STRESS, ANXIETY AND DEPRESSION IN LAW STUDENTS: HOW STUDENT BEHAVIOURS AFFECT STUDENT WELLBEING

NATALIE SKEAD* AND SHANE L ROGERS**

There is growing national and international concern for the mental wellbeing of law students and law graduates. Some excellent work has been, and continues to be, done in several Australian law schools on how law schools and law teachers can promote mental health in their law students through curriculum design and teaching practices. The relationship between mental health in law students and student behaviours has, however, remained largely unexplored. To fill this void in the research, in 2013 the authors undertook an empirical study at the University of Western Australia involving over 500 law and psychology students. This article reports on the results of that study and identifies the correlations between the levels of stress, anxiety and depression in law students and certain behaviours. By exploring the impact students’ own behaviours have on their wellbeing, this article provides guidance to law students and law schools on managing mental health.

I INTRODUCTION AND BACKGROUND

When we are free of depression, anxiety, excessive stress and worry, addictions, and other psychological problems, we are more able to live our lives to the fullest.¹

Happiness is not something ready made. It comes from your own actions.²

The increasing incidence of psychological distress in law students and law graduates, and the responsibility of law schools in addressing this global trend is well documented.³ A 2010 study on depression in the legal community undertaken by the Brain & Mind Research Institute of the University of Sydney reported that

² Dalai Lama.
over 35 per cent of Australian law students experience high or very high levels of ‘psychological distress’ — this is compared with 13 per cent of the general population within the same age range.\(^4\)

Of particular interest and importance to law schools is the evidence that upon entering law school, law students enjoy levels of wellbeing at least equal to, and in some cases higher than, the general population. However from the first semester of their studies, law students experience stress, anxiety and depression at rates significantly higher than their contemporaries who do not study law including those studying other professional degrees such as medicine, nursing, psychology, and engineering.\(^5\)

Much has been written on the multi-factorial cause of mental illness in law students and lawyers more generally.\(^6\) Tentative conclusions include heavy workloads, the highly competitive nature of law and law students, inadequate feedback and feelings of a lack of social connectedness, competence and autonomy,\(^7\) the innately pessimistic and adversarial nature of law, and the Socratic methods commonly adopted in teaching law. Other factors associated with mental illness in law students include extrinsic motivations for studying law and a focus on

4  Kelk et al, above n 3, 12; Kelk, Medlow and Hickie, above n 3, 117.


the extrinsic rewards of doing so, as well as the associated pre-occupation with academic results and ranking.8

Whatever the cause, however, from as early as 19579 there has been a growing body of scholarship acknowledging that law school is the ‘breeding ground for depression, anxiety, and other stress related illness’10 and examining the role of law schools and law teachers in improving and promoting mental health in law students.11 Indeed, some have gone so far as to suggest that psychological distress in law students is to be understood as a teaching and learning issue,12 and is the ‘responsibility of the Australian legal academic community’.13

What is clear is that law schools need to acknowledge and take steps to address stress, anxiety and depression among law students and the undeniable fact that these indicators of psychological distress begin to surface on our watch:

It seems that there is something about the people who choose to do law that makes them more prone to depression than anybody else. I think that’s something that we need to look at with the universities, because


what we’re getting far too often is young lawyers who are already either suffering depression or prone to depression.14

Many Australian law schools have invested significant resources in designing curricula and teaching programs that promote mental health in their law students.15

The solution, however, is not entirely within the power of law schools and law teachers. Addressing this important issue requires a consideration of not only what law schools can and should do, but also on what law students themselves can and should do to alleviate the stress, anxiety and depression that can result from attending law school. To this end it is imperative for law students themselves to engage in personal, social and academic behaviours that will promote not only academic success but also their physical and mental wellbeing.

The relationship between mental health in law students and student behaviours has, however, remained largely unexplored.16 To fill this void in the research, in 2013 the authors undertook an empirical study at the University of Western Australia (UWA) exploring the relationships between mental health and certain behaviours of over 500 law and psychology students. This article reports on the results of that study as far as the law students are concerned,17 identifying the correlations between levels of stress, anxiety and depression and student behaviours. By exploring how students may be unwittingly contributing to their own feelings of stress, anxiety and depression, the authors seek to provide law students and law schools with some strategies that may assist students in the self-management of their mental health.


17 The results of the study as regards psychology students and a comparative analysis of law and psychology students are beyond the scope of this article and will be reported elsewhere.
II  THE STUDY

A  Aims

The genesis of the study described in this article was the appointment of one of the co-authors as Associate Dean (Students) of the Faculty of Law at UWA in 2012. This role entails, among other things, responsibility for student welfare. In the course of meeting with students in this role, it became apparent that the law students who were reporting heightened states of stress, anxiety and depression may not have been making the wisest and healthiest choices as to how they spent their time and the activities in which they engaged.

The importance of law schools becoming proactive in promoting and supporting mental health in law students through curricula design and teaching strategies cannot and should not be underestimated. However, in the authors’ view, an effective student welfare program requires buy-in from both faculty and students — academic programs and curricula design aimed at improving student wellbeing cannot succeed if student behaviours both inside and outside of the classroom are not also directed at preventing or reducing the development and/or exacerbation of stress, anxiety and depression. Law students are an important force in the ‘triad of forces which shape legal education’.

Despite the importance of student behaviour in the mental health equation, there is little research focusing on how law students’ own behaviours and activities may be impacting on their mental health. This study was designed with the aim of collecting quantitative data to identify the correlation between the way law students spend their time both at and away from law school, and their wellbeing (measured by stress, anxiety, and depression measures). The results of the study provide an evidence-based behavioural toolkit to assist law students in making informed choices that promote and even improve their sense of wellbeing. This toolkit might also be useful to law schools in improving orientation and embedded mental health initiatives in academic programs. While it is acknowledged that there may be many other extrinsic factors that contribute to the heightened stress, anxiety and depression experienced by so many law students, it is hoped that more informed decision-making by students, together with the work that is already being undertaken by

19 The BMRI study assessed law students’ likely behaviour should they be or become depressed relating, in particular, to student attitudes to seeking help and receiving treatment and the forms such treatment may take including drugs and alcohol use. See Kelk et al, above n 3, 20–6, 40. See also Heins, Fahey and Leiden, above n 16, 174; Heins, Fahey and Henderson, above n 16, 517 8, 521 2; Taylor, above n 16, 252.
20 Although the study involved law and psychology students, this article reports the results of the law student study only. The results of the study of psychology students and the comparison of the studies of law and psychology students are beyond the scope of this article and will be reported elsewhere.
21 Larcombe et al, above n 5, 410.
law schools to promote and support student wellbeing, will ultimately translate into a more robust, healthy and happy law student body.\textsuperscript{22}

\textbf{B Participants}

All 1013 students enrolled in either the LLB or the JD at UWA were invited by email to participate in an online survey half way through semester one of 2013. The stated purpose of the survey was to measure stress, anxiety and depression levels in UWA law students and to identify the correlations between these indicators of psychological distress and student behaviours. Invitees were advised that the survey was both voluntary and anonymous and that they were free to withdraw from the survey at any time. To ensure confidentiality, results would be reported in group-form only.

\textbf{C Survey Instrument}

The survey instrument was divided into nine sections. The questions in section one gathered general information about the participants, including gender and age. Sections two to six measured students’ current stress, anxiety and depression levels using the measures described below. In sections seven and eight, participants were asked to indicate whether they had engaged in any of 24 identified university and non-university related activities in the past week. The activities were divided into four broad categories: social, leisure, exercise, and work. If a participant reported engaging in a behaviour, they were asked how many days during the previous week they had engaged in the behaviour and the amount of time spent doing so on a typical day that week on a scale ranging from 10 minutes to 10 hours.\textsuperscript{23}

Participants who reported that they had engaged in a particular behaviour were also asked to appraise to what extent they found the time spent on that behaviour relaxing, enjoyable, and worthwhile using an eight-point Likert scale (ranging from ‘extremely not’ to ‘extremely yes’). Each type of appraisal was rated separately for each behaviour.

Section nine of the survey asked participants to indicate the extent to which they feel a sense of belonging to their cohort and at university more generally. This was measured by two items: ‘I feel a strong sense of belongingness to my year group at UWA’, and ‘I feel a strong sense of belongingness to UWA’, each on a four-point Likert scale (strongly disagree, slightly disagree, slightly agree, strongly agree).

Anecdotal evidence indicated that although the survey took approximately 30 minutes to complete, participants considered the subject matter of the study sufficiently important to warrant the time spent.

\textsuperscript{22} Soonpaa, above n 11, 373–4.

\textsuperscript{23} The number of days multiplied by the number of typical hours provided a measure of the number of hours spent engaged in each behaviour during the prior week.
D Methodology and Measures

Participants’ stress levels were measured by way of 51 survey items using the Student Life Stress Inventory (SSI) that assesses causes of stress (frustrations, conflicts, pressures, changes, and self-imposed) and reactions to stress (cognitive, behavioural, physiological, and emotional). All items were measured on a five-point Likert scale from one (Never) to five (Most of the Time).

As to the causes of stress, the frustrations subscale contains seven items measuring stress resulting from goals not being met, a lack of resources, social frustrations, and denied opportunities. An example item is: ‘I have experienced frustrations due to delays in reaching my goals’. The conflicts subscale contains three items measuring stress resulting from experiencing conflict arising from having to choose between desirable and/or undesirable alternatives. An example item is: ‘I have experienced conflicts which were produced when a goal had both positive and negative alternatives’. The pressures subscale contains four items measuring stress resulting from competition, deadlines, work overload, and work responsibilities and expectations. An example item is: ‘I experienced pressures due to an overload (attempting too many things at one time)’. The changes subscale contains three items measuring stress resulting from life changes. An example item is: ‘I have experienced change which disrupted my life and/or goals’. Finally, the self-imposed subscale contains six items measuring stress resulting from beliefs underlying competitive and worrying tendencies. An example item is: ‘I like to compete and win’. These five subscales are combined into an overall stressors factor measuring the stress causing experiences and tendencies of the participant.

On reactions to stress, the cognitive subscale contains two items measuring the extent to which an individual thinks about and analyses their stress. An example item is: ‘With reference to stressful situations, I have thought about and analysed how stressful the situations were’. The behavioural subscale contains eight items each measuring a particular behavioural response to stress. An example item is: ‘When under stressful situations, I have cried’. The physiological subscale contains fourteen items each measuring a particular physiological response to stress. An example item is: ‘During stressful situations, I have experienced trembling (being nervous, biting fingernails, etc)’. The emotional subscale contains four items each measuring a particular emotional reaction to stress (anxiety, anger, guilt, and depression). An example item is: ‘When under stressful situations, I have experienced fear, anxiety, worry’. These four subscales are combined into an overall reactions factor measuring the participant’s overall reaction to stressful experiences.

Anxiety was measured by way of forty survey items rating the participants’ self-reported immediate and general feelings of anxiety using the State-Trait Anxiety Inventory (Form Y). This survey instrument consists of two, 20-item

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subscales. One subscale measures state anxiety — this conceptualises anxiety as the anxiety-related emotion the participant is feeling at the time of the survey and is considered to be a transitory emotional state. For each item, participants were asked to rate how they were feeling ‘right now, at this moment’ on a four-point scale: not at all, somewhat, moderately so, very much so. An example item is: ‘I feel upset’. The second subscale measures trait anxiety that conceptualises anxiety as a fairly stable dispositional characteristic that influences response to everyday situations. For each item participants were asked to rate how they were feeling ‘generally’ on a four-point scale (almost never, sometimes, often, always). An example item is: ‘I feel nervous and restless’.

Finally, depression was measured using the depression subscale from the Depression, Anxiety and Stress Scale (DASS). This subscale consists of 14 items measuring the respondents’ self-reported feelings of depression over the past week on a four-point scale: did not apply to me at all; applied to me to some degree, or some of the time; applied to me to a considerable degree, or a good part of the time; applied to me very much, or most of the time. An example item is: ‘I felt sad and depressed’.

E Ethics Approval

This study complied with the National Health and Medical Research Council of Australia’s National Statement on Ethical Conduct in Human Research. Institutional ethics approval for this study was obtained from the UWA Human Research Ethics Office before the study commenced.

III RESULTS

A Response Rate and Participant Profile

Two hundred and six law students undertook and completed the survey. This represents a response rate of just over 20 per cent of all LLB and JD students at UWA. Of these, 188 were LLB students and 18 were JD students. This disproportion between the number of LLB and JD participants is explained by the fact that the JD only commenced at UWA in 2013 and, therefore, when the survey was conducted there was a very small cohort of first year JD students.

While all JD participants were in the first year of their law degree, the majority of LLB participants were in their third to fifth year: 18.6 per cent in third year,
28.2 per cent in fourth year and 23.4 per cent in fifth year. The remaining LLB participants had been at law school for five years or longer with one participant reporting having enrolled in the LLB in 2005.28

The mean age of participants was 22.46 years (standard deviation = 3.89, range 18 to 47 years) and 72.3 per cent were female. This is higher than the total percentage of females enrolled in law programs at UWA of around 58 per cent.29 Over two-thirds of participants were living with their parents, and 91.3 per cent were living within 30km of the university campus at the time of the survey. A significant 85.4 per cent of participants reported that they engaged in some form of paid non-university work during the prior week. 58.2 per cent of participants reported being high achieving students averaging distinction or high distinction grades, and only 3.9 per cent reported averaging a pass grade. None reported a fail grade average.

B Survey Results

1 Stress, Anxiety and Depression

The means, standard deviations, and internal consistency values (Cronbach’s $\alpha$) for the self-reported stress,30 anxiety and depression measures are presented in Table 1.

Consistent with existing scholarship in this regard,31 the law student participants in this study reported significantly higher levels of anxiety and depression than members of the general Australian population in the same age range. The mean observed for the DASS depression subscale is slightly higher than recently reported results from a study examining law students at the University of Melbourne.32 Based on scoring cut-offs,33 the DASS depression scores in the UWA sample were distributed as: Normal (54.4 per cent), Mild (6.8 per cent), Moderate (20.8 per cent), Severe (10.2 per cent), and Extremely severe (7.8 per cent).

Of particular interest in Table 1 is that the standout sub-scales for causes of stress were external pressures (4.02 on a scale of 5.00) and self-imposed causes (3.77 on a scale of 5.00). The external pressures related to competition (on grades and work), deadlines, and work overload. The self-imposed pressures related to a tendency to compete and a will to win, worry, procrastination, and perfectionism. The mean...

28 It is to be noted that 2011 was the last year in which a student could enrol in the LLB at UWA. This accounts for there being no LLB survey participants in the first or second year of their LLB.

29 Due to the disproportionate number of female participants, caution should be exercised in extending the findings of the survey to male law students.

30 Throughout this article the term ‘stress’ is used to refer to both stressors and reactions and essentially encompasses ‘overall stress’ as measured by this study.


32 Larcombe et al, above n 5.

33 Lovibond and Lovibond, above n 26, 1.
of the external pressures sub-scale is higher than that reported in a number of other studies for university students from a range of other disciplines. This result provides quantitative evidence to support often mentioned anecdotal comments.

that law school is a highly competitive environment in which students are under a great deal of pressure and are expected to perform to very high standards.\textsuperscript{35} The law students surveyed also scored higher on the behavioural reactions subscale (2.27 on a scale of 5.00) compared with students from other disciplines as reported in previous studies.\textsuperscript{36} The most common behavioural reactions to stress for the law students were reported to be irritability towards others and separating oneself from others.

As indicated in Table 2, there were strong positive correlations between the results of the stress, anxiety and depression measures, suggesting that students who experience one of stress, anxiety and/or depression are also more likely to experience the other two states.

\begin{table}[h]  
\centering  
\caption{Inter-correlations between stress, anxiety and depression measures}  
\begin{tabular}{|c|c|c|c|}
\hline  & Stressors & Reactions & State Anxiety & Depression \\
\hline  SSI Stressors & 1 & & & \\
\hline  SSI Reactions & .73** & 1 & & \\
\hline  State anxiety & .52** & .55** & 1 & \\
\hline  DASS Depression & .58** & .62** & .64** & 1 \\
\hline  
\end{tabular}  
\end{table}

\*\*p < .01. \textit{Note:} Correlations listed here are Pearson correlations, except those with the depression measure which are Spearman correlations due to positively skewed nature of the depression measure.

\section{Belongingness}

Existing research on heightened psychological distress in law students posits a lack of social connectedness as one of the primary causes.\textsuperscript{37} This study sought to provide quantitative evidence of this possible cause of psychological distress in law students by including questions aimed at assessing participants’ feelings of belongingness to their cohort and institution. In particular, using a four-point Likert scale, participants were asked to agree or disagree with two statements:

- I feel a strong sense of belongingness to my year group at UWA
- I feel a strong sense of belongingness to UWA

\textsuperscript{35} Kelk et al, above n 3, iii, 46; Hess, above n 6, 75, 81–2.

\textsuperscript{36} See generally Gadzella and Baloglu, above n 33; Misra and McKean, above n 33; Misra, Crist and Burant, above n 33; Misra and Castillo, above n 33; Marzieh, above n 33; Godf, above n 33; Hamaideh, above n 33.

\textsuperscript{37} See, eg, Watson and Field, above n 6, 391–3; Larcombe and Fethers, above n 6; Field and Duffy, ‘Better to Light a Single Candle Than to Curse the Darkness’, above n 6, 6–7; Kelk et al, above n 3, 46; Hess, above n 6; Peterson and Peterson, above n 6; Sheldon and Krieger, ‘Does Legal Education Have Undermining Effects on Law Students?’, above n 3, 262, 280; Sheldon and Krieger, ‘Understanding the Negative Effects of Legal Education on Law Students’, above n 5; Tani and Vines, above n 6, 4, 7; Larcombe et al, above n 5, 427, 429; G Andrew H Benjamin et al, above n 10, 247–51; Olivia Rundle, ‘Creating a Healthy Group Work Learning Environment in Law Classes’ (2014) 14(1) Queensland University of Technology Law Review 63, 65 referring to the keynote address of Lawrence S Krieger at the 2014 Australian Wellness for Law Forum at QUT.
There was a positive correlation between the responses ($r = .57$, $p < .001$) to the two statements, which were averaged to produce an overall belongingness score. The internal consistency for this new measure using Cronbach’s $\alpha$ was .72. This is deemed acceptable based on standard guidelines. The authors were somewhat surprised at the outcome of these survey questions. As reflected in Figure 1, while 63.1 per cent of respondents reported a strong sense of belongingness to the university generally, only 39.2 per cent felt a strong sense of belongingness to their law school cohort.

![Figure 1: Responses to the belongingness statements](image)

What were not surprising, however, were the correlations between belongingness and the stress, anxiety, and depression measures. These correlations are indicated in Table 3.

Table 3: Correlations between belongingness and stress, anxiety, and depression measures

<table>
<thead>
<tr>
<th>Belongingness</th>
<th>Stressors</th>
<th>Reactions</th>
<th>State Anxiety</th>
<th>Depression</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$-0.24^{**}$</td>
<td>$-0.24^{**}$</td>
<td>$-0.29^{**}$</td>
<td>$-0.36^{**}$</td>
</tr>
</tbody>
</table>

$p < .01$. Note: Correlations listed here are Pearson correlations, except the correlation with the depression measure that is a Spearman correlation due to positively skewed nature of the depression measure.

As noted, there was a strong positive correlation between stress, anxiety and depression (see Table 2), and all were moderately negatively correlated with overall feelings of belongingness (see Table 3), meaning that students who feel a greater sense of belonging to their year group and institution generally have lower levels of stress, anxiety and depression. This data provides quantitative evidence.

supporting the existing research on the relationship between psychological distress in law students and a sense of lack of social connectedness.\(^{39}\) Regardless of any other results coming out of the study discussed in this article, what is clear is that universities, law schools and student bodies must continue to work on orientation and mentoring programs, curriculum and course design, student engagement strategies, and teaching and learning methods that foster a sense of belongingness in students.

3 **Student Behaviours**

Participants were asked to provide details of their engagement in 24 identified activities in the previous week. The 24 specified activities related to five broad categories: social, leisure, exercise, work, and university (distinguished by different patterns in Figures 2 to 4 below).

If the participant had engaged in the activity in the previous week he/she was asked to indicate how many days during the previous week, and what length of time each day, they had spent engaged in the behaviour. From this information the mean hours during the prior week spent engaged in an activity was determined. Figures 2 and 3 respectively indicate the percentage of students who engaged in the activity, and the mean hours spent engaged in each activity in the previous week. Figure 4 presents the mean hours per week engaged in the behavioural categories.

Note that in Figure 4 leisure is broken into three sub-categories: other leisure, leisure electronic, and leisure online. As discussed below,\(^{40}\) these sub-categories are justified by discrepancies in the participants’ appraisal of each leisure activity.

**Figure 2: The percentage of participants who engaged in the activity in the previous week**

\(^{39}\) See sources cited in above n 37.

\(^{40}\) See below p 22.
(a) **Social**

As can be seen in Figures 2 and 3, despite the survey being conducted mid-semester, a large proportion of respondents spent a relatively large amount of time with family and friends. Interestingly, even though only 67.5 per cent of students live with their parents, 86.4 per cent spent time with family in the previous week with the mean number of hours during the prior week spent with family exceeding 8 hours.

![Figure 3: The mean hours engaged in a particular activity in the previous week](image)

![Figure 4: Collapsed mean hours engaged in each category of activity](image)

(b) **Leisure**

With regard to leisure activities (shown in horizontal, diagonal and vertical lines in Figures 2, 3, and 4), the greatest percentage of students engaged in watching television and movies, surfing the internet and social media with a mean of over 17 hours during the previous week being spent on all three activities.
Relatively few participants engaged in the seven other leisure activities, including extracurricular university activities, with a total mean of less than eight hours for all seven activities. Given the negative correlation between students’ sense of belongingness to university and stress, anxiety and depression this result is regrettable although not unexpected.

Engaging in extracurricular activities at university, including student social, sporting and special interest clubs and societies, is likely to result in a greater sense of belonging to a group of like-minded students. Yet only 30 per cent of law students at UWA reported engaging in extracurricular university activities during the previous week. Law students should be encouraged to become more involved in extracurricular activities both within the law school and the university. Perhaps extracurricular programs need to be reviewed to ensure they adequately cater for a broad range of student interests. If adequate programs are already in place then it may be the case that they are not being effectively promoted to students.

(c) Exercise

Of added concern is the relatively low percentage of students engaging in the more social forms of exercise — sport and exercise classes. Figure 4 reveals that students who did exercise typically spent less than four hours in the prior week doing so. When compared with the 84 per cent of students who spent a mean of fourteen hours in the prior week working, this neglect of physical wellbeing does not bode well for mental wellbeing: ‘To keep the body in good health is a duty … otherwise we shall not be able to keep our mind strong and clear’.41

(d) Work and University

The vast majority of students spent in excess of 37 mean hours engaged in university related activities including attending and preparing for classes and completing assignments. This is to be expected in a mid-semester week at law school. However, the significant number of hours that a large proportion of participants worked outside of university in this busy mid-semester week is concerning and may exacerbate the stress and anxiety associated with a heavy workload.42

4 Appraisal of Behaviours

In addition to obtaining quantitative data as to how law students spend their time, an important objective of this study was to obtain quantitative data as to how these students subjectively perceived the value of the activities in which they engaged. To this end, participants were asked to evaluate the extent to which they had found the various activities engaged in during the week prior to be relaxing, enjoyable and worthwhile on an eight-point Likert scale (ranging from ‘extremely

41 Hindu Prince Gautama Siddharta, the founder of Buddhism, 563–483 BC.
42 Hess, above n 6, 75–6, 78; Larcombe et al, above n 5, 419, 427–8; Benjamin et al, above n 10, 243, 247–8.
not’ to ‘extremely yes’). The mean appraisal ratings for all behaviours surveyed is presented in Figure 5 and the collapsed mean appraisal scores for each of the five broad categories of activities are presented in Figure 6.

There are two preliminary points to note in relation to Figure 6. Firstly, based on the discrepancies in the results for the appraisal measures for the broad ‘Leisure’ category, to provide for more meaningful analysis this category was divided into three sub-categories: ‘Leisure Electronic’, ‘Leisure Online’ and ‘Other Leisure’. Secondly, the specific activity ‘Extra curricular (Uni)’ typically relates to students’ leisure time and activities rather than to university work and, therefore, has been included in the ‘Other Leisure’ category. Figure 4 presented earlier contains the collapsed mean hours for each category of activity.

![Figure 5: Mean appraisal rating for each activity](image)

(a) **Social, Other Leisure and Exercise**

The results presented in Figure 6 indicate that participants considered times spent engaged in social, other leisure (which includes extracurricular university activities), and exercise-related activities to be relaxing, enjoyable and worthwhile. In light of this result, it is both surprising and disappointing that those who reported engaging in exercise did not typically spend very much time doing so, with a mean of only 3.39 hours (standard deviation = 4.34) per week being reported.

(b) **Leisure Electronic**

Leisure electronic scored highly for both relaxation and enjoyment but comparatively was perceived to be less worthwhile. Procrastination is a feature of the self-imposed causes of stress reported by participants. Engaging in activities that require little or no physical effort are immediately available at the press of a button in the comfort of one’s home. That these behaviours (watching television

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43 See above p 9.
and movies and playing computer games) are not considered worthwhile is likely to be a manifestation of procrastination and, therefore, contribute to feelings of stress.

**Figure 6: Collapsed appraisal scores for each category of behaviour**

![Graph showing collapsed appraisal scores for each category of behaviour.]

### (c) Leisure Online

Online leisure activities (which comprised surfing the internet and social media) produced the most startling appraisal results. The results relating to social media provide a useful illustration. Figure 2 indicates that 92.7 per cent of participants reported engaging in social media in the prior week and Figure 3 shows that the mean hours spent engaged in this activity in the survey week was over six hours which was more than the total mean hours spent exercising and engaged in other leisure activities (for example, reading and extracurricular university activities) combined. Yet, as can be seen in Figure 5, of all 24 specified activities, time spent on social media was considered by participants to be the least worthwhile, and only marginally more enjoyable and relaxing than university activities and work.

This analysis suggests that many law students at UWA spend a significant amount of time engaging in an activity that they find neither enjoyable nor relaxing and is a waste of their time. For a group of students experiencing higher than normal levels of stress, anxiety and depression, at least partly as a result of heavy workloads, the data presented at this point would suggest that students should be encouraged to reflect on whether they are using social media in the best way, or using it too much.

### (d) Work and University

Work and university appraisal means were both relatively high on the worthwhile measure and, compared to other behaviours, the lowest for relaxing and enjoyable. Given that law students at UWA spent a cumulative mean of 51.82 hours a week involved in both work and university activities which perceived as worthwhile but not enjoyable or relaxing, it is not surprising they have higher stress, anxiety and
depression levels compared to the general population. When you factor in that they are spending another six hours a week on social media which they do not find relaxing, enjoyable or worthwhile, it would appear that these students are not spending much time engaging in enjoyable activities.

Of further interest (and indeed concern) for law schools is that when one considers the collapsed mean appraisal ratings for work and university related activities reflected in Figure 6, and the types of work participants engaged in prior to the survey week as represented in Figure 7 below, UWA law students reported deriving more enjoyment working in jobs outside of university (predominately in retail, hospitality and administration) than they did from their law studies.\textsuperscript{44} While university work may not be relaxing, as a law teacher one would hope that law students would find university at least as enjoyable as non-university related work. That they do not requires attention and action.

\textbf{Figure 7: Type of work undertaken by law students in the previous week}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{fig7.png}
\end{figure}

\section{Correlations Between Stress, Anxiety and Depression and Student Behaviours}

In analysing the data gathered from the survey, the authors sought to establish correlations between particular student behaviours and levels of stress, anxiety and depression. The results represented in Table 3 suggest that students who spend more time engaged in social activities (that is, with friends, family and partners) and who exercise, tend to experience the lowest levels of stress, anxiety and depression. The data also suggests that students engaged in more online

\textsuperscript{44} An independent sample t-test revealed that rated enjoyment of work behaviour ($M = 4.63, SD = 1.48$) was significantly higher compared to university behaviour ($M = 3.90, SD = 1.25$), $t(373) = 5.17$, $p < .001$, $d = .53$. There was however no significant difference between these behaviours for rated relaxation ($r(373) = .96$, $p = .34$) or worthiness ($r(373) = .77$, $p = .45$).
leisure experience more stress and depression (although the anxiety correlation of .13 failed to reach statistical significance). These results provide quantitative data supporting the importance of face-to-face student interaction for mental health.

Table 4: Relationship between hours spent engaging in a broad behaviour category in the previous week with stress, state anxiety, depression and belongingness

<table>
<thead>
<tr>
<th>SOCIAL OTHER</th>
<th>LEISURE ELECTRONIC</th>
<th>LEISURE ONLINE</th>
<th>EXERCISE</th>
<th>WORK</th>
<th>UNI</th>
</tr>
</thead>
<tbody>
<tr>
<td>SSI – Stressors</td>
<td>–.20**</td>
<td>–.04</td>
<td>–.07</td>
<td>.18*</td>
<td>–.15*</td>
</tr>
<tr>
<td>SSI – Reactions</td>
<td>–.17*</td>
<td>–.03</td>
<td>–.04</td>
<td>.15*</td>
<td>–.22**</td>
</tr>
<tr>
<td>State Anxiety</td>
<td>–.17*</td>
<td>–.11</td>
<td>–.09</td>
<td>.13</td>
<td>–.13</td>
</tr>
<tr>
<td>Depression</td>
<td>–.24**</td>
<td>–.14</td>
<td>–.07</td>
<td>.16*</td>
<td>–.19**</td>
</tr>
<tr>
<td>Belongingness</td>
<td>.25**</td>
<td>.18</td>
<td>.01</td>
<td>.06</td>
<td>.14*</td>
</tr>
</tbody>
</table>

**p < .01, *p < .05. Note: Correlations listed here are Spearman correlations due to positively skewed nature of the time variables.

Of some interest for law schools is the finding that the greater the time a student spent engaged in university work the higher the student’s anxiety (but not stress or depression). Therefore, not surprisingly, students that are pushing themselves the hardest with their university work are more prone to developing anxiety.

Counterintuitively, it would seem, spending more time at university was not related to a stronger feeling of belongingness. The only activities for which there was a meaningful positive correlation between time spent and feelings of belongingness were social activities ($r = .25$).\(^{45}\) This suggests that a stronger sense of belongingness to the cohort and university is a product of socialising with friends at university rather than the university experience itself. However, it is in classes, and especially small group classes, that students have the opportunity to make friends and social connections in the first instance. Yet there is a trend in higher education, possibly driven by economies of scale and increasing financial pressures on tertiary institutions generally, to reduce face-to-face classroom contact and to incorporate more online off-campus learning experiences into the learning and teaching paradigm.\(^{46}\) Should this trend take hold in legal education it may well impact negatively on the mental health of law students by reducing social interaction on campus and the opportunities available to students to make friends and to connect with peers and teachers.

6 Correlations Between Stress, Anxiety and Depression and Student Appraisal of Behaviours

Time spent engaged in particular categories of behaviours and stress, anxiety and depression showed some weak correlations. However, stronger correlations were

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\(^{45}\) There was also a significant positive relationship found between belongingness and time spent exercising however this was only very small (.14).

\(^{46}\) See generally Sharon Mascher and Natalie Skead, ‘On the Record: The Trials and Tribulations of Lecture Recording in Law’ (2011) 35 University of Western Australia Law Review 407.
found between the students’ overall appraisal of certain behaviours and their stress, anxiety and depression levels. This is particularly the case in regards to social and online leisure activities.

Table 5: Relationships between overall appraisal*** measures for the behaviour types with the stress, state anxiety, depression, and belongingness measures

<table>
<thead>
<tr>
<th></th>
<th>SOCIAL</th>
<th>OTHER LEISURE</th>
<th>LEISURE ELECTRONIC</th>
<th>LEISURE ONLINE</th>
<th>EXERCISE</th>
<th>WORK</th>
<th>UNI</th>
</tr>
</thead>
<tbody>
<tr>
<td>SSI – Stressors</td>
<td>-.37**</td>
<td>-.07</td>
<td>-.12</td>
<td>-.30**</td>
<td>-.13</td>
<td>-.10</td>
<td>-.20**</td>
</tr>
<tr>
<td>SSI – Reactions</td>
<td>-.39**</td>
<td>-.14</td>
<td>-.12</td>
<td>-.31**</td>
<td>-.11</td>
<td>-.06</td>
<td>-.16*</td>
</tr>
<tr>
<td>State Anxiety</td>
<td>-.39**</td>
<td>-.19*</td>
<td>-.16*</td>
<td>-.28**</td>
<td>-.17*</td>
<td>-.12</td>
<td>-.19**</td>
</tr>
<tr>
<td>Depression</td>
<td>-.51**</td>
<td>-.16*</td>
<td>-.14</td>
<td>-.32**</td>
<td>-.12</td>
<td>-.17*</td>
<td>-.24**</td>
</tr>
<tr>
<td>Belongingness</td>
<td>.25**</td>
<td>-.07</td>
<td>23**</td>
<td>.24**</td>
<td>.07</td>
<td>.01</td>
<td>.33**</td>
</tr>
</tbody>
</table>

**p < .01, *p < .05. Note: Correlations listed here are Pearson correlations, except those with the depression measure which are Spearman correlations due to positively skewed nature of the depression measure.

***The overall appraisal measure for each behaviour type is calculated by averaging across relaxing, enjoyable, and worthwhile appraisal scores.

With regard to social behaviours, the survey results suggest that it is not only the time spent engaged in a social activity, but, and perhaps more importantly, the students’ perception of the quality of that time spent, that correlates with lower levels of stress, anxiety and depression. It was found that students reporting more positive appraisal of social behaviour also tended to report less stress, anxiety, and depression (see Table 4). Overwhelmingly participants perceived engaging in social activities with friends, family and partners as being relaxing, enjoyable and worthwhile, however this was not the case for all participants.

The lesson to be learnt from this result is that rather than spending more of their already very limited spare time with friends, family and partners, law students should be encouraged to ensure that the time they are already spending with these others is quality time — time that they can enjoy, during which they are able to relax and that they consider worthwhile.

Similar comments may be made in regard to students’ online leisure behaviours and university related activities. While generally participants did not rate the time spent engaging in online leisure activities such as social media, or university related activities, as particularly enjoyable, relaxing or worthwhile, those that did rate these activities higher on these measures also reported lower levels of stress, anxiety and depression.

It would seem, therefore, that law students would be well served by being more discriminating in their choice of online activities. For example, rather than spending hours on social media for purely social purposes, students may

47 As revealed by the behavioural reactions to the stress sub-scale of the student life stress inventory discussed above, law students commonly report reacting to stress by becoming irritable towards others and separating themselves from others. This tendency would negatively impact a student’s perception of the quality of time spent with friends, family and partners.
find using social media for more meaningful purposes such as online learning activities, or university or community engagement, to be more worthwhile and enjoyable. This may in turn positively affect their sense of wellbeing. From a law teacher’s perspective, these survey results also present the opportunity to support student wellbeing through the design and use of appropriate online learning and teaching activities.

In addition, the appraisal of university behaviours was found to be negatively related to stress, anxiety, and depression (see Table 4). This result strengthens the intuitive notion, noted above, that improving the university experience is critical to improved student wellbeing.

Further supporting this conclusion are the survey results indicating that, generally, the higher a participant’s overall appraisal rating of the various categories of activities, the greater the respondent’s sense of belongingness to his/her cohort and the university, and therefore the lower his or her levels of stress, anxiety and depression. The only exception to this general result is exercise — this most likely because, as evidenced in Figure 2 above, the vast majority of participants who exercised in the survey week engaged in solo, rather than group, exercise.

The reported correlations between students’ overall appraisal of the value and worth of their behaviours, stress, anxiety and depression levels and their sense of belongingness raises the typical ‘chicken or the egg’ conundrum: does having a more positive response to activities and behaviours result in an increased sense of belongingness, or does an increased sense of belongingness positively affect a student’s overall perception of the value and quality of their activities and behaviours? Conversely, does a student’s negative appraisal of behaviour have a primary influence upon his or her stress, anxiety, and depression levels, or does experiencing elevated levels of these emotional states negatively impact on appraisal of behaviour? The potential for bi-directional influence affecting student behaviours and levels of psychological distress is difficult to assess due to the cross-sectional design of this study. Regardless of the answers to these questions, it would appear that spending more time engaged in activities that are considered to be worthwhile, enjoyable and relaxing is conducive to an increased sense of belongingness and in turn lower levels of stress, anxiety and depression in law students.

IV DISCUSSION AND ANALYSIS

While the results of this study raise a number of complex, and perhaps even unanswerable questions, they also provide some useful insights into how law students at UWA spend their time, the relationship between these activities, the students’ sense of belongingness and their self-reported levels of stress, anxiety and depression.

As to the time spent engaged in particular behaviours, the results suggest that law students spend the least amount of time doing what they consider most worthwhile,
enjoyable and relaxing (exercise and other leisure including reading, meditation, extracurricular activities), and the most amount of time engaged in activities that they do not enjoy or find relaxing (work and university). Most perplexing is that many law students also spend a significant amount of time engaged in activities that they do not perceive to be enjoyable, relaxing or worthwhile (on social media and the internet). These patterns of behaviour have been shown to correlate with higher levels of stress, anxiety and depression. Is it not time then for law students to re-evaluate and make better choices as to how they are spending their time? Law schools have an important role to play in this improved decision-making.

A basic starting point for law students is that, whatever other wellbeing strategies they might adopt, they should all endeavour to exercise more. While prior research shows that exercise may not affect a student’s sense of belongingness,48 the evidence provided by the current study suggests that students who engage in some form of exercise experience lower levels of stress, anxiety and depression. Law schools and student societies might assist in this regard through a range of diverse and varied organised sporting events held throughout the year or perhaps a sports day held each semester.

Aside from exercise, improving the sense of belongingness in law students is particularly important to their wellbeing. These results are consistent with the excellent work done by a number of researchers on the Self-Determination Theory in the context of law student wellbeing.49 This theory posits that ‘there are three basic and universal psychological needs — autonomy, competence, and relatedness — the fulfilment of which predicts human thriving’.50 What is clear from the results of this study is that universities, law schools and student bodies must continue to work on orientation and mentoring programs, curriculum and course design, student engagement strategies, and teaching and learning methods that foster a sense of belongingness in students.

In an excellent article on the impact of the teaching and learning environment on psychological distress in law students, Gerald Hess identifies eight components of an effective and healthy learning environment: respect, expectation, support, collaboration, inclusion, engagement, delight and feedback.51 Hess provides guidance as to how law teacher (and law student) behaviours and attitudes can contribute to these components.52 Drawing on Hess’s work, the authors suggest three simple strategies law teachers can adopt to begin to address the lack of belongingness experienced by many law students:

51 See Hess, above n 6, 87.
52 Ibid 87–100.
create a friendly and unintimidating collaborative and co-operative learning environment in which students work with one another and with teachers in developing understanding and skills;

- make students feel welcome and included in a classroom in which diversity and variety is not only accepted but celebrated; and

- actively engage students in the learning journey through effective verbal and non-verbal (making eye-contact and smiling) student-teacher communication and interactive teaching techniques.53

The results of this study also suggest that improved wellbeing may come from students ensuring the time they spend with friends, family and partners is quality time, and being more discerning as to their online activities. While these choices may be principally within the power of the students themselves, there are steps that law teachers can take to encourage better choices. As law students spend the majority of their time engaged in university-related activities — on average over 37 hours a week — it is in association with these activities that law students can be encouraged to engage in healthier social and online leisure behaviours.

Creating a collaborative and co-operative classroom environment that is conducive to getting to know each other may not only help students make friends but also ensure that the time they spend socialising with those friends is worthwhile, enjoyable and, perhaps even relaxing. Doing so may result in law students finding university activities enjoyable, which the survey results show is currently not the case.

Law teachers are also in a position to influence how students spend their online leisure time through the development of appropriate (but fun) online learning activities. This may include the use of blogging, wikis, social media and games.54 Engaging in these learning related online activities may be perceived by students as more worthwhile and may engender a greater sense of belongingness to the other students in the cohort also engaging in these activities.

Finally, increased student involvement in extracurricular law school and university activities is also likely to result in a greater sense of belongingness and, therefore, wellbeing in students. To be effective however, extracurricular programs need to cater to a diverse range of student interests. While competitions such as mooting, client interviews and negotiations may appeal to the competitive, outgoing law student, they may not appeal to more introverted and shy students. Voluntary team research projects providing research assistance to community groups and legal centres might be one way of providing better opportunities for these students to connect with one another outside of the classroom and with the legal community more broadly. As noted, if adequate programs are already in

place then it may be the case that students are not aware of what is on offer due to inadequate promotion.\textsuperscript{55}

\section*{V CONCLUSION}

The results of the study discussed in this article confirm what many have been previously suggested: a sense of belongingness (or social connectedness) is central to mental health and wellbeing in law students.\textsuperscript{56} It is acknowledged, however, that ‘[i]n contrast to how a child belongs in the world, adult belonging is never as natural, innocent, or playful. Adult belonging has to be chosen, received, and renewed. It is a lifetime's work’.\textsuperscript{57}

Based on these findings, the authors have made recommendations and provided some strategies that may be adopted by law students to increase their sense of belongingness to their cohort and the university and thereby reduce the stress, anxiety and depression experienced by so many of them. Recognising the critical role of law schools in addressing student wellbeing, the authors have also made some suggestions as to how law schools and law teachers may contribute to the improvement and maintenance of wellbeing in their students.

It is hoped that by adopting the strategies suggested in this article law students will make better choices as to how they spend their time. With the assistance of their teachers and law schools, law students will then be better-equipped to cope with the mental health issues so prevalent in law schools — the ultimate goal being happier, more well-balanced law students, law graduates and, in time, lawyers.

\textsuperscript{55} As noted at pp 31–2 above, findings from the study reported in this article are consistent with the Self-Determination Theory in suggesting that how behaviour is perceived by a student and, in particular, how relaxing, enjoyable, and worthwhile a student regards his or her behaviour has a stronger influence on the student’s mental health than the act of performing the behavior does. See Sheldon and Krieger, ‘Does Legal Education Have Undermining Effects on Law Students?’; above n 3; Sheldon and Krieger, ‘Understanding the Negative Effects of Legal Education on Law Students’, above n 5; Larcombe and Fethers, above n 6; Huggins, above n 7.

\textsuperscript{56} Kelk et al, above n 3, 47; Hess, above n 6, 75–6; Tani and Vines, above n 6, 4, 21, 25, 28–30; Benjamin et al, above n 10, 227–8.