

LAW STUDENTS' ATTITUDES TO EDUCATION: POINTERS TO DEPRESSION IN THE LEGAL ACADEMY AND THE PROFESSION?

MASSIMILIANO TANI* AND PRUE VINES**

I INTRODUCTION

In 2005, a survey was administered in first semester to approximately 5000 students in all faculties at the University of New South Wales (UNSW), to which 2528 students responded.¹ The survey was intended to investigate students' attitudes to their experience and expectations of their university education so that teachers could respond effectively to those expectations. We were interested in why students chose their course and whether it met their expectations. On a campus with a high proportion of international students as well as a multicultural Australian student body, we were also interested in identifying any cultural barriers to the way education was taking place within the university.²

When the data was examined and divided across faculties, some unexpected differences between law students and other students appeared. Law students reported different reasons for their choice of course, seemed disproportionately concerned about their grades, less interested in teamwork, and had different ideas about employers' preferences for graduates when compared with students from other

* Senior Lecturer, Department of Economics, Macquarie University, New South Wales, Australia.

** Professor, Faculty of Law, University of New South Wales, Australia.

¹ Massimiliano Tani (ed), *Report: On the Motivations, Expectations, and Experiences of Students in Tertiary Education: Findings from a Large Survey Carried Out at the University of New South Wales* (2006) <http://tls.vu.edu.au/learning_and_teaching/guidelines/VU11/Tani%20UNSW%20report%20-December%202006.pdf> at 23 December 2009.

² UNSW in 2005 had approximately 35 000 students. Two-thirds of our respondents were Australian citizens. The cultural background of 50 per cent of all UNSW students was self-identified as 'Asian', predominantly Chinese. Respondents identified themselves as having Anglo-Saxon background in the following percentages: Law (17 per cent), Medicine (20 per cent), Arts/Social Sciences (22 per cent), Engineering (33 per cent), College Of Fine Arts (33 per cent) and Commerce/Economics (4 per cent). The remainder were a broad mix reflecting the multicultural nature of Australian society.

disciplines.³ The present paper reports on a further investigation of the differences between law students and those in other disciplines. Those differences are of general interest to legal and other tertiary educators; however, we were also aware that law students have the highest proportion of depressive illness amongst university students and that lawyers have the highest proportion of depression of all the professions.⁴ As a consequence, in undertaking our further analysis, we considered whether the differences between law students and other students in their attitudes to education might help to suggest factors that contribute to the disproportionate level of depression amongst law students.

Law students' experiences and attitudes, as they emerged from the further analysis, showed a comparatively low level of personal autonomy and a strong element of competitiveness compared with medical students and with students from other faculties. The psychological literature suggests that lack of autonomy and lack of social connectedness are important factors in depression. The results of this study thus indicate a number of factors which might assist in helping us understand why law students are more likely to develop depression than students in other disciplines.

The rest of the article is organised as follows: Part II reviews the (mostly psychological) literature about motivation and the hypotheses that guided the data analysis. Part III presents the data and key findings. Part IV discusses the results in relation to the literature on depression. Part V concludes with a consideration of strategies for increasing law students' resilience and with recommendations for further research.

II LITERATURE AND APPROACH

Our initial survey suggested that there could be differences in law students' attitudes to why they chose their course, how they prefer to learn, what they hope to achieve from it and their expectations of employers. Our further analysis sought to tease out these matters in a more detailed fashion than occurred originally. By 'attitudes to education', we mean students' broad preferences about how and what to learn rather than learning style alone (the preferences of individuals about how they process information and the strategies they use to do this).⁵ Students were questioned about

³ Tani, above n 1, 17, 26.

⁴ Norm Kelk et al, *Courting the Blues: Attitudes Towards Depression in Australian Law Students and Legal Practitioners* (2009). The results of this survey carried out by the NSW Brain and Mind Institute were presented at the UNSW Tristan Jepson Memorial Lecture by Professor Ian Hickie, 18 September 2008.

⁵ The study is not based on any particular theory of learning styles but does implicitly rely upon an information processing model which draws on personality theory. On learning styles, see, eg, Richard Felder and Joni Spurlin, 'Applications, Reliability and Validity of the Index of Learning Styles' (2005) 21(1) *International*

a broad range of issues, including their decisions and expectations about university, their perceptions of university life and learning, as well as their backgrounds and expectations of life after university. Of the 2528 student responses, 2241 were undergraduates from all the then 10 faculties at UNSW.⁶ These data provide the opportunity to compare the responses of law students with those of students of similar characteristics enrolled in other disciplines.

A major question this study seeks to examine is whether the responses of law students to questions about their experiences and expectations of university education can reveal factors that help to explain why they may be more likely to become depressed than students in other faculties. We know that law students and law professionals are disproportionately affected by depression. There has been United States (US) data to this effect for a long time: out of 105 professions surveyed, US lawyers rank first in depression and suffer depressive illness at a rate two to four times that of the general population.⁷ Twenty-five per cent of US lawyers suffer from psychological distress, a disproportionate number commit suicide, and there is evidence that they have a high rate of substance abuse including alcohol abuse.⁸ Recently, this data has been added to by Australian studies which appear to agree.⁹ Beaton Consulting in 2006 showed that lawyers came second only to patent attorneys in unhappiness in a survey of 7000 Australian professionals.¹⁰ The same survey showed that 45 per cent of young lawyers wanted to leave their jobs within two years and that 9 per cent planned to leave law altogether. A separate survey in 2008 of 741 law students in

Journal of Engineering Education 103; David Kolb, *Experiential Learning: Experience as the Source of Learning and Development* (1984). While some models of learning styles would distinguish active learners from passive learners and suggest that active learners prefer group work, we are more interested in the fact that a preference for group work also reflects a personal preference for social connectedness rather than competitiveness.

⁶ Australian Defence Force Academy (ADFA); Arts and Social sciences; Australian Graduate School of Management (AGSM); Built Environment; College of Fine Arts (COFA); Commerce and Economics; Engineering; Law; Medicine; and Science.

⁷ William Eaton et al, 'Occupations and the Prevalence of Major Depressive Disorder' (1990) 32 *Journal of Occupational Medicine* 1079, 1083; G Andrew Benjamin, Elaine Darling and Bruce Sales, 'The Prevalence of Depression: Alcohol Abuse and Cocaine Abuse among United States Lawyers' (1990) 13 *International Journal of Law and Psychiatry* 233, 240; Martin Seligman, Paul Verkuil and Terry Kang, 'Why Lawyers are Unhappy' (2005) 10 *Deakin Law Review* 49, 54; Martin Seligman, *Authentic Happiness* (2004) 177; see generally American Bar Association, *At the Breaking Point: The Report of a National Conference on the Emerging Crisis in the Quality of Lawyers' Health and Lives — Its Impact on Law Firms and Client Services* (1991).

⁸ Benjamin, Darling and Sales, above n 7, 243.

⁹ Beaton Consulting, *Annual Professions Survey 2007: Short Report* (2007) 2; Norm Kelk et al, above n 4, 14, 42; Colin James, 'Lawyer Dissatisfaction, Emotional Intelligence and Clinical Legal Education' (2008) 18 *Legal Education Review* 123, 124.

¹⁰ Beaton Consulting, above n 9, 2.

13 Australian law schools, and of 924 solicitors and 756 barristers across Australia, confirmed these findings, showing that over 35 per cent of law students and almost a third of solicitors and one-fifth of barristers had levels of depression regarded as disabling.¹¹

Importantly, these studies show that, before they enter law school, there appear to be no differences in wellbeing between law students and the general population.¹² Indeed, law students may enter law school with feelings of wellbeing higher than the rest of the student population. And why not? Entry requirements for law are extremely demanding and being offered a place is a significant recognition of success. However, we also know that undergraduate law students begin to suffer depressive illness in quite high numbers within six to 12 months of beginning their studies.¹³ This suggests that something about being in or choosing to be in law school may contribute to the likelihood of depression. Our initial hypothesis was that this may be a factor of being in a professional discipline. We anticipated, consequently, that law students and medical students would have similar attitudes to their education because they were in similar situations — undertaking professional degrees, with very high entry level requirements and high stress environments of study. To test this hypothesis, we compared the survey responses of law students with those of medical students, and then with students in other disciplines. Because this was a re-analysis of existing data, we could not go back and ask the students whether they were depressed or about particular aspects of their university study that might predispose students to depression. We therefore chose to examine the existing literature for factors known to cause depression and examine the data to see if there were attitudes expressed which could be indicators of those factors.

Why are law students so subject to developing depression? It is well known that western societies are suffering from an epidemic of depression generally, but lawyers and law students are disproportionately affected. The dominant psychological theory of the aetiology of depression today is the theory of learned helplessness. This theory is based on research which has shown that patterns of

¹¹ Kelk et al, above n 4, 12.

¹² G Andrew Benjamin et al, 'The Role of Legal Education in Producing Psychological Distress Among Law Students and Lawyers' (1986) *American Bar Foundation Research Journal* 225, 240; Kennon M Sheldon and Lawrence S Krieger, 'Does Legal Education Have Undermining Effects on Law Students? Evaluating Changes in Motivation, Values and Well-Being' (2004) 22 *Behavioural Science & Law* 261, 262; Kennon M Sheldon and Lawrence S Krieger, 'Understanding the Negative Effects of Legal Education on Law Students: A Longitudinal Test of Self-Determination Theory' (2007) 33 *Personality and Social Psychology Bulletin* 833, 890–1.

¹³ Eaton et al, above n 7; Benjamin, Darling and Sales, above n 7; Kelk et al, above, n 4; Ann Iijima, 'Lessons Learned: Legal Education and Law Student Dysfunction' (1998) 48(4) *Journal of Legal Education* 524, 526; Benjamin et al, above n 12, 241.

thinking, or attributions, affect feelings of wellbeing.¹⁴ Other theories of depression are not necessarily inconsistent with this theory. These include those focused on self-esteem, many of which are based on psychoanalytic theories.¹⁵ Then there are behavioural theories which regard depression as created by the failure of the person to reach their goals and use reinforcement to effect changes as treatment.¹⁶ But all these theories are consistent with the view, central to learned helplessness theory, that attributional style (that is, the way one thinks about cause and effect in one's own life) is important for the development of depression.

The dominant characteristics of depressed thinking include feelings of helplessness and loss of autonomy. Sheldon and his colleagues have produced empirical (and cross-cultural) data which shows what psychological needs are required to be met for a positive life experience.¹⁷ The critical needs for wellbeing identified by that study include: self-esteem, competence, security (as an underlying requirement), social connection or relatedness to others, and autonomy. These factors are entirely consistent with the vast majority of the literature. Consequently, having noted differences between the survey responses of law students and other students, we looked in the present analysis for attitudes which might connect to the factors identified as significant for depression.

Of the factors related to depression, self-esteem was something we could not measure since this original survey had no tools to do so; similarly, security as a background issue was outside the bounds of our survey. The three factors which might be usefully considered were attitudes indicating feelings of a lack of competency, autonomy and social connectedness. Indicators of problems with competency might exist in attitudes to marks dropping, for example. A lack of autonomy might show up in attitudes to learning manifesting external rather than internal motivation. Internal motivation would

¹⁴ See, inter alia, Lauren Alloy et al, 'The Hopelessness Theory of Depression: Attributional Aspects' (1988) 27 *British Journal of Clinical Psychology* 5, 21; Judy Garber and Martin Seligman (eds), *Human Helplessness: Theory and Application* (1980).

¹⁵ Sigmund Freud, 'Mourning and Melancholia' in Ernest Jones (ed), *Collected Papers* (1950); Alice Miller, *Prisoners of Childhood: The Drama of the Gifted Child and the Search for the True Self* (1996); Sidney Blatt, 'Contributions of Psychoanalysis to the Understanding and Treatment of Depression' (1998) 46(3) *Journal of the American Psychoanalytic Association* 723.

¹⁶ Arnold Lazarus, 'Learning Theory and the Treatment of Depression' (1968) 6 *Behavioural Research Therapy* 83; Peter Lewinsohn and Julian Libet, 'Pleasant Events, Activity Schedules and Depression' (1972) 79 *Journal of Abnormal Psychology* 291; Arthur Staats and Elaine Heiby, 'Paradigmatic Behaviourism's Theory of Depression' in Steven Reiss and Richard Bootzin (eds), *Theoretical Issues in Behavioural Therapy* (1985).

¹⁷ Kennon Sheldon et al, 'What is Satisfying about Satisfying Events? Testing 10 Candidate Psychological Needs' (2001) 80 *Journal of Personality & Social Psychology* 325.

be manifested by students deciding for themselves what courses to do, rather than trying to please others. It would also manifest as a concern more with what is learned than with the marks gained, and with a greater intrinsic interest in subject matter. We thus explored whether law students manifested more concern than other students about grades and whether they were more likely to have chosen law for 'external' reasons. Indicators of lesser likelihood of social connectedness might include a very high level of competitiveness, so we investigated whether law students' responses indicated that they may be less likely to be social in various ways, and thus more isolated than other students.

Teasing out factors that might affect, or become manifest in, law students during the course of their study — but not in students from other disciplines — required us to identify a group of students that could be used as a natural and logical reference for our empirical analysis. As indicated above, we anticipated that law and medicine students, both being involved in professional studies with similar entry levels to university and a strong potential for economic success thereafter, would have similar attitudes to learning and that comparing them, as professional schools, with non-professional schools would be a natural starting point to identify different attitudes which might create an increased likelihood of depression. We therefore hypothesised that students may respond to stressful events in their studies in various ways which reflected their personal attributes, whether learned or inherent, and that their attitudes to learning would reflect these personal attributes and attitudes. The stressful events in early law school and early medical school include the drop in grades suffered by nearly all law and medical students in their first year compared with those they achieved for entry into law school. (This necessarily occurs because students who have been at the top of their previous schools find themselves in a group of people who were also at the top and therefore have a much lesser chance of being on top of the new group.) Later stressors for law students may be greater or different, including the competition for summer clerkships, associateships to judges, and the various competitions run in law schools including mooted competitions, mock trial competitions and so on. Medical students must also compete for some positions, however. And all students ultimately compete in the employment market. How much impact these different stressors may have on the person may well depend on attitudinal factors or style and this is what the study seeks to illuminate.

In addition to comparing the responses of law students to the responses of medical students (as another professional environment), we compared their responses to those of students in non-professional environments — in particular Arts and Social Sciences and students in the College of Fine Arts (COFA).

III DATA AND METHODOLOGY

A *The Questionnaire*

The data used in this paper are sourced from a database constructed with the aim of uncovering incentives and expectations that affect students' behaviour, learning attitudes and outcomes at UNSW. The questionnaire developed for the study is included in Appendix A, and is divided into four major parts:

- Decisions and expectations about university — reasons for deciding to study at university and for choice of program and course of study.
- Perceptions about university life — learning approach, expectations of teachers, value placed on marks, preferred assessment, perception of benefits/disadvantages of learning in a culturally diverse university, perceived benefits of higher education, and attitudes towards higher education and work.
- Expectations about post-university life — plans after graduation, perception of preparedness for work, perception of employers' expectations, and estimate of self-worth after finishing.
- Student background — in terms of education, culture, demographic and family background.

The questionnaire was purposely broad to develop a single instrument that could be used to analyse, at once, various aspects of student learning and relate them to their characteristics, background, and expectations about the future. A key characteristic of the questionnaire was its combination of qualitative assessment of statements as measured by a Likert scale (for example, 'how important is it for you to get a high mark? — very much, much, indifferent, not much, not at all') with quantitative measures of available alternatives (for example, 'please rank what motivates you most between (a) getting high marks, (b) developing research skills, (c) learning about a new subject, (d) being involved in university activities, (e) other — please specify'). This disaggregation allows us to contextualise the ranking of alternative answers provided by students with their perceived relevance of the topic. We validated the instrument with experts in psychometrics and piloted the questionnaire on a small sample of UNSW students. Following satisfactory preliminary testing, we carried out the survey across the University.

Questionnaires were completed by 2528 graduate and undergraduate respondents from all the then 10 UNSW faculties. As three of the faculties are relatively small in student population size, we have grouped them into a single faculty labelled 'Other' in the rest of this paper. This choice also simplifies the comparison of law students to reference groups that are well-represented in the sample and the population. These are Medicine, Commerce/Economics, COFA, Arts and Social Sciences, Engineering, and the aggregate

‘Other’. Not every question was answered; hence, the sample size associated with each question varies. Differences are small (within 5 per cent of the total number of respondents) with reference to students’ characteristics such as age, gender, and year of enrolment, but they become more substantial with respect to more personal questions about their experiences and expectations. Throughout the analysis, we report the number of non-respondents to illustrate this source of sample bias.

The sample included 333 undergraduate respondents from the Faculty of Law, or 13 per cent of the total sample size. This proportion is comparable with the proportion of law students in the underlying student population. The distribution by year of study was balanced across faculties, especially with reference to first, second and fourth year. First and fourth year are important flag points for UNSW law students, as they undertake joint degrees which are completed in five years. By fourth year, the majority of law students have finished their other degree and so take only law subjects from then on.

About 54 per cent of the students surveyed were females, and this proportion is similar to that of the actual student population at UNSW. The students sampled at COFA were predominantly females, those in Engineering were predominantly males, while law students tended to have a more balanced gender ratio. The average age of the students sampled was in the early 20s, with small differences across faculties.¹⁸

Respondents generally came from families where parents had a university degree, especially fathers, as indicated by the figures in Table 1.

Table 1: Parents’ Education and Pre-University Score

	% Father has university degree	% Mother has university degree	Pre-university score (min = 0; max = 4)
Arts/SocSc	60%	51%	3.13
COFA	50%	37%	2.77
Comm/Econ	58%	41%	3.39
Engineering	48%	25%	2.35
Law	66%	46%	3.60
Medicine	72%	63%	3.66
No answer	23	42	40
N	2505	2486	2488

¹⁸ The cultural composition of the UNSW student body is set out briefly above, n 2. There was no evidence to suggest systematic cultural or faculty-specific biases in the survey data.

Table 1 also shows that law and medicine students had the highest average pre-university score among all students surveyed. This is not surprising, as medical and law students at UNSW are selected from cohorts achieving a University Admission Index (ranking) score of 99 per cent or more — that is, their scores were higher than 99 per cent of the population taking their Higher School Certificate examinations. This result supports our stance of using medical students as a natural comparison group, at least within UNSW. At this stage, it is useful to note that law students in all Australian law schools require high pre-admission scores; although not all law schools would necessarily have comparable admission requirements.¹⁹

We analysed the data in two ways. First, we checked whether or not students of law and medicine have similar characteristics, tertiary learning experiences and labour market expectations. In other words, we first tested *whether* there is a difference in the answers of law and medical students, then law and medical students as compared to each other faculty. The appropriate statistical technique for this task is identified by the question we address ('are the answers of law and medical students similar?') and the type of data we use (answers are numbers representing a rank; the ranking scale is arbitrary, so there is no special value in using a 1–10 scale versus a 100–1000 scale; students from each faculty are surveyed independently from each other so their answers can be seen as uncorrelated). In our case, the Wilcoxon rank sum test and the Kruskal-Wallis tests are suitable techniques.²⁰ Both tests compare the median of the answers' distribution given by the (two) groups of students. In particular, the Wilcoxon rank sum test determines whether or not two populations have identical location (median) as well as spread (variance) and shape (distribution). The Kruskal-Wallis test instead determines only whether two populations have the same location (median) but can differ in their variance and shape. The null hypothesis for both tests is of identical locations — that is, whether the median rank of the answers of law students is identical to that of medical students, notwithstanding that the variance and shape of the ranks of law and medical students may differ.

Second, we carried out regression analysis in order to study the *strength* of the relationship between the choice of law as a field of study relative to medicine (and other disciplines), and explanatory variables that include indicators of the student's autonomy and

¹⁹ 'Group of Eight' (Go8) universities and their 2009 tertiary admission scores for law were: Adelaide (95.05), ANU (95), Sydney (99.55), Melbourne (no longer taking undergraduates), Queensland (95.80), UWA (96.3), UNSW (99.4), Monash (98.05). For comparison, UNE appeared to have one of the lowest (84.44) but UWS (94.70) and UTS (97.9) and Macquarie (96.3) also have comparable admission requirements to Go8 universities.

²⁰ For an excellent discussion on this topic, see Gerald Keller and Brian Warrack, *Statistics for Management and Economics* (5th ed, 2000) ch 16.

social connection as well as ‘controls’ for other possible sources that may influence the choice of the field of study. These controls include individual characteristics like gender, age, pre-university score, country of birth, cultural background, educational level of parents, and language skills. They also include the educational conditions (for example, whether study is full- or part-time, year of study, type of degree, whether domestic or international student), and the occupational environment (for example, whether working or not) experienced by the student. We applied regression analysis to examine the determinants of other dependent variables related to educational experiences and expectations to assess the robustness of our results. The results of statistical and regression analysis are discussed jointly, as we present the results by topic rather than technique in the next section.

B Results

We initially carried out Wilcoxon rank sum and Kruskal-Wallis tests for each question of the survey.²¹ Tests were performed separately by comparing first the answers of law and medical students, and then the answers of students in law with those of respondents from each of the other faculties. Rather than presenting the results for each question, the discussion in this section focuses on three key topics:

- the choice of field of study;
- what students believe is the essence of being at university and their attitudes towards grades; and
- what they believe employers value.

For ease of exposition, in this section we reproduce in boxes both the question and the alternative answers available to respondents. We also report, by faculty, the mean value of the answers as ranked by respondents. Each table presents the mean rank of each alternative answer in a sequence, from most to least important, as per the rank expressed by law students. As a result, in each table, the answer characterised by the highest mean rank (for law students) is located in the first column at the left of the table. Answers with lower mean rank are progressively located to the columns on the right, and the answer scoring the lowest mean rank (for law students) is located at the table’s right.

Whenever a distribution of answers ranked by students enrolled in medicine, and other faculties, substantially differs from that of law students on the basis of the Kruskal-Wallis test, its mean rank is highlighted by a ‘*’. Table cells characterised by a ‘*’ therefore pertain to answers/topics that may potentially reveal something

²¹ For the present analysis, we restricted our attention to undergraduate students only (N = 2241), though the inclusion of postgraduate students (about 10 per cent of the total sample) does not significantly alter the results and conclusions discussed.

about the above-average rates of depression in law students. The regression analysis carried out in the second stage of our empirical analysis and presented here tends to focus on those variables and their possible explanations. We view the results of the regression analysis as suggestive, rather than conclusive, about the correlations found, and we hope that our results can encourage other researchers to undertake further work on correlations between students' attitudes to education and depression.

1 *Choice of Field of Study*

Students were asked to answer a question about their main reasons for choosing their present program of study by ranking pre-coded responses (Question B in the questionnaire).

- B. What were your main reasons for choosing your present program of study (Law, Commerce, etc.)? Please rank up to five reasons.*
- A: It was the one I qualified for.
 - B: I could not get into my first choice.
 - C: It is easy to manage in terms of time (i.e. allows flexibility).
 - D: It was recommended to me by previous students.
 - E: It is personally interesting to me.
 - F: The faculty has a good reputation.
 - G: The program description was comprehensive and sounded interesting.
 - H: It is relevant to my present job or the career I envision for myself.

We examined these responses for indicators of social connectedness or autonomy, or the lack thereof. Of these, factors external to the individual (likely to negatively influence autonomy) are reflected in answers A, B, D and F (external motivators), while response E is likely to indicate positive personal feelings of autonomy. Response H was considered an indicator of interest in social connectedness. The results for each possible answer are displayed in Table 2.

Table 2 shows that students across all faculties rank the pre-coded answers in a similar order. This is illustrated by the fact that students, regardless of their faculty, rank E as most important pre-coded answer (that is, it has the lowest values across columns), followed by H and (in most cases) F. Answers A, G and D tend to be ranked as of middle importance. Answers B and C tend to be ranked as least important (they have the highest values). However, there are substantial differences in the relative importance of the responses. Law students find their field of study to be on average less interesting (answer E, which we view as an indicator of internal motivation), and consider it less relevant for their careers, than students in medicine. In contrast, students in law rank the reputation of the faculty (answer F, which we view as an external motivator) more highly than do students in medicine.

Table 2: Average Rank — All Years (1 = Highest; 10 = Lowest)
Question B

	E	H	F	A	G	D	B	C
Law	1.86	2.28	2.74	2.96	3.31	3.49	3.50	4.32
Medicine	1.56*	1.87*	3.20*	3.23	3.08	3.67	5.20*	4.60
Arts/SocSc	1.91	2.45	3.16*	2.81	3.32	3.70	2.57*	3.49*
COFA	1.51*	2.58*	3.16*	3.49*	2.96*	3.69	3.39	4.04
Comm	2.06	2.25	2.66	2.89	3.20	3.58	3.68	3.97
Engin	1.57*	2.35	2.83	3.14	3.13	3.52	3.04	3.87*
N answered	1965	1398	1334	856	1184	818	379	485

A ‘*’ indicates a different location of the distribution relative to law students, based on the Kruskal-Wallis test.

Some law students also indicated that they had been unable to get into their first choice of study program (answer B). This result, which ranks as the first most important reason for 15 law students out of the 46 (compared with 2 out of 15 students in medicine), is somewhat puzzling given the fact that law students have pre-university scores entitling them to choose whatever field of study they wanted. This may perhaps be explained by the reputational factor they consider so important — they may be referring to their feeling that their pre-university score did not entitle them to get into another Faculty of Law which they consider more prestigious.

When these differences are calculated only on first-year undergraduate students, as summarised in Table B1 in Appendix B, there is no change in the rank of answers, and only limited variation in their relative importance. First-year law students find their program of study less interesting than first-year students in medicine. They also consider the reputation of the faculty more important than first-year students of medicine in influencing their choice of field. However, it is noticeable that the inability to choose the desired field of study (answer B) is least important and no longer statistically significantly different for law and medicine students when first-year responses are isolated. Since the data are cross-sectional, including several cohorts of students at a single point in time, we cannot determine whether this outcome is due to a more motivated cohort of first-year law students relative to older cohorts in the same field or to some form of disillusion or disappointment that affects law students after their first year.

Unfortunately, answers from year four students are relatively few and hence the reliability of the test is limited. Having said this, it is noteworthy that the mean value of answers B and C were lower among fourth-year (Table B2 in Appendix B) than among first-year law students (Table B1), while there is virtually no change in the rank of answers among medical students of different years. This result, albeit based on few observations, appears consistent with the

hypothesis that external factors, such as an excellent pre-university score, influence the educational choices of some law students to a higher degree than students in medicine. However, as the educational training continues or as law students experience education in other courses (UNSW law students are required to complete a double degree), a choice of course based on external influences may become less motivating and progressively erode a student's interest in his/her field of study.

To explore the possibility that law students are more influenced by external influences than students in other disciplines, we examined the answers to questions about influences on students' educational choices (survey question QQ — see Appendix A) and the main reason to undertake university studies (survey question A).

QQ. Who influenced most your decision to pursue a university degree?

1. No one, I decided for myself
2. Parents
3. Spouse / Partner
4. Close friend(s)
5. Other

Table 3: Distribution of Answers, by Faculty — All Years, Question QQ

	1	2	3	4	5	Kruskal-Wallis test	N answered
Law	61%	34%	0%	2%	3%	Reference	327
Medicine	80%	18%	0%	1%	2%	*	272
Arts/SocSc	74%	20%	1%	2%	4%	*	279
COFA	73%	18%	2%	3%	4%	*	616
Comm	67%	27%	1%	2%	3%	—	377
Engin	69%	20%	0%	5%	6%	*	452

As indicated by the results of the Kruskal-Wallis test reported in Table 3, the distribution of the answers of law students differs from those of medical as well as students in every other faculty with the exception of economics and commerce. In particular, the choice of law as a field of study appears to be significantly influenced by the student's parents. About a third of law students responded that they had chosen their field under the influence of their parents: the highest proportion among all respondents and almost double the corresponding response for medical students (18 per cent). In contrast, just over half of the respondents (61 per cent) appear to have chosen law because of their individual interest compared with 80 per cent of medical students, and 67–74 per cent of all the other students surveyed. This level of family influence suggests that law students

have a lower level of autonomy in their choice of field of study than medical students and indeed students in every other faculty except economics and commerce. This result confirms anecdotal evidence that law students frequently choose law just because they ‘got the mark and their parents said they shouldn’t waste it’ by choosing a field with less stringent minimum UAI requirements.

The relevance of external influences in the decision of law students also emerges from the distribution of answers to a question about the main motivation for undertaking university studies, Question A. Lack of autonomy may be associated with a high rank to answers A and B, while C, G, H and I are related to mostly labour market influences that are external to the individual. At the same time, both A and B are indicators of interest in social connectedness.

A. What were your main reasons for undertaking university studies? Please rank up to five answers.

- A: I want to be like my friends who are also studying at university.
- B: I want to please my family.
- C: I want to be promoted in my current job (or shift to another field/career).
- D: I enjoy learning about new things.
- E: I want to acquire skills for postgraduate studies.
- F: I want to develop my intellectual potential.
- G: I could not find a good job at my current level of education.
- H: I believe that a university degree will help me find a job that pays well.
- I: I believe that higher education may open up a wider array of interesting job opportunities for me in the future.

Table 4: Average Rank — All Years (1 = Highest; 9 = Lowest)
Question A

	I	H	F	D	B	G	C	E	A
Law	1.90	2.31	2.93	3.44	3.86	3.89	4.41	4.82	5.11
Medicine	1.87	3.00*	2.53*	2.83*	4.43*	3.62	4.37	3.97*	5.02
Arts/ SocSc	2.06	2.99*	2.68*	2.86*	4.15	4.34*	4.56	4.14*	4.96
COFA	1.99	3.10*	2.61*	2.95*	4.48*	4.57*	4.34	4.01*	5.89*
Comm	1.97	2.29*	3.00	3.62*	4.02	4.04	4.10	4.08*	4.58*
Engin	1.97	2.51	2.88	3.47	4.15	3.59	3.53*	3.74*	4.72
N	1982	2232	1779	1587	871	2232	401	677	495

A ‘*’ indicates a different location of the distribution relative to law students, based on the Kruskal-Wallis test.

As shown in Table 4, future career (H) and the desire to please family (B), both external motivators, are more important for law students than for medicine students and indeed all other students. At the same time, law students appear to enjoy learning new things less than all other students (except engineers) (D), to have less interest in developing their intellectual potential (F), and, most definitely,

to have less interest in acquiring skills for postgraduate studies (G), which would indicate a more internal motivation and higher autonomy.

To examine the strength of the possible relationship between those motivators and the choice of field of study, we performed a regression analysis in which the choice of field is explained by a set of explanatory variables that include those captured by questions A, B and QQ, as reported above. The regressions performed are based on a multinomial logit (MNL)²² and use law students as the reference group (this enables us to interpret the results using students in law as a benchmark). The dependent variable is the faculty chosen by the student. Independent variables are the main motivations to undertake university study and a particular program (Questions A and B, respectively) as well as the student's academic performance and his/her demographic and social characteristics. We performed the regression analysis only on students who were undergraduates or honours students (not postgraduates).²³

²² A multinomial logit (MNL) model essentially performs separate logit regressions for each pair of outcome categories of the dependent variable. A logit is a model where the dependent variable assumes only two values, typically zero and one. This peculiarity, if not taken into account using particular estimation techniques, produces impossible or irrelevant predictions about the strength of association between dependent and independent variables. In our case, MNL estimates the probabilities of choosing each of the other five faculties in which data are organised (ie, Arts/Social Science, COFA, Commerce and Economics, Engineering, Medicine, Other) relative to choosing law. For a discussion of limited dependent variable models, see Jeffrey Wooldridge, *Introductory Econometrics* (1999) ch 17. For a discussion of MNL estimation, see A Colin Cameron and Pravin Trivedi, *Microeconometrics: Methods and Applications* (2005) ch 15.

²³ As respondents typically did not rank all the options available in questions asking them to rank several alternatives (eg, A and B), we had to deal with two types of problem in the empirical analysis: (1) missing data whenever a questionnaire was incomplete; and (2) a varied 'density' in the frequency of responses, especially when the ranks of the answers were low. To avoid carrying out regression analyses only on surveys for which we had the complete set of responses, we decided to adopt the following strategy. To deal with (1), we created categorical (dummy) variables for each alternative option: the categorical variables were assigned a value of zero if the answer was missing, and of one if the answer was chosen or ranked. To deal with (2), we created new categorical (binary) variables with a value of one if the respondent ranked that option as most, second-most or third-most important and zero otherwise. We preferred comparing answers that students see as relatively important (grouped together) to those ranked fourth or lower, rather than focusing on the nuances of their exact rank, which quickly rarefies for alternatives seen as unimportant. Both sets of dummies were used as independent variables in the regression analysis. Alternative strategies to deal with missing data were also considered (eg, replacing the missing values with each response's average) and these yielded similar results. We believe that the approach followed is the least 'intrusive' in handling the data and hence preferable. Finally, for questions leading to only one choice among several alternatives (eg, question QQ 'key influences in university decision'), we expanded the possible answers into a set of dummy variables, one for each possible choice, with one extra category for non-respondents.

Although the sample of students we surveyed is probably non-random (and hence might omit some parts of the student population), the choice of explanatory variables was limited to those that are most likely to be independent of the choice of the field of study (that is, those least likely to change the probability of being in the sample). In this context, the non-randomness of the sample surveyed does not pose particular statistical problems.²⁴

As the MNL model is non-linear, the interpretation of the coefficients does not arise naturally from the coefficients' estimates. As a result, we present in Table 5 the 'marginal effects' of each explanatory variable calculated at their average value. The marginal effects indicate the change in the probability of being enrolled in law, relative to being enrolled in another discipline, due to a marginal change in the explanatory variable from its average value. Marginal effects that are statistically significantly different from zero, at a level of significance of five per cent or smaller, are highlighted with a '*'. As an example, consider the -.003 in the top-left numerical cell of Table 5. This number suggests that if 'going to university to be like one's friends' increases by a small amount from its average value (towards becoming one of the three most important answers), then the probability of choosing law over medicine drops by 0.3 per cent, keeping all the other variables constant at their average level. This proportion, however, is statistically not different from zero (that is, the relationship is weak), as the reported number has no '*' next to it. In contrast, if 'studying to learn' increases by a small amount over its average value (towards becoming one of the three most important answers), then the probability of choosing law over medicine is reduced by 1.6 per cent (same column, fourth row). This marginal effect is statistically significantly different from zero (that is, there is a strong statistical relationship).

²⁴ See Wooldridge, above n 22, 299.

Table 5: Marginal Effects for Choice of Study

Law students	Relative to respondents enrolled in:				
	Med	Art/SS	COFA	Comm	Engin
<i>Main reason for university study:</i>					
– want to be like friends	–.003	.004	.002	–.068	.046
– please my family	–.008	–.075	–.015	.026	.066*
– advance my career	–.008	.076	.140*	–.027	–.250*
– learn	–.016*	–.115*	–.111*	.094*	.110*
– prepare for graduate studies	–.001	.054	–.166*	.051	.004
– develop my potential	.002	–.051	–.107*	.021	.051
– could not find a job	–.014	.096*	–.123*	–.008	.031
– find a high pay job	–.013	–.013	–.061*	.023	.021
– find an interesting job	–.004	–.022	–.088	.003	.073
<i>Main reason for program of study:</i>					
– I qualified	.004	.033	.052	–.019	.052
– could not get into 1st choice	.023*	–.017	–.103	–.023	.123*
– easy	.014*	–.081	.027	.015	.008
– recommended	.003	–.010	.033	–.047	.071*
– interesting	.003	.034	–.136*	.101*	.031
– faculty reputation	.006	.079*	.114*	–.122*	.014
– attractive program	.005	.095*	–.145*	–.020	.049
– relevant to job	–.009	–.006	.078	–.041	.027
<i>Influence on university decision:</i>					
– family and friends	.007*	.043*	.010	.041*	.002
<i>Pre-university score:</i>					
– satisfactory	.012	–.031	–.043	.094*	.016
– average	.017*	–.109*	–.021	.064*	.040
– excellent	–.018*	.002	.207*	–.115*	.082*
N	2165				
Log-likelihood	–2676				
Pseudo R2	.3348				

MNL regressions: Pr(each other faculty vs law) = constant + explanatory variables + error term.

Reference group: law students. Data refer only to students enrolled in an undergraduate degree. ‘*’ indicates that the effect is statistically significantly different from zero (at the 5 per cent of smaller level of significance).

The effects reported in Table 5 are obtained from a regression model that explains a fair amount of the variance in the data (the pseudo- R^2 is over 33 per cent). These results reveal some general points: first, law students appear more strongly influenced by family and friends in their choice of tertiary education than students of

every other discipline: the marginal effects for this explanatory variable are positive relative to all other choices of faculty, and are often statistically significantly different from zero (except in the case of COFA and Engineering). The influence of parents and friends among students choosing law is relatively modest when compared with students choosing Medicine (+0.7 per cent), with whom they share similarly high entry scores. However, it is far higher relative to students choosing Arts and Social Sciences (+4.3 per cent) and Economics and Commerce (+4.1 per cent). In each case, the increased probability is statistically significant.

Second, the probability of choosing law tends to rise with very good pre-university scores: the probability of law students having an 'excellent' score is 20.7 per cent higher than comparable students at COFA, 8.7 per cent higher than Engineering and 0.2 per cent higher than in Arts and Social Sciences. In contrast, it is 1.8 per cent lower than comparable students in Medicine and 11.2 per cent lower than for those choosing Economics (which appears unusual as the UAI cut-off for that faculty is lower than that of law).

Law students are less likely to say that their choice of being at university and field of study is motivated by learning than comparable students in medicine (-1.6 per cent). Relative to medical students, those choosing law are also more likely to choose their faculty after failing to get into their first choice (+2.3 per cent), or because they have the required entry marks (+1.4 per cent). As those motivators are clearly 'external', these results tend to support our initial hypothesis that law students' choice of field of study may be externally motivated.

The marginal effects obtained for other faculties provide further evidence that law students seem to choose their degree following external motivators. Wanting to learn is a less important motivator among law students than comparable students in Arts and Social Sciences (-11.5 per cent) and COFA (-11.1 per cent). This result is reversed in the case of respondents in Economics and Commerce and Engineering, where the coefficients are positive (+9.4 per cent and +11.0 per cent, respectively).

2 *What's Important about Being at University?*

Experience of university was covered in a number of questions in the survey. The answers to Question F were of particular interest to the present study. Students were asked to rank a series of statements about what they felt was important in studying at the tertiary level. Table 6 displays the average rank assigned to each of the answers, by faculty.

F. Studying at university, I feel it is important to: Rank up to five answers.

- A: Gain knowledge that I need for my future career
- B: Develop an ability to learn on my own
- C: Broaden my knowledge
- D: Get good grades
- E: Develop my research skills
- F: Have fun
- G: Find out what I would really like to do in the future
- H: Develop a network of friends who may help in my future career

Table 6: Average Rank — All Years (1 = Highest; 8 = Lowest) Question F

	A	B	C	D	G	E	H	F
Law	2.24	2.50	2.63	2.85	3.05	3.46	3.47	3.73
Medicine	1.71*	2.46	2.74	3.44*	3.16	3.67	3.88*	3.39*
Arts/SocSc	2.40	2.93*	2.41*	3.27*	2.84	3.54	3.69	3.73
COFA	2.19	2.75*	2.47	3.82*	2.75*	3.53	3.95*	3.37*
Comm	2.17	2.78*	2.69	2.93	2.95	3.56	3.52	3.59
Engin	1.98*	2.53	2.66	3.16*	3.24	3.45	3.75*	3.45
N	1893	1456	1691	901	1209	896	923	1109

A ‘*’ indicates a different location of the distribution relative to law students, based on the Kruskal-Wallis test.

As indicated in Table 6, the rank of the first three answers follows a similar rank among law and medical students, albeit with different intensity. Getting knowledge that is relevant for their careers (answer A) is valued less by students in law than students in medicine; however, for both groups this answer is at the opposite end of the rank scale from response F – to ‘have fun’ while at university – which may be an indicator of sociability. Notably, the fourth-most important answer, D – ‘get good grades’ – puts law students in contrast with those enrolled in medicine, and every other field of study. Law students appear particularly preoccupied about getting good grades. This concern about good grades may reflect both competitiveness (a less sociable trait) and external motivators – as noted above, important factors in the aetiology of depression.

Law students also appear more concerned than other students about developing a network of friends that will be useful for their professional career (H). This would seem to suggest social connectedness, but the instrumentalism involved in connection for the sake of the professional career may reduce the efficacy of such friendships in protecting against depression. It is also of interest to note that law students were significantly less willing than other students to be involved in group work and group assessment. All students were asked about whether they wanted to be assessed by group work (Question J in the survey). Law students wanted to be assessed in groups the least of all the faculty groups, including medicine. This may indicate both high levels of competitiveness and reduced interest in social connectedness.

3 What Students Believe Employers Value

Law students' questionnaire responses were also different from students in other faculties when asked what they thought employers expected and valued in university graduates (Question U).

U. Below is a list of what employers tend to look for in university graduates. Please indicate what you think is the extent to which employers value each by choosing a number from the scale below. Jot your answer in the space before each item:

Scale: 0 = Not important

1 = Somewhat important

2 = Important

3 = Very important

4 = Essential

- A: The job related knowledge and skills gained at university that can be immediately applied
- B: My overall marks/grades
- C: The university from which I get my degree
- D: The broad, general education I acquired
- E: My ability to write and speak clearly and effectively
- F: My ability to think critically and analytically
- G: My ability to analyse quantitative problems
- H: My ability to use computing and information technology
- I: My ability to work effectively with others
- J: My ability to learn effectively on my own
- K: My ability to understand people of other racial and ethnic backgrounds
- L: My ability to solve complex real-world problems
- M: My personal code of values and ethics
- N: My ability to contribute to the welfare of my community

Students across all faculties had broadly similar beliefs about what employers value most. Valued characteristics are typical graduate attributes, such as the ability to think critically (answer F) and communicate effectively (E), to work in teams (I), to solve complex problems (L), and to learn independently (J). However, even within graduate attributes there are substantial differences in the order of answers between law and medical students, as well as between law students and students in other faculties.

Table 7 summarises the marginal effects obtained from regressing the rank of each of the answers A to N on the respondent's faculty and year of study with respect to answers ranked as most and second most important. Law students are again used as the reference group. The average ranks of each potential answer, along with the Kruskal-Wallis test of differences in the distribution of preferences, are reported in Table B3 in Appendix B.

Table 7: Marginal Effects for What Employers Value

Law students	Relative to respondents enrolled in:				
	Med	Arts/SS	COFA	Comm	Engin
<i>I believe employers value:</i>					
Answer ranked as MOST important					
A knowledge instantly applicable	-0.056*	-0.009	-0.029*	-0.008	-0.011
B my grades	0.158*	0.126*	0.196*	0.0005	0.096*
C university from which I graduate	0.157*	0.085*	0.080*	0.006	0.031*
D general education acquired	0.028	-0.043*	-0.027*	0.0007	-0.021
E ability to communicate	0.011*	0.008*	0.013*	0.015*	0.016*
F ability to think	0.012*	0.010*	0.013*	0.007	0.015*
G ability to analyse problems	-0.027*	-0.023*	-0.019*	-0.022*	-0.049*
H ability to use ICT	0.020*	-0.025*	-0.056*	-0.022*	-0.051*
I ability to work with others	-0.010*	0.002	0.001	-0.001	-0.001
J ability to learn on my own	-0.009*	-0.005	-0.014*	-0.004	0.004
K ability to understand diversity	-0.083*	-0.054*	-0.061*	-0.026*	-0.050*
L ability to solve complex issues	-0.006	0.021*	0.013*	-0.002	-0.001
M my personal code of values	-0.035*	-0.035*	-0.065*	-0.023*	-0.041*
N ability to add to community	-0.120*	-0.067*	-0.070*	-0.041*	-0.087*
Answer ranked as SECOND MOST important					
A knowledge instantly applicable	0.114*	-0.0108	0.035*	0.0009	-0.002
B my grades	-0.008	-0.018*	-0.018*	0.002	-0.023*
C university from which I graduate	0.019*	-0.0036	-0.006*	-0.0007	-0.003
D general education acquired	0.004	0.002	0.001	-0.0007	0.001
E ability to communicate	-0.049*	-0.041*	-0.061*	-0.064*	-0.067*
F ability to think	-0.041*	-0.035*	-0.042*	-0.019	-0.044*
G ability to analyse problems	0.045*	0.033	0.023	0.043*	0.104*
H ability to use ICT	-0.041*	0.050*	0.135*	0.042*	0.137*
I ability to work with others	0.035*	-0.008	-0.002	0.007	0.008
J ability to learn on my own	0.027	0.011	0.041*	0.0116	-0.020
K ability to understand diversity	0.125*	0.065*	0.077*	0.033*	0.059*
L ability to solve complex issues	0.023	-0.048*	-0.030*	0.011	0.012
M my personal code of values	0.038*	0.030*	0.072*	0.018	0.047*
N ability to add to community	0.119*	0.040*	0.042*	0.024*	0.066*

Separate ordered probit regressions for each answer: $\text{Pr}(\text{rank of answer}) = \text{constant} + \text{faculty} + \text{control variables (year of study dummies)} + \text{error term}$.

Reference group: law students. Data refer only to students enrolled in an undergraduate degree. A '*' indicates that the effect is statistically significantly different from zero (at the 5% of smaller level of significance).

A few differences in law students' responses emerge. With reference to what students rank as the most important, those in law are 10–20 per cent more likely than students from any other faculty (except Economics/Commerce, though the sign of the marginal effect is positive) to believe that their grades are the most important matter for prospective employers. It is noteworthy that law students do not differ very much from other students in terms of ranking answer A as the second-most important (the coefficients are much smaller and less often statistically significantly different from zero). This suggests that the focus on getting good grades as a motivator permeating law students' tertiary educational experience is really what makes them stand out from other respondents.

Law students also tend to have a significantly higher probability of ranking answer B (reputation of the university) as most important, a likely external motivator, relative to students in Medicine and other faculties. Law students are more likely than other students to think that employers value most their ability to communicate and to think. In both cases, the marginal effects are positive and are often statistically significant. By contrast, law students do not seem to think that employers place a high value on their abilities to understand diversity (including cultural diversity). They are also far less likely than any other student to think that employers value most their social and leadership abilities, though the marginal effects obtained for what students rank as the second-most important answer suggest that law students tend to view as somewhat important employers' expectations about their personal code of ethics and their intention to contribute to the welfare of the community. Whether or not this reflects the actual attitudes of employers, it appears that law students' sense of the importance of social connectedness is less than that of some other students. This finding is particularly striking as UNSW Law School places a very strong emphasis on teaching law as a social justice issue.

IV DISCUSSION

To briefly summarise these results, it seems that, at a statistically significant level, law students in contrast to all other students including those in medicine have the following characteristics:

- they are more likely to be doing their course for a reason external to themselves, such as because their parents wanted them to;
- they are less likely to find their studies intrinsically interesting;
- they are more likely to see employers as interested in their marks and not in other social characteristics such as their personal code of ethics or their social and leadership abilities, or ability to understand diversity;
- they dislike group work as a learning and grading method;

- they are more likely to value the reputation of their university;
- they are less likely to state that they are at university to learn;
- they are more likely to see their friendships in terms of networks which will advance their career; and
- they see their marks as the most important motivator and indicator of their success — far more so than other students — and they are less likely to see good grades as helping them to learn.

The focus on getting good grades as a motivator is perhaps the most significant factor differentiating law students from other students.

What to make of these results? The evidence in this survey shows some significant differences in law students' attitudes to their education when compared with other students. Those differences suggest that inherent or learned personal characteristics may indeed have a significant impact on law students' likelihood of developing depression.

We hypothesised that law and medical students would be similar in their attitudes to their university education and that the major differences would be between the students in these two professional degree programs and students in programs such as Arts and COFA. We did this on the basis of literature which suggests that professionals are more subject to depression than non-professionals,²⁵ and that it was likely that there would be factors in common. We also hypothesised that students' attitudes and preferences could be mapped to the two major poles which much of the literature sees as elements of depression — namely, loss of autonomy and lack of social connectedness. In the literature review, we referred to the fact that the dominant characteristics of depressed thinking include feelings of helplessness and loss of autonomy and that self-esteem, competence, security, social connection and autonomy are critical needs for wellbeing.²⁶ Although we did find the expected differences from students in Arts and COFA, we were surprised to find significant differences between law and medical students on a number of matters. These differences seem to point to an increased likelihood that law students may have feelings of less autonomy and less social connectedness than may be optimal for mental health.

The findings of our analysis suggest factors which may be important for the development or prevention of depression in law students — namely, a sense of autonomy and social connectedness. Martin Seligman²⁷ has suggested that the legal reasoning process

²⁵ Eaton et al, above n 7; Paul Henry, 'Life Stresses, Explanatory Style, Hopelessness and Occupational Class' (2005) 12(3) *International Journal of Stress Management* 241, 243.

²⁶ Sheldon et al, above n 17.

²⁷ Seligman, above n 7, 179; Seligman, Verkuil and Kang, above n 7, 54–5; see generally Henry, above n 25.

— focusing on problems and warding off risk — is essentially a pessimistic process and is thus likely to predispose to learned helplessness. Whether or not this is true, first-year students and, indeed, many later year students are unlikely to have mastered legal reasoning so, for them, the sense (or lack) of autonomy and social connectedness are likely to be more relevant issues. Where there is too little of any of these factors, people are likely to suffer from depression.

Autonomy is commonly thought of as independence and the ability to take control of one's life. It is often assumed that people with high intelligence (such as law students) automatically have autonomy. However, this assumption may be unwarranted. Lawrence Krieger prefers to think of autonomy as 'authenticity'. He says, referring to Sheldon's study of 2001:

Two of the three measurement questions went beyond the normal understanding of 'autonomy' to include issues of genuineness. Specifically, subjects were asked whether their choices 'expressed my true self' and 'were based on my true interests and values' ... law students run the substantial risk of losing contact with aspects of their authentic selves, such as their conscience and underlying values, as they are trained to emphasise thinking 'like a lawyer' and acting as agents for others.²⁸

In this view, autonomy is thought of as the ability to exercise one's authentic self.²⁹ In Krieger's sense, autonomy means not only the ability to control oneself and one's own actions, but also the ability to be true to one's own genuine self and evaluate oneself. People having autonomy are relatively unlikely to accept other people's valuations of themselves and they are unlikely to be motivated by external factors. This form of autonomy would be indicated by students who were intrinsically motivated to study in their field because they were interested in it; and/or who studied for the purpose of self-satisfaction rather than for the external marker of grades or to please other people. When motivation is considered in the context of university study, lack of autonomy may also be demonstrated by a very high level of concern about grades (external assessment) as opposed to an internal issue of whether one has learned what one needs, for example. Real autonomy might also manifest itself in interest in types of work not normally regarded as high status in the profession, in contrast with those on the 'high status' track, such as being a partner in a large city firm or, as a student, being selected as a summer clerk for one of those firms. Despite large firms being seen as the 'high status' track, the price paid for this track is often a

²⁸ Lawrence S Krieger, 'Institutional Denial about the Dark Side of Law School, and Fresh Empirical Guidance for Constructively Breaking the Silence' (2002) 52 *Journal of Legal Education* 112, 119.

²⁹ *Ibid.*

great loss of autonomy.³⁰ Seligman recognises this when he says: '[a] second psychological factor that demoralises lawyers, particularly junior ones, is low decision latitude in high-stress situations'.³¹

There was a striking difference in the attitudes to matters which might suggest issues of autonomy between law students and every other cohort, including medical students. Law students had the highest rate of wanting to please their family of all students, and this was significantly higher than for medical students. The percentage of law students who chose for themselves which degree to study was the lowest in the university. Law students also valued getting good grades (clearly an external motivating factor), rather than the satisfaction of learning (an intrinsic motivator) more highly than all students, including medical students. Similarly, law students believed employers value grades very highly rather than social attitudes or abilities. The rate at which law students held this belief was higher than for all other students in the university.

The focus on grades in order to get a high-paying job may reflect the selection practices of firms demanding law undergraduates. It is possible that large, high-paying (for example, city-based) law firms only hire new graduates based on their marks, and that the opportunity cost of not being at the top x-th percentile of the grades' distribution (for example, high distinction average) is extremely large, even with respect to the second-highest percentile group (for example, distinction). Alternatively, it could indicate that the market for new law graduates is so segmented that a difference of a mark in a student's grade point average (GPA) translates into thousands of dollars and other non-monetary benefits during his/her career.³² These are matters students cannot control. All these factors point to a relatively low level of personal autonomy being experienced by law students.

An argument that is sometimes made is that law students become depressed because they have always been high achievers and when they get into law school their marks suddenly drop because they are in a similar cohort. This is an example of a felt competency factor at

³⁰ This is both a personal observation of one of the authors and a comment which has been made by a young solicitor member of the audience (typically juniors in very large law firms) in every one of the Annual Tristan Jepson Memorial Lectures held in Sydney for the last four years for the purpose of raising awareness of issues of mental illness, and particularly depression in the legal profession. See also Krieger, above n 28.

³¹ Seligman, above n 7, 177.

³² There is some evidence that the private returns to a law degree in Australia are amongst the highest across fields of study, and have risen in recent times. The additional earnings, adjusted for the probability of unemployment, have been estimated to be higher than 30 per cent for each year in law education relative to half as much for business education. See, eg, Philip Lewis, Anne Daly and Don Fleming, *Investing in a Legal Education: The Private Rate of Return to a Law Degree* (Curtin Business School Centre for Labour Market Research Discussion Paper Series 03/1, 2003) 7.

work. However, the change from always getting top marks to being in the middle applies to both law and medical students so this is not sufficient to explain why law students seem to begin to suffer from depression as they get further into their studies in a way which is not replicated for medical students. However, when one compares their apparently different levels of felt autonomy, the difference in depression levels and their timing is explained. This would also explain the high level of psychological wellbeing law students experience at the beginning of their studies (when all the external motivating factors operate at their peak) and the clear drop in feelings of wellbeing that seem to occur in first year. This is presumably more problematic for law students than for the equivalent medical students because of the differences in felt autonomy between the two cohorts.

As discussed above, social connectedness is also an important factor in preventing depression.³³ People with strong links with others, who are able to interact positively with others, get positive reinforcement from those others, get support and help from them more easily than those whose only recourse is professional help. Social ease is an important part of maintaining social connection. Competitiveness might be regarded as antithetical to it, at least to some extent. Law students, as high achievers, are likely to have a high level of perfectionism — that is, ‘high and unrealistic standards combined with relentless self-criticism’³⁴ — and there is strong evidence that this sort of perfectionism may be productive of relationship difficulties.³⁵ In turn, a lack of social connectedness is predictive of depression and a lack of self-esteem.³⁶ People who are socially connected are likely to be supported well and therefore less likely to become depressed in response to stressful events. Being socially connected includes having friends available, as well as intimate relationships such as those between partners and between parents and children. Social skills are both a type of competency and a factor contributing to social connectedness.³⁷ We believe that

³³ Keith L Williams and Renee V Galliher, ‘Predicting Depression and Self-Esteem from Social Connectedness, Support and Competence’ (2006) 15(8) *Journal of Social and Clinical Psychology* 855, 858; Richard Lee and Steven Robbins, ‘The Relationship between Social Connectedness and Anxiety, Self Esteem and Social Identity’ (1998) 45 *Journal of Counseling Psychology* 338, 343.

³⁴ Kenneth Rice et al, ‘Perfectionism, Stress and Social (Dis)Connection’ (2006) 53(4) *Journal of Counseling Psychology* 524, 524.

³⁵ Robert Hill et al, ‘Perfectionism and Interpersonal Problems’ (1997) 69(1) *Journal of Personality Assessment* 81; Kenneth Rice and Daniel Lapsley, ‘Perfectionism, Coping and Emotional Adjustment’ (2001) 42 *Journal of College Student Development* 157.

³⁶ See generally Tracy Cross, Karen Gust-Brey and P Bonny Ball, ‘A Psychological Autopsy of the Suicide of an Academically Gifted Student’ (2002) 46 *Gifted Child Quarterly* 247; Rice et al, above n 34, 524.

³⁷ Williams and Galliher, above n 33; Lee and Robbins, above n 33.

a high level of competitiveness may reduce social connectedness and therefore also be an indicator of vulnerability to depression. At the same time, competitiveness with others is also likely to be an indicator of lesser autonomy in that it involves using external measures for self-evaluation.

Social connectedness is therefore one of the markers for depression that law students' attitudes to university might illuminate. Again, the results of this analysis show quite a striking difference between law and medical students in ways which might not have been expected. One would expect medical students as high performers also to be perfectionistic; but getting good grades was significantly more important to law students than medical students, and law students put good grades further ahead of having fun than anyone else. We have already discussed the notion that grades are an external benchmark for students to measure themselves by, as opposed to the satisfaction of learning or intrinsic interest in subject matter. Clearly, getting good marks is reassuring that one is competent, which is one of the factors that is important for avoiding depression as well. However, the desire for good grades is also probably an indicator of competitiveness. The reluctance of law students to work in groups was far greater than that of medical students — itself probably a sign of both competitiveness and a lesser desire for social connection. This lesser interest in social connection is also suggested by the fact that law students' perceptions of employers' interests emphasised grades over anything else, including employees' personal attributes such as codes of ethics.

The survey did not ask questions about the level of social connectedness of students and the data does not tell us that law students necessarily lack social connections. Indeed, the prevalence of student law society functions suggests that a great deal of social connection of some kind is going on. However, the attitudinal indicators given by this data suggest that law students may be less likely to see social connection as important per se than other students, so that they may be less likely to put effort into maintaining social connections at times of stress than others who value it more highly. One may speculate that this, then, may cause a lack of social connectedness which might increase the risk of depression when law students are under stress. It is also worth noting that one form of social connectedness, the link with family, while strong in many of these students, may operate as a form of pressure and loss of autonomy rather than as a supportive mechanism. The particular character of law students' link with family may repay further study.

Also warranting further study is the issue of whether the results for law students at UNSW can be extrapolated to other law students. One possible differentiator of UNSW law students is that they have to meet one of the most demanding admission requirements

in Australia (although, as noted above, admission requirements for all law students are demanding). The fact that the cultural mix of students in the survey did not seem to alter the answers across the university may reflect the cultural mix of UNSW students as a whole (which has a relatively high number of international and Chinese ethnic background students). Cultural background may thus be another factor that would repay further exploration with students from other universities. However, the fact that, despite the UNSW cultural mix, there is a very distinct difference in law students from all other students in the university continues to suggest that the factors we have identified as differentiating law students from others might be extrapolated to law students at other universities and may well be associated with factors leading to the disproportionate rate of depression amongst them.

V CONCLUSION AND STRATEGIC DIRECTIONS

This study suggests that law students' attitudes to their education may be connected to a number of traits which have been described as factors contributing to depression. Those suggested traits in turn may help to explain the disproportionate rate of depression in law students. Further research is necessary to establish whether the factors we have identified as significant — lack of autonomy, high levels of competitiveness and a lack of social connectedness — can be directly identified in law students and whether they have a direct causal connection to the depression suffered so disproportionately by law students. Such research would need to track students who were identified as having these factors as part of their attitudinal array to determine whether they were more or less likely than law students without those factors to develop depression over time. It would also be useful to assess whether high levels of competitiveness do indeed create problems with social connection or whether it is an independent variable for law students.

Since lack of autonomy and lack of social connectedness are major risk factors for depression, these are the obvious areas for law schools to focus their attention on when designing and conducting legal education. This article is not intended to be a manual for fostering resilience to the kinds of depression and anxiety so prevalent amongst lawyers; however, the data show that law students do demonstrate attitudes that are likely to reduce their resilience and that institutional strategies focused on fostering autonomy and social connectedness may be useful and effective over time.

There are a number of possible approaches to fostering resilience, focused on the two poles of autonomy and social connection, which are worthy of brief consideration here. The general aim of strategies focused on autonomy is to increase the ability of people to stand alone

and to be empowered in their studies. The principles for increasing students' sense of personal autonomy include developing ways of increasing intrinsic motivation and reducing external motivation. Paradoxically, this might mean that we should be doing less prize and certificate-giving rather than more. It may need more emphasis on the purposes of law and legal practice, and on ways of seeing legal practice as intrinsically valuable.

One of the most significant matters for legal educators is the proportion of law students who do not, initially at least, have an intrinsic interest in the subject. This may have implications for the methods of selecting law students. It may be that interviews or other factors that are more likely to suggest intrinsic motivation to study law should be given further thought for this reason. Once the students are in the law school, however, strategies to increase a sense of autonomy should be considered. Student law societies having control of matters such as competitions may be part of this. Giving students a choice in assessment, something which is often thought of as merely allowing them to maximise their marks, might actually be more significant as a way of developing a sense of autonomy in students. The legal educator may need to consider using techniques that help students to feel more in control of their own learning; for example, using feedback to demonstrate to students how their effort increased marks. Classical education techniques such as scaffolding may be useful for developing this.

This is not to say that students are to be given total control of what amounts to the appropriate level of knowledge or what professional standards are. Part of the development of the legal professional involves accurate knowledge of such standards; however, to be robust and resilient lawyers in the profession, it is necessary to develop a sense of autonomy and to have intrinsic motivation for one's actions. In the law school, it may be important to be explicit about the need for people to have intrinsic motivation and for students to develop this. Using peer mentors to de-emphasise marks and emphasise the joys of learning and the satisfaction of knowing for oneself what one has achieved may be another way to build these characteristics. The ability of a student to feel that they have a meaningful relationship with their teacher is also likely to be important in developing resilience.

Social connectedness that will foster resilience requires strong relationships rather than merely casual ones. Student societies' balls and drinking fests have their place but are unlikely to create strong relationships. Working together on common endeavours such as law revues and mooted competitions may well set the foundations for strong social connection. There is a limit to the extent to which law schools can and should create social connections for their students, but it seems likely that strategies such as peer-mentoring and academic

mentoring may be helpful ways to begin to develop relationships. Teaching techniques that increase meaningful interaction between students, including carefully managed group work, rather than always only between staff and students may also be valuable in helping to create social connectedness over time. The advantage of these latter techniques is that their availability to students does not depend on personal charm, acting ability or being academically at the top of the tree. Thus, mentoring and group work may well be especially important for law students for non-academic reasons as well as academic ones — despite the resistance to group work. It may also be worth considering programs which foster social skills as a way of increasing the likelihood of maintaining social relationships. Such skills are part of the legal professional repertoire³⁸ and may be able to be presented as significant in that way — as part of moot training, for example.

The survey results analysed in this paper indicate that susceptibility to depression in law students may be at least partially explained by their attitudes to learning and university education. Attitudes related to autonomy and social connectedness may also explain the puzzling pattern observed in first-year law students of high psychological wellbeing followed by a massive drop. However, this study could not link particular student attitudes to any incidence of depression. This is an acknowledged limitation of the study; however, since many of the studies discussed above demonstrate that depression hits students and lawyers after they begin law school,³⁹ this investigation of indicative factors remains useful. It is also helpful in that it suggests that, without falling into the trap of attempting to be counsellors, and consistently with a professional education, legal educators may be able to use educational strategies based on data such as this to help prevent the extreme levels of depression which are currently endemic in the law student and legal professional population. It is a welcome thought that the results of this study suggest that it may be entirely possible to target strategies to foster resilience amongst law students, and the legal professionals they will later become.

³⁸ Consider in this context the English tradition of eating dinner at the Inns of Court as part of the training of the barrister.

³⁹ Benjamin et al, above n 12, 240; Sheldon and Krieger, 'Does Legal Education Have Undermining Effects on Law Students? Evaluating Changes in Motivation, Values and Well-Being', above n 12, 262; Sheldon and Krieger, 'Understanding the Negative Effects of Legal Education on Law Students: A Longitudinal Test of Self-Determination Theory', above n 12, 890–1.

Part II: Perceptions of university life

E. My learning is stimulated most when: (Rank up to five answers.)

- I try to follow the examples of my teacher.
 I am encouraged to ask questions in lectures/class.
 I work with my peers.
 I am asked to research on my own about a topic.
 I am entertained during the lecture.
 The teacher creates a friendly atmosphere in class.
 The teacher provides lecture notes.
 Other (specify _____)

F. Studying at university, I feel it is important to: (Rank up to five answers.)

- Gain knowledge that I need for my future career
 Develop an ability to learn on my own
 Broaden my knowledge
 Get good grades
 Develop my research skills
 Have fun
 Find out what I would really like to do in the future
 Develop a network of friends who may help in my future career
 Other (specify _____)

G. Think about what you expect of teachers. From the list below, choose which you value most then rank up to five answers.

- Is knowledgeable about the subject
 Has organized teaching materials
 Has methods of assessment that clearly relate to learning
 Encourages student participation in class
 Explains complex concepts clearly
 Has innovative teaching methods
 Lets students discover on their own without too much guidance
 Is entertaining
 Conveys clearly what is expected of students
 Other (specify _____)

H. Do you expect university teachers to fulfill other roles *aside from* their academic responsibilities (i.e., teaching and research)?

0. No
 1. Yes (Go to H.1a below)

H.1a. In particular, I would like them *most especially* to (choose only *one* from below):

- a. Listen to and give advice on my personal problems
 b. Be friendly and approachable
 c. Help me find a job or provide information on future career prospects
 d. Other (specify _____)

I. What methods of assessment are most commonly used in your courses? Please use percentages to indicate the extent to which these are used.

- Exams
 Individual project (e.g. paper, lab assignment)
 Group project (e.g. paper, lab assignment)
 Participation in class
 Other (_____)

J. How would you prefer to be assessed? Please use percentages to indicate the extent to which you would like to be assessed in a particular way.

- Exams
 Individual project
 Group project
 Participation in class
 Other (_____)

K. Is getting good grades important for you?

0. No
 1. Yes (Go to Question K.1a below)

K.1.a. Why? Please rank up to 5 answers.

- It leads to a high paying job.
 It is what my family expects of me.
 It is a reward for my effort.
 It makes me feel capable.
 It gives me prestige and honour.
 It shows that I have actually learned something.
 Other (_____)



L. Based on my average marks so far, I would consider myself a ___ student.

- 0. N/A (for first year students)
- 1. Fail
- 2. Pass
- 3. Credit
- 4. Distinction
- 5. High Distinction

M. On the whole, based on the past efforts I have put into my studies at University, I believe I should be a ___ student.

- 0. N/A (for first year students)
- 1. Fail
- 2. Pass
- 3. Credit
- 4. Distinction
- 5. High Distinction

N. As a student at UNSW, to what degree do the following statements apply to you? Please pick a number from the scale and jot it in the space before each item.

- Scale: 0 = Not relevant
1 = Never
2 = Sometimes
3 = Often
4 = Always

- ___ On the whole, I am confident that I will be able to cope with the academic requirements of my degree because of my pre-university education.
- ___ I am comfortable about speaking in class (including asking questions during a lecture).
- ___ I cannot understand the lecture or instructions given by teaching staff due to my language difficulties.
- ___ I have difficulty working in groups when they involve students from English speaking backgrounds.
- ___ I have difficulty working in groups when they involve students from a non-English speaking background.
- ___ I feel that I am or have been disadvantaged in assessments due to my cultural background.
- ___ I feel that my education is affected positively by my cultural background.
- ___ I find it difficult to socialize with students from with different cultural backgrounds.
- ___ My exams have challenged me to do my best work.
- ___ I find English-background teachers helpful.
- ___ I find non-English speaking background teachers helpful.

O. Below is a list of what students can gain from studying at university. Please indicate how much you value each one by choosing a number from the scale below. Jot your answer in the space beside each item:

- Scale: 0 = Not important
1 = Somewhat important
2 = Important
3 = Very important
4 = Essential

- ___ General education
- ___ Knowledge and skills that can be applied to practical work situations
- ___ Ability to write and speak clearly and effectively
- ___ Ability to think critically and analytically
- ___ Ability to use computing and information technology
- ___ Ability to work effectively with others
- ___ Learning effectively on my own
- ___ Understanding myself
- ___ Understanding people of other racial and ethnic backgrounds
- ___ Solving complex real-world problems
- ___ Developing my code of values and ethics
- ___ Other (specify _____)

P. Below are 10 statements that are clustered in pairs. Circle the number of the statement in each matched pair that you are most comfortable with. There are no wrong answers. Make your choice as spontaneously as possible. You should circle five answers.

- 1. a. Diplomas or certificates of educational attainment are NOT important.
- 1. b. Diplomas or certificates of educational attainment are important.
- 2. a. Gaining competence is more important than acquiring certificates.
- 2. b. Acquiring certificates are more important than gaining competence.
- 3. a. My university studies will make me competitive in the workforce.
- 3. b. My work experience more than my degree will make me competitive in the workforce.
- 4. a. My grades are important to my prospective employers.
- 4. b. Grades are not that important to my prospective employers.
- 5. a. The benefits of investing in a university degree compensates for the cost of that investment.
- 5. b. The cost of investing in a university degree outweighs the expected benefits.



Part D: Student Background

W. Gender: 1. Female 2. Male

X. Age at last birthday : _____ years

Y. Level of study
 1. Undergraduate
 2. Honours
 3. Postgraduate Coursework
 4. Postgraduate Research

Z. Mode of study (current session)
 1. Part-time
 2. Full time

AA. Year of study
 1. 1st year
 2. 2nd year
 3. 3rd year
 4. 4th year

BB. Faculty
 1. Arts and Social Science
 2. ADFA
 3. AGSM
 4. Built Environment
 5. COFA
 6. Commerce and Economics
 7. Engineering
 8. Law
 9. Medicine
 10. Sciences

CC. Are you currently working?
 0. No
 1. Yes - related to my field of study
 1. Yes - NOT related to my field of study

EE. Country of birth
 1. Australia
 2. Other (specify _____)

EE.2a. If born overseas, how long have you lived in Australia? _____ years

FF. What is your nationality as shown in your passport? _____

GG. Use up to five words to describe your cultural background or ethnic identity

HH. Do your parents have a university degree?

Father	Mother
0. Don't know	0. Don't know
1. No	1. No
2. Yes	2. Yes

JJ. Where did you do most of your schooling before enrolling at UNSW?
 1. Australia
 2. Other (specify country _____)

KK. Is English your first language?

1. No (specify _____)
 2. Yes

LL. What language do you speak with family?

MM. What language do you speak with friends?

NN. My spoken English is:

1. Fair
 2. Good
 3. Excellent

OO. My written English is:

1. Fair
 2. Good
 3. Excellent

PP. My score in pre-university education was:

1. Satisfactory
 2. Average
 3. Above average
 4. Excellent

QQ. Who influenced most your decision to pursue a university degree?

1. No one, I decided for myself
 2. Parents
 3. Spouse / Partner
 4. Close friend(s)
 5. Other (specify _____)

RR. Did you seriously consider studying in a country other than Australia?

0. No
 1. Yes (specify country _____ then go to Question RR.1a below:

RR.1a. If so, what was your main reason for not pursuing this option?

a. It was too expensive.
 b. I did not qualify for admission.
 c. It was too far from my home/family/friends.
 d. I could not get a visa.
 e. I might have language problems.
 f. I will just apply in the future
 g. Other (_____)

APPENDIX B

Table B1: Average Rank — First Year Only (1 = Highest; 10 = Lowest)
Question B: Main Reasons for Choosing Present Program

	E	H	F	A	G	D	B	C
Law	1.85	2.19	2.93	3.31	3.51	3.79	4.55	4.50
Medicine	1.62*	1.99	3.24*	3.38	3.17	3.80	5.00	4.58
Arts/SocSc	1.91	2.59	2.99	3.02	3.21	3.87	2.40*	3.57*
COFA	1.62*	2.88*	3.15*	3.65*	2.97*	3.71	3.16*	4.29
Comm	1.97	2.19	2.76	2.92	3.09	3.29*	3.73	3.97
Engin	1.55*	2.16	2.70	3.52	3.00*	4.00	3.38*	4.11
N answered	766	555	548	345	500	332	155	197

A '*' indicates a different location of the distribution relative to law students, based on the Kruskal-Wallis test.

Table B2: Average Rank — Fourth Year Only (1 = Highest; 10 = Lowest)
Question B: Main Reasons for Choosing Present Program

	E	H	F	A	G	D	B	C
Law	1.56	2.25	2.63	3.06	3.08	2.64	3.00	2.89
Medicine	1.31	1.79	2.75	2.25*	2.89	3.20	5.00*	5.00*
Arts/SocSc	1.38	1.40	5.00*	1.63*	4.25*	3.00	2.42	3.00
COFA	1.26	2.50	2.92	3.77*	2.59*	3.40*	5.00*	4.50*
Comm	2.92*	2.43	2.70	2.20*	3.12	3.40	3.20	2.25
Engin	2.11*	2.28	2.53	3.31	3.49	3.15	2.88	4.63*
N answered	226	153	137	95	116	77	54	56

A '*' indicates a different location of the distribution relative to law students, based on the Kruskal-Wallis test.

Table B3: Average Rank — All Years (4 = Highest; 0 = Lowest)
Question U

	F	E	I	L	J	G	B	A	H
Law	3.44	3.41	3.29	3.14	3.10	2.70	2.67	2.59	2.47
Medicine	3.32*	3.27*	3.46*	3.21	3.19	2.97*	2.08*	3.09*	2.34
Arts/ SocSc	3.31*	3.30*	3.29	2.93*	3.18	2.91*	2.17*	2.67	2.67*
COFA	3.28*	3.21*	3.30	3.01*	3.26*	2.90*	1.85*	2.79*	2.97*
Comm	3.35	3.22*	3.32	3.19	3.14	2.95*	2.53*	2.68	2.70*
Engin	3.26*	3.19*	3.33	3.14	3.05	3.19*	2.31*	2.70	2.95*
N	2118	2111	2112	2094	2098	2095	2121	2118	2102
continued	M	C	K	D	N				
Law	2.44	2.39	2.33	1.96	1.92				
Medicine	2.69*	1.77*	2.98*	1.86	2.74*				
Arts/ SocSc	2.66*	2.06*	2.74*	2.17*	2.33*				
COFA	2.78*	2.04*	2.73*	2.10*	2.32*				
Comm	2.62*	2.33	2.56*	2.02	2.19*				
Engin	2.66*	2.23*	2.68*	2.02	2.41*				
N	2094	2116	2100	2111	2092				

A '*' indicates a different location of the distribution relative to law students, based on the Kruskal-Wallis test.