety regarding academic situations than controls. Additionally, it is proposed that dyslexics will be more anxious overall, across various domains, than matched controls, due to generalized feelings of incompetence and failure experiences.

The study extends the findings of Riddick et al. (1999) by measuring levels of state anxiety in dyslexics immediately prior to completion of a reading task. The inclusion of a reading task in the experimental situation directly places demands on literacy skills, creating a situation in which the dyslexic student may feel less competent and capable than others. This study included such a task based on the recommendations made in Riddick et al.'s (1999) discussion.

### *Method*

#### *Subjects*

32 native English speaking undergraduate students at the University of York participated. Subjects were obtained from all years of study. All subjects were unpaid volunteers, contacted via e-mail, poster advertisement or word-of-mouth at the University of York. 16 students were dyslexic (all had previously taken a recognized assessment, and were registered with the University as dyslexic). Age of dyslexic students ranged from 19.4 years to 24.0 years (mean age 21.5 years). The remaining 16 students were control subjects, matched for gender and age with the dyslexic students. The control subjects did not have, and had never been known to have, any learning or reading disabilities. Control subjects ranged from 19.2 years to 22.5 years (mean age 21.6 years). There were 3 males and 13 females in each group.

*Tests and materials.*

General trait anxiety was measured using a questionnaire composed by the second author, and is reproduced in the Appendix. A new questionnaire was created because existing questionnaires did not concentrate on the three separable areas of anxiety that we wished to investigate – academic anxiety, social anxiety and appearance anxiety. The questions were partly based on two established and copyright free questionnaires: the IPAT Self Analysis Form (Cattell, 1957) and the Screen for Child Anxiety Related Emotional Disorders

(SCARED) (Birmaher, Khetarpal, Brent, Cully, Balach, Kaufman, & McKenzie Neer 1997). These measures have been established as valid and reliable. The current questionnaire comprised 90 questions: 30 questions on each of three specific areas of anxiety – academic, social and appearance anxiety. This aimed to measure the relatively enduring individual differences in general anxiety that represent trait anxiety. Anxiety was measured in three general areas in order to determine whether dyslexics are specifically anxious with regard to academic achievement, or whether they are more anxious overall than non-dyslexics, with their anxieties having generalized to other areas of their lives. Overall reliability for the anxiety scale was .878, while reliabilities for the individual subscales were as follows; .903 for academic anxiety, .870 for social anxiety and .892 for appearance anxiety. The measure showed moderately high correlations with the state anxiety measure (STAI), with  $r = .52$  ( $p < 0.01$ ), suggesting that this measure had validity in this sample.

Each question on the trait anxiety questionnaire gave subjects three options, which were scored on a scale of 1 to 3, with 3 representing the highest levels of anxiety. These responses were summed to calculate four scores for each subject: academic anxiety, social anxiety, appearance anxiety and overall anxiety (sum of previous three scores).

The State-trait Anxiety Inventory (STAI; Spielberger et al., 1983) aims to measure both state anxiety and trait anxiety, with two separate questionnaires. . The state anxiety inventory of the STAI (in its original form) was administered to participants, to measure anxiety under the particular manipulated situation. This form contains 20 questions, each of which are graded on a 4 point scale.

Subjects' word reading efficiency was measured using the Test of Word Reading Efficiency (TOWRE) (Torgesen et al., 1999). This test is designed to quickly assess two kinds of word reading skill critical in the development of overall reading ability: the ability to sound out words quickly and accurately, and the ability to recognize familiar words as whole units or single words (Torgesen et al., 1999). Reported test-retest reliability for this measure is 0.93.

*Procedure.*

All subjects completed each measure in a fixed order. Trait anxiety was tested first. All subjects were then told they would complete a timed reading test.

Before this was administered, State anxiety was assessed by the STAI. Finally reading speed was measured by the Test of Word Reading Efficiency (Torgesen et al., 1999). Participants completed both the word and non-word sections of the TOWRE.

*Results**Reading ability.*

[Table 1 about here]

Mean standard scores on the two parts of the TOWRE are shown in Table 1. The standard scores for the control group are average, while those of the dyslexic group are below average. Some ceiling effects were shown for control subjects on the word section of the TOWRE. For this reason, analyses were carried out on the summed proportion correct for each student on the two sections of the TOWRE combined. This measure was normally distributed. There was a significant difference between groups on this measure ( $F(1, 29) = 21.93, p < 0.001$ ), with dyslexics performing less well than controls. A summary of the ANOVA is presented in Table 2.

[Table 2 about here]

*Trait anxiety.*

[Figure 1 around here]

[Table 3 about here]

Summary scores on the different subscales of the trait anxiety measure are shown in Figure 1 and Table 3. Anxiety levels for dyslexic and control students were entered into a 2 x 3 within subjects ANOVA, described in Table 4. The between subject variable was group and the within subject variable was area of

anxiety (of which there was three levels: academic anxiety, social anxiety and appearance anxiety). This analysis revealed a statistically significant main effect of group ( $F(1, 30) = 19.94, p < 0.001, \eta^2 = 0.40$ ), a statistically significant main effect of area of anxiety ( $F(2, 60) = 30.998, p < 0.001, \eta^2 = 0.51$ ), and a significant interaction between group and area of anxiety ( $F(2, 60) = 13.93, p < 0.001, \eta^2 = 0.32$ ). These analyses indicate that overall levels of anxiety are higher in dyslexic students than control students. However, differences between the groups vary according to the area of anxiety. In order to examine the reason for these statistically significant main effects further, individual t-tests were carried out. These showed that the significant interaction was due to the fact that dyslexics were more anxious than controls in both academic and social areas ( $t(30) = 7.21, p < .001$ ;  $t(30) = 3.87, p = .001$ , respectively), but not more anxious concerning their appearance ( $t(30) = 0.685, p = ns$ ).

*State anxiety.*

The two groups showed significantly different mean scores in an ANOVA, presented in Table 4. Dyslexics scored significantly higher than controls (44.44 vs. 32.00 for dyslexics and controls respectively).

[Table 4 about here]

To assess whether the differences in anxiety level between the groups could be explained by their difficulties in reading, and analysis of covariance was carried

out controlling for reading score on the TOWRE. Though there was no significant main effect of TOWRE score ( $F(1, 28) = 0.872, p = ns$ ), once reading ability had been controlled the group difference in state anxiety became only marginally significant ( $F(1, 29) = 3.81, p = .06$ ). This implies that differences in state anxiety levels between groups are largely attributable to differences in reading ability.

#### *Correlations.*

Correlations were calculated between subjects' reading abilities (a summed score of word and non-word reading, as assessed by the TOWRE) and all the tested areas of anxiety. Results are shown in Table 5.

[Table 5 around here]

Both trait and state anxiety were associated with reading rates. Within the trait anxiety questionnaire, academic anxiety was associated with reading abilities, as predicted. In addition, social anxiety was also related to reading abilities, suggesting that students with weak reading skills are more likely to be anxious in social situations. There was no association between reading and appearance anxiety.

#### *Discussion*

The findings from the present study support the previously hypothesized associations between reading and other learning disabilities and vulnerability to emotional consequences such as anxiety (e.g. Cohen, 1986; Gever, 1970; Maughan, 1994; Thomson, 1990), and replicate previous findings of elevated levels of anxiety in dyslexics (e.g. Paget & Reynolds, 1984; Huntington and Bender, 1993; Rodriguez & Routh, 1989). The findings indicate that dyslexic university students have higher levels of trait anxiety than non-dyslexics with respect to both academic and social situations. They also show higher levels of state anxiety when faced with a situation in which their reading abilities will be tested.

Increased anxiety levels in dyslexics were not limited to academic situations. Dyslexics in higher education also show increased levels of social anxiety. It is likely that for this group, as with school children, social factors are closely bound up with academic achievements: for the majority of students their academic peer group also forms the major part of their social network. For both school children and students, academic situations are largely social situations. It is not surprising, therefore, that anxiety about academic difficulties generalizes to anxiety about social situations. Dyslexic students did not show increased levels of appearance anxiety, showing that academic difficulties do not cause generally



increased levels of anxiety in all areas. These findings are in line with those of Carroll et al. (in press), who found that children with reading difficulties were at increased risk of generalized anxiety disorder and separation anxiety, but not of specific phobias or other anxiety diagnoses.

Unlike Riddick et al. (1999), the present study found dyslexics to have higher levels of state anxiety within the interview situation. This finding supports the assumption that years of repeated struggles with reading will have disposed dyslexics to feel signs of stress, worry and anxiety when placed in a situation demanding literacy accuracy. Riddick et al. (1999) perhaps failed to find such results due to the absence of a manipulated 'stressful' environment (i.e. a reading test) in their study. In the present study, actual reading ability largely accounted for variable levels in state anxiety between the groups. This is most likely due to the specificity of the situation; the demand is strictly on reading ability, therefore level of reading ability will undoubtedly affect subject's experience of level of anxiety.

The sample in the present study was predominately female (13 females and 3 males in each group). This was not anticipated or selected: dyslexic students contacted the researchers themselves after a group email was sent out and

posters were placed around the support centre. Given the well known preponderance of males with dyslexia (Rutter, Caspi, Fergusson, Horwood, Goodman, Maughan, Meltzer, & Carroll, 2004), this was surprising. The gender difference in this study may reflect the fact that female dyslexic students, in general, felt more willing to talk about their experiences and worries. There is some evidence that female dyslexics are more prone to anxiety related symptoms than male dyslexics (Carroll et al., in press; Hales, 1994). The present study may therefore somewhat overestimate the levels of anxiety present in dyslexic students as a group. This bias therefore limits the conclusions that can be drawn concerning dyslexic students as a group.

It is important to remember that all of the participants were highly capable students, able to enter higher education. It is likely that they will have developed good compensatory strategies (as mentioned by dyslexic students in the present study). These students may therefore represent individuals who have found adaptive ways of coping and learning, despite their difficulties. However, the new demands of the higher educational environment may place strains on these strategies, which were previously adequate for coping, consequently placing these students at high risk for anxiety in times of difficulty, stress and frustration. Compared with non-dyslexics, those with dyslexia have to spend much more

time and effort on their work in order to achieve accepted levels of academic competence (National Working Party, 1999). They may have developed slow and vigilant methods of working. These factors may inadvertently cause stress, as students will feel less capable than their peers. It may be of interest for future studies to focus on success rates and coping strategies in dyslexics, such as whether they adopt positive or negative (e.g. avoidance, covering up; Roth and Cohen, 1986) coping techniques. Additionally, studies could look at whether students have an internal or external locus of control, which may directly affect anxiety levels in various situations (Spielberger et al., 1983). For example, if students have an internal locus of control this may directly protect them against stress and anxiety, dependent on perception of controllability of events (Meadows & Merrill, 1989).

Previously, anxiety levels in dyslexics have mainly been studied in school-age children. Bruck (1989) found most students with learning disabilities to show good levels of adjustment in adulthood, however, in contrast present results suggest that those with dyslexia in higher education may still suffer the emotional consequences of a disability that has been with them since childhood. It is possible that these levels of anxiety are lower than when the students were attending school, but this study did not look at comparable levels. It would be of

interest to carry out a study to compare anxiety levels in university students with those felt by younger children of various ages, in order to determine fluctuations of these anxieties at various stages of the educational system, and at what particular age intervention and support is most critical. It may be of most use to conduct longitudinal studies on dyslexic children as they progress to adulthood. At present it remains unclear whether adult anxieties are a result of ongoing literacy problems, repeated childhood failure experiences, or more indirect processes, mediated through current life experiences (Maughan, 1994). Anxieties will be moderated by other environmental and personal variables (Riddick, Farmer & Sterling, 1997).

The students in the present sample are from quite a small age range ( 19 – 24 years). Year of study for the students was not recorded, but potentially one might expect that students towards the start of their course would have higher anxiety levels than students towards the end of the course. One would also predict that students would have higher anxiety levels than non-students of the same age, because of the increased literacy demands placed upon students. Again, this possibility should be examined in more detail in further research.

The present findings have clear practical implications. The majority of dyslexic students in the present study commented that they do not believe university to offer adequate emotional support, and available facilities are not made aware to them, despite the established disability advice system within the university. At time of assessment for dyslexia, individuals should perhaps also undergo an assessment of emotional well-being (Huntington and Bender, 1993; Riddick et al., 1999), in order to measure individual needs, and subsequently assess whether support is of benefit. McKissock (2001) and The National Working Party (1999) stress the importance of offering counseling to dyslexic students. These students may have accumulated many unhelpful coping strategies, and coupled with damaged self-esteem and high anxiety may need professional counseling to prevent continuation of such disadvantages (The National Working Party, 1999). This study adds to a growing body of evidence that individuals with literacy difficulties are likely to have substantially increased levels of anxiety (Carroll et al., in press; Hales, 1994; Willcutt & Pennington, 2000). Support for these difficulties is crucial throughout the education system and beyond.

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Table 1: Mean standard scores (with standard deviations in parentheses) for each group on the TOWRE.

	Word	Non-Word	Total proportion correct
Control (n=16)	103.13 (11.06)	104.47 (9.45)	0.918 (0.05)
Range	83-113	87-120	0.82 – 1.00
Dyslexic (n=16)	88.94 (11.70)	87.5 (9.87)	0.757 (0.12)
Range	64-113	72-115	0.47 – 0.98

Table 2: ANOVA summary table for the reading task

Dependent variable: TOWRE	df	MS	F	Sig.	$\eta^2$
Reading (proportion correct)					
Intercept	1	21.72	2348.39	<.001	.988
Group	1	.203	21.93	<.001	.431
Error	30	.009			

Table 3: Summary statistics for the anxiety questionnaires.

	Academic Anxiety (max. = 90)	Social Anxiety (max. = 90)	Appearance Anxiety (max. = 90)	State Anxiety (STAI) (max. = 80)
Control (n=16)	50.94 (6.44)	43.50 (6.46)	49.81 (8.47)	32.00 (8.25)
Range	41-64	35-55	37-67	22-50
Dyslexic (n=16)	70.00 (8.38)	54.06 (8.81)	52.25 (11.43)	44.44 (11.37)
Range	52-85	40-69	38-70	23-62

Table 4: ANOVA summary table for the state anxiety task

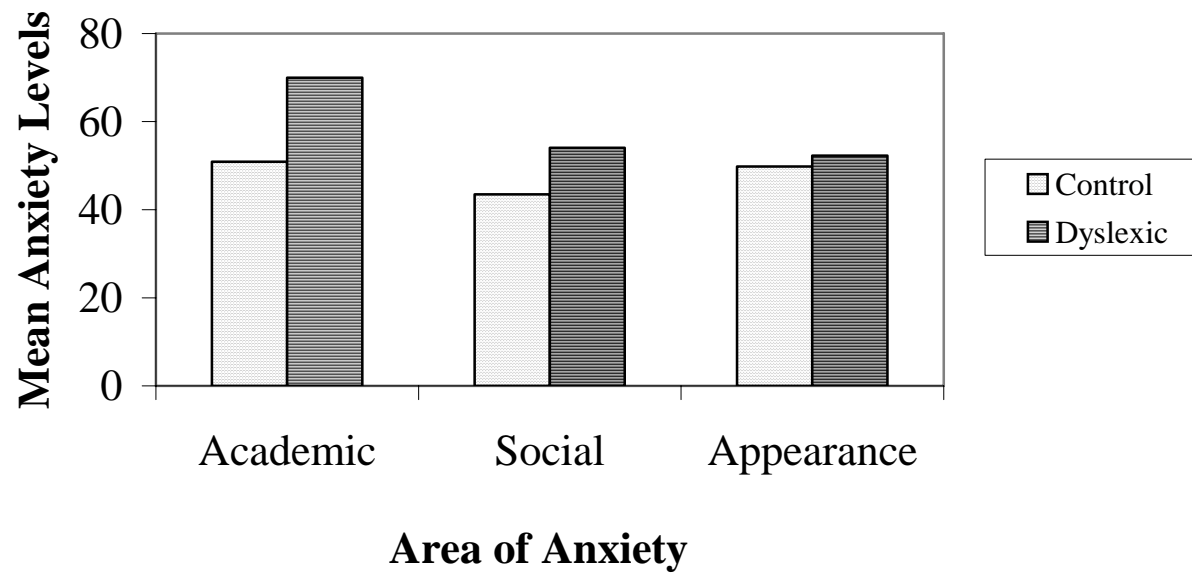
Dependent variable:	df	MS	F	Sig.	$\eta^2$
State anxiety					
Intercept	1	46741.53	473.74	<.001	.940
Group	1	1237.53	12.54	.001	.295
Error	30	98.67			

Table 5: Summary of Pearson correlation coefficients for reading ability and different areas of anxiety.

	TOWRE Score
Overall Trait Anxiety	-.62*
Academic Anxiety	-.64*
Social Anxiety	-.55*
Appearance Anxiety	-.29
STAI	-.46*

\* Significant at  $p < 0.01$

Figure 1: Mean trait anxiety levels in dyslexic and non-dyslexic students:



**APPENDIX 1** – questionnaire devised by second author to assess trait anxiety:

**SELF-EVALUATION/ ANXIETY QUESTIONNAIRE**

A number of statements are given below that may describe how people feel. Please read each statement carefully and then circle one number for each answer, indicating as accurately as possible how you *generally* feel. Do not spend too long on any one statement. There are no right or wrong answers, but please give the response that seems to describe how you generally feel, avoiding the use of 'partly true' as often as possible. It is important that you try to answer all questions. Thank you.

**Responses:**

**Very like me: 1, Partly true: 2, Not like me: 3**

- |  |   |   |   |
|--|---|---|---|
| 1. I feel tense when I know people are looking at me                       | 1 | 2 | 3 |
| 2. If I make an awkward social mistake I can soon forget it                | 1 | 2 | 3 |
| 3. I have trouble sleeping when I know I have a lot of work to<br>get done | 1 | 2 | 3 |
| 4. I get angry when I cannot look how I would like                         | 1 | 2 | 3 |
| 5. I am confident and happy with my academic abilities                     | 1 | 2 | 3 |
| 6. I feel socially inadequate compared to my friends                       | 1 | 2 | 3 |
| 7. I have trouble relaxing when I know I have work to do                   | 1 | 2 | 3 |
| 8. Looks are unimportant   | 1 | 2 | 3 |

9. I like to stand out from a crowd and be noticed	1	2	3
10. I feel secure in my friendships	1	2	3
11. I am very jealous of how others look	1	2	3
12. I need my friends more than they need me	1	2	3
13. I find it hard to joke about appearances	1	2	3
14. When exams are approaching I often feel ill or suffer from a cold	1	2	3
15. I have a lot of friends	1	2	3
16. I am confident that I could help others if they are struggling with their work	1	2	3
17. I lack self-confidence in academic situations	1	2	3
18. I cannot make decisions easily about my work	1	2	3
19. My appearance upsets me	1	2	3
20. I feel tense and easily upset when my academic abilities are questioned	1	2	3
21. I cannot concentrate on other tasks, or conversations, when I have lots of work to do	1	2	3
22. I doubt the honesty of those who are more friendly than they need to be	1	2	3
23. I am comfortable talking to strangers	1	2	3

24. I often wish I could look like others	1	2	3
25. Even when surrounded by others I often feel lonely	1	2	3
26. I spend longer on my work than most people	1	2	3
27. My friends are all more attractive than I am	1	2	3
28. I feel a failure academically, in comparison to my peers	1	2	3
29. I am happy with my appearance	1	2	3
30. I feel anxious when reading aloud in front of my class	1	2	3
31. I am jittery when meeting new people	1	2	3
32. I prefer spending time on my own than with others	1	2	3
33. I feel anxious when speaking in class	1	2	3
34. I am very touchy about my weight	1	2	3
35. I am happy spending time in one-on-one situations	1	2	3
36. I am confident in front of a crowd of people	1	2	3
37. I avoid looking in mirrors	1	2	3
38. When about to enter an exam I feel ill/ shaky	1	2	3
39. I always think very carefully before speaking	1	2	3
40. I feel lethargic when I have lots of work to get done	1	2	3
41. I constantly worry over mistakes I may make in social situations	1	2	3
42. I avoid having to socialize	1	2	3



43. I feel sick when I have to make an effort to look nice	1	2	3
44. I lose sleep when I know I have to meet a group of people I don't know very well the following day	1	2	3
45. I feel overly anxious when I have exams	1	2	3
46. I am a shy person	1	2	3
47. I feel my literature skills may let me down in exams	1	2	3
48. I find it hard to concentrate on what others are saying as I am so preoccupied with how I may come across	1	2	3
49. I feel I can face up to, and overcome, my academic weaknesses	1	2	3
50. I spend excessive time on my appearance every day in an attempt to feel better about myself	1	2	3
51. I feel tense when walking into a crowded room	1	2	3
52. No matter how much work I have to do I generally remain high spirited	1	2	3
53. I find I resent others if I feel they are more attractive than myself	1	2	3
54. I am often brought to tears when I think about my academic abilities	1	2	3
55. I often don't want to see anyone	1	2	3

56. I feel constantly under strain to achieve well, and perform better than I am capable	1	2	3
57. I am very reliant on others	1	2	3
58. I am unconcerned with how I look	1	2	3
59. I tremble when public speaking	1	2	3
60. I am almost brought to tears when thinking of my social abilities	1	2	3
61. I constantly set myself goals to change how I look	1	2	3
62. When in the company of friends, I sometimes feel worthless	1	2	3
63. I think about how I look for a large amount of time each day	1	2	3
64. People don't have the time for me	1	2	3
65. I get angry with myself for taking so long over one piece of work	1	2	3
66. I try to fill my day with as many social events as possible	1	2	3
67. My work suffers if I am under pressure, and I work better if I have plenty of time	1	2	3
68. I often feel I let myself down in social situations	1	2	3

69. I am sometimes unable to sleep at night due to worrying thoughts about my appearance	1	2	3
70. I feel tense and stressed when I have an essay to write	1	2	3
71. I feel my appearance lets me down	1	2	3
72. I feel confident that I am fit and healthy	1	2	3
73. I am happy with my research skills	1	2	3
74. I am confident in my looks	1	2	3
75. After handing in a piece of work I feel able to relax	1	2	3
76. I take comments on my appearance very personally	1	2	3
77. It upsets me when I think about my appearance	1	2	3
78. If I worry about my work I usually calm down quickly again	1	2	3
79. I lose sleep over my physical appearance	1	2	3
80. I am relaxed in most social situations	1	2	3
81. I worry that people judge me too quickly on how I look	1	2	3
82. Thinking about my appearance upsets me to the extent that I avoid going out	1	2	3
83. I get frustrated when faced with a lot of reading	1	2	3
84. I avoid situations when I know I will be judged on my appearance	1	2	3

85. I can trust others easily	1	2	3
86. I feel I have no academic weaknesses	1	2	3
87. I find it easy to take a compliment on how I look	1	2	3
88. I feel no one understands me	1	2	3
89. I sweat a lot when I know people are looking at me	1	2	3
90. I often feel stressed when deadlines are approaching	1	2	3