

OCCUPATIONAL STREE AND JOB SATISFACTION IN  
RECENTLY QUALIFIED AUSTRALIAN OSTEOPATHS

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## ABSTRACT

**Introduction** Occupational stress is an important, but under-explored issue in osteopathic practice. In related professions, such as general medical practice, occupational stress is a key factor compromising job satisfaction, and potentially compromising patient care. This study was developed to explore the job satisfaction, and sources of occupational stress, in osteopaths with less than 5 years clinical practice experience. A concurrent study was conducted to explore the same issues in more experienced practitioners.

**Objectives** Sources of occupational stress and job satisfaction were explored via a questionnaire mailed to osteopaths at their practising addresses.

Participants returned the questionnaire to the researchers using reply-paid envelopes. Participation in the study was voluntary. Personal identifiers have been kept confidential.

**Method** The Osteopaths' Stress Survey (OSS) was mailed to 936 Australian osteopaths with an invitation to participate in this study and provide data on their occupational stress and job satisfaction. The returned surveys were divided between the two lead researchers on the basis of the respondents years in practice. Surveys returned from practitioners of less than 5 years clinical practice experience were analysed in this study.

**Participants:** 103 recently graduated osteopaths, practicing in Australia, completed the questionnaire.

**Measures:** The questionnaire was derived from the General Practice Stress Scale, subject to revisions to make it suitable for use with osteopaths. The questionnaire was piloted for face and content validity by a small group of

osteopaths, ( $n = 5$ ) representative of the sample. The resultant OSS comprised three parts: in part 1 participants provided personal and practice data such as gender, age, and years in practice; part 2 was an osteopathic practice career survey, in which participants ranked stressors in osteopathic practice in order of severity and frequency, and reported unfavourable aspects of osteopathic practice; and in part 3 participants reported favourable aspects of osteopathic practice, ranked their job satisfaction, and reported to what extent clinical practice matched the expectations they had as students.

**Results** Most new graduate osteopaths (93%) reported being very satisfied, or somewhat satisfied, with their chosen career. The most frequent sources of occupational stress among new graduate osteopaths included, managing patients who were “difficult,” managing time pressures to see patients and dealing with paperwork. The most severe stressors included, earning enough money, excessive clinical responsibility and managing difficult patients. The severity of a stressor is somewhat tempered by the frequency of that stressor.

**Conclusions** Although largely satisfied with osteopathic practice, new graduate osteopaths find paperwork, time pressures, and difficult patients frequently stressful in their work.

## **Keywords**

Osteopath; occupational stress; job satisfaction; recent graduates

## INTRODUCTION

Stress, in a general sense, may be defined as “a state of physiological or psychological strain caused by adverse stimuli, physical, mental or emotional, internal or external that tends to disturb the functioning of an individual”.<sup>1</sup>

When stress occurs in the workplace, it is referred to as occupational or job stress.<sup>2</sup> Some stress is motivating,<sup>3</sup> in which case it is called a “stimulus”, to differentiate it from the detrimental stress that occurs if the levels are too high. The outcomes of occupational stress in health care practice may include both immediate and long term, physical, emotional or psychological problems, leading to a loss of effectiveness in the treatment of patients.<sup>4</sup> Viewing job stress as a response to stressors, one can focus on aspects of the work environment that are potential stress producers.<sup>5</sup>

In Australia, osteopathy is a rapidly growing profession. The Australian Osteopathic Association predicts that the number of practising osteopaths will double in the next few years.<sup>6</sup> It is a widely held belief, within the osteopathic profession, that osteopathy occupies a unique niche within the health care industry due to the holistic philosophy on which the profession was founded. Osteopathy is frequently associated with other forms of manual therapy, particularly physiotherapy and chiropractic. It can also be compared with general medical practice as both provide primary health care to patients.

The most significant similarity between general practitioners and osteopaths working in private practice is the close interaction with patients. This contact, and the significant responsibility of being a health care advisor, can be

emotionally draining and may give rise to job related stress.<sup>7</sup> It is therefore reasonable to hypothesise that when an osteopath's level of job satisfaction is poor, and he/she experiences high levels of occupational stress, a similar pattern of negative effects on patient care may develop.

Because primary health care practitioners play a pivotal role in the Australian health care system, research into factors impacting upon the practitioner's ability to provide high quality care to their patients is essential. Occupational dissatisfaction in a medical practitioner affects patient satisfaction.<sup>8</sup>

Dissatisfied medical practitioners can adversely influence patient behaviour leading to a reduction in quality of care.<sup>9</sup> Extensive research in this field, focusing on medical practitioners, has revealed that in general they have poor job satisfaction and high levels of occupational stress, both of which can have a negative impact on patient care.<sup>2,4,8</sup>

DiGiacomo et al<sup>4</sup> and Godwin et al<sup>10</sup>, in their research involving occupational therapists and dentists respectively, have stated that the early post-graduate years in practice are possibly the most stressful of all. Empirical evidence suggests in their first year(s) of practice, the majority of osteopathy graduates seek an associate position in private practice. It is postulated by the authors of this study, that new graduates do this in the hope of obtaining professional support during the potentially difficult transition between university and the workforce. Sydenham<sup>11</sup> found that practitioners with less experience may benefit from seeking a mentor. Consequently there may be discernible differences in the levels of job satisfaction, and sources of occupational stress, depending on whether the osteopath is a subcontractor, employee or

principal osteopath within the practice. This study explores these possible differences.

This study was one part of a two-part research project. This component comprised the collection of occupational stress and job satisfaction data from osteopaths with less than five years experience. All data from osteopaths with equal to or more than five years experience was passed to the co-researcher who focussed on experienced osteopaths. A distinction between the two groups was made as it was hypothesised that recent graduates' levels of job satisfaction, and sources of occupational stress, may be different to those of the experienced osteopaths based on the aforementioned potentially difficult transition from university to the workforce.

Although there are similarities between general medical practice and osteopathic practice, considerable differences are also apparent. For example, consultation time for a patient visiting a General Practitioner (GP) is considerably less than when visiting an osteopath and a GP must practise in line with expectations of a publicly funded health system. It is recognised by the authors of this research that there are limitations associated with direct comparison between GPs and osteopaths.

## METHOD

### Aims

This study was one part of a two part research project. The general purpose of both parts of the research project was to investigate sources of occupational stress and levels of job satisfaction in participating Australian Osteopaths.

Specific aims of the study were:

- i) To determine to what degree the participating osteopaths are satisfied with their current practice experience
- ii) To identify common sources of occupational stress in participating osteopaths
- iii) To compare sources of occupational stress and level of job satisfaction experienced by practitioners working as subcontractors, employees and principal osteopaths

### Participants

The two researchers sought potential participants throughout all Australian states and territories using the publicly accessible Australian Yellow Pages Online database. Surveys were sent to 936 osteopaths who had advertised on the database during 2004. Therefore, exclusion criteria were osteopaths who had not advertised with the Yellow Pages at that time. An arbitrary decision was made deeming all participating osteopaths who had graduated from osteopathic training equal to or more than 5 years ago as “experienced” and those who had graduated less than 5 years ago, recent graduates. All surveys were returned to one of the researchers who sorted them into two

groups according to the reported time in practice. The overall response rate was 276 participants (29%). In this part of the research project, focussing on recent graduates, 103 participants qualified for data analysis.

### Measures

Due to the similarities between general practice and osteopathic practice, data collection for part of this research used a modified version of the General Practice Stress Scale (GPSS). The GPSS was selected for use, following extensive research of previous survey designs, as it was deemed the most relevant and comprehensive survey in relation to this research project. The GPSS was developed in 1996 by Coman and Schattner. Dr Schattner granted permission for GPSS to be used in this research project.

The GPSS was described by the developers as having face validity, as all items in the stress scale are events which can occur within practice and which do cause stress to practitioners. The GPSS also had construct and content validity as the developers noted the items were developed by a team of occupational stress experts.<sup>2</sup>

Sections One and Three were designed specifically for the purposes of this study, and Section Two had minor modifications made from the original GPSS, (to create a survey completely relevant to an osteopaths experience in practice). The modified survey was validated in a pilot study, using a group of five qualified osteopaths who were accessible as they were all clinicians at the Victoria University Student Osteopathic Clinic. The modified survey was called the Osteopaths Stress Scale (OSS).



The survey (see Appendix 1) consisted of three sections.

*Section One: Personal & Practice Information*

The aim of this section was to obtain information relating to demographics and work related variables. Tick-a-box style questions posed to participants covered the following variables:

- Gender
- Age
- Time in osteopathic practice (years/months)
- Number of osteopaths within the practice
- Position within the practice
- Average number of hours worked per week
- Approximate number of patients seen per week

*Section Two: Osteopathic Practice Career Survey (Osteopathic Stress Scale)*

Participants were requested to respond to various questions regarding sources of occupational stress. Question 1 had twenty-seven parts to it. Each part expressed one of the variables identified by Coman and Schattner as a contributor to stress in clinical practice (see Appendix 1 for outline of specific variables).<sup>2</sup>

Participants were requested to indicate both the level of stress caused by the identified variable and how frequently the variable contributed to occupational stress.

The frequency of stress was indicated using a 4-point scale from 0-3. Zero represented that the event was not applicable, 1 indicating rarely (a few times a year) the variable causes them stress, 2 indicating occasionally (at least monthly) the variable causes them stress, and 3 indicating the variable causes them stress frequently ( at least weekly).

On a similar 4-point scale, participants were asked how much stress, on average, the variable caused them to feel when it did occur. Zero represented no stress, 1 represented mild stress, 2 represents moderate stress and 3 indicates severe stress. See below for a sample question:

<u>Frequency of stress</u>		<u>Level of stress</u>	
0	<i>Not Applicable</i>	0	<b>No stress</b>
1	<i>Rarely – a few times a year</i>	1	<b>Mild stress</b>
2	<i>Occasionally – at least monthly</i>	2	<b>Moderate stress</b>
3	<i>Frequently – at least weekly</i>	3	<b>Severe stress</b>

	Not applicable	<i>Frequency of stress</i>	<b>Level of stress</b>
Q1. Time pressures to see patients	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Other questions in Section Two related to:

- How much stress the osteopath had felt in the past twelve months

- Ranking aspects of clinical practice in order of contribution to stress levels
- Relative increase/decrease of stress levels in the past twelve months
- If occupational stress had ever made the osteopath feel as though they wanted to leave their a) current workplace and/or b) profession
- Absence due to occupational stress
- The osteopath's thoughts on how the community perceives osteopathy
- The quality of service the osteopath believes they are providing their patients

Participant's responses were expressed using tick-a-box, ranking variables, and open ended qualitative style questions.

### *Section Three: Job Satisfaction Survey*

This section aimed at investigating the participant's level of overall career satisfaction, attractive variables within osteopathic practice and included specific questions relating to the participant's level of satisfaction about their salary and the expectations they had as a student osteopath of clinical practice.

### Procedure

Potential participants received a letter which outlined the purpose of the study, a survey consisting of three sections and a reply paid envelope to encourage better response from potential participants.

The Victoria University Human Ethics Committee approved the proposed research design. Once ethics approval had been granted, surveys were sent

to potential participants throughout Australia. Participants were requested to return completed surveys within four weeks of the mail-out date.

### Statistical Methods

Raw data was collected and analysed using Microsoft Excel 2002 SP3.

Quantitative results were expressed as percentages and mean, median, mode and standard deviations were calculated where appropriate. Qualitative data was coded for common themes and expressed in tables that included themes and scope of themes.

## RESULTS

### Personal and Practice Information (Demographics)

Of the 103 participants, 48 were male and 55 were female. The majority of the participants were subcontractors (56%), 38% were principals and 6% were employees. Participants were most commonly in the 25-29yr age range (56%), followed by 20-24yrs (20%), 30-34yrs (15%), 40-44yrs (5%), 50-54yrs and 55-59yrs (1% respectively).

On average, the participants had been practicing Osteopathy for 19 months.

Fifty three percent of participants were working in a practice as the sole Osteopath, 40% were working in a practice consisting of two or three Osteopaths and 7% were working in a group of 4 or more Osteopaths.

The majority of the participants were working on average 31-40hrs per week (44%), followed by 21-30hrs (24%), 40+hrs (22%), 11-20hrs (11%) and 0-10hrs (2%).

The participants reported the number of patients they were treating per week was 31-40 (34%), 21-30 (22%), 41-50 (17%), 11-20 (12%), 51-60 (11%), 61-70 (2%), less than 10 patients (2%) and 70+ patients (1%).

Figures 1-3 illustrate the Personal and Practice information of the data.

Insert Figures 1- 3 here

### Degree of Job Satisfaction

The Degree of Job Satisfaction in this sample of osteopaths is represented in Figure 4. Fifty four percent of participants rated their career overall as Very Satisfying, 39% reported being Somewhat Satisfied, 4% were Neither Satisfied nor Dissatisfied, and 3% reported being Somewhat Dissatisfied. No participant rated their career as Very Dissatisfying. Comparisons of overall job satisfaction between subcontractors, employees and principals are outlined in Table 1.

Insert Figure 4 and Table 1 here

Of the 102 participants that responded to the question 'What are the variables that make working as an osteopath attractive to you' 97% reported 'relationships with patients'. Eighty percent reported the 'challenges and variation of work in clinical practice' was an attractive variable, similarly 80% reported 'owning their own practice/having the potential to own their own practice', as an attractive variable. Sixty five percent of participants reported that both the 'hours', and 'salary', working as an osteopath were attractive factors in Osteopathic practice.

In response to the question regarding their salary/wage, the majority of participants were somewhat satisfied (54% of 101 participants), 18% reported feeling very satisfied, 17% were neither satisfied nor dissatisfied, 10% were somewhat dissatisfied and 3% reported being very dissatisfied with their salary/wage.

When asked if clinical practice measured up to the expectations they had as student osteopaths, 1 % strongly disagreed, 16% disagreed (however two participants indicated they had negative expectations and were pleasantly surprised by clinical practice), 12% neither agreed nor disagreed, 51% agreed and 22% strongly agreed that their experience in clinical practice met their expectations when they were students.

Participants were asked for any other comments that they would like to make in relation to job satisfaction. The results were coded for themes. Table 2 represents the theme of the comments as well as the scope of the theme.

Insert Table 2 here

#### Identification of Common Sources of Stress

Table 3 displays each issue which may contribute to occupational stress, the percentage of participants who responded that the particular issue had caused them some stress, and the ranking of the issue (i.e. issue that most frequently caused the participants stress was ranked 1).

Insert Table 3 here

Table 4 displays each issue and its mean stress score, ranked in order of severity of stress caused. On average, all issues caused the participants either mild to moderate stress or, no stress to mild stress, when they occurred. Overall, no item recorded a mean of moderate to severe stress or

severe stress; however, some individual participants reported severe stress to some of the issues.

Insert Table 4 here

Table 5 displays how often the issues cause the participants stress. Three issues frequently (weekly) caused the participants stress. 'Time pressures to see patients' was frequent contributor to stress for subcontractors and employees. Principals and employees perceived 'phone interruptions during consultations' as a frequent contributor to occupational stress. Principals also perceived 'not enough input into how the practice runs' as a frequent contributor to stress. All other issues caused the participants stress only occasionally (at least monthly) or rarely (a few times a year).

Insert Table 5 here

In the last twelve months, 12% of participants reported experiencing No Stress; 59% Mild Stress; 24% Moderate Stress and 5% Severe Stress in clinical practice.

'Economic factors' were the most frequent contributors to occupational stress followed by 'clinical factors' and 'workload'. 'Medico-political factors', 'effect of work on outside life' and 'physical working environment' contributed least to occupational stress.

Figure 5 represents changes in occupational stress felt by participants in the last twelve months.



Insert Figure 5 here

Eighteen percent of participants reported their occupational stress has caused them to consider leaving their current workplace at some stage, while 19% reported times when their occupational stress had caused them to consider leaving the osteopathic profession altogether.

Forty nine percent of participants reported that their occupational stress has never made them feel like not going to work. Thirty two percent reported that once every few months, they did not want to go to work due to occupational stress; 17% reported occupational stress makes them not want to go to work on a monthly basis and 3% of participants reported not wanting to go to work frequently due to occupational stress. There were no participants who reported not wanting to go to work due to occupational stress on a daily basis.

The vast majority of participants (92%) reported never having a day off attributable to occupational stress, in the past twelve months. One or two days of work were missed by 7% of participants due to occupational stress and one participant (1%) reported having to take one to two weeks off in the past twelve months due to occupational stress.

The vast majority of participants agreed, or strongly agreed, that they felt valued by their patients (97%), the remainder of participants (3%) neither agreed nor disagreed with the statement. Likewise, the vast majority (99%) of osteopaths agreed, or strongly agreed, that they provide their patients with a

quality service. Sixty-seven percent of participants either agreed, or strongly agreed, that osteopathy is rated highly in the community in terms of occupational prestige and professionalism; 23% of participants neither agreed nor disagreed while 10% disagreed with the statement.

Participants were asked for any other comments that they would like to make regarding their own level of occupational stress or stress in the osteopathic profession in general. The results were coded for themes. Table 6 represents the theme of the comments as well as the scope of the theme.

Insert Table 6 here

Figures 6-8 represent results from the concurrent study investigating experienced osteopaths. These results represent average number of hours worked per week, approximate numbers of patients treated per week and overall levels of job satisfaction.

Insert Figures 6 – 8 here

Table 7 summarises results from the concurrent study investigating experienced osteopaths. These results display experienced osteopaths mean level of stress attributed to the twenty seven different variables as well as how frequently each variable contributes to occupational stress.

## DISCUSSION

The primary aim of this study was to investigate level of job satisfaction and sources of occupational stress in participating recently qualified Australian osteopaths, who had been practising for less than five years.

The results of this study indicated that the overwhelming majority (93%) of participating osteopaths are satisfied (either somewhat satisfied or very satisfied) within their profession. This result is similar to the high levels of job satisfaction in comparable health care practitioners such as Canadian physiotherapists<sup>12</sup> and American chiropractors.<sup>13</sup>

Encouragingly, no respondent from any of the three groups, subcontractors, employees or principals considered that they were very dissatisfied with their overall career. The majority of subcontractors and employees were very satisfied with their profession, while the majority of principals were somewhat satisfied. Assuming the respondents in the principal category were practising in a solo practice, this slight reduction in the reported level of job satisfaction is similar to the results from one study that reported solo practitioners reported less satisfaction than physicians in other practice arrangements.<sup>14</sup> Another possible explanation of the slight discrepancy is that there is less pressure in clinical practice for subcontractors and employees, due to the support they receive from the practice principal.

It is not possible to deduce from the above result that only 7% of the participants are dissatisfied with their profession and have low levels of job

satisfaction. Authors of one study explain job satisfaction and job dissatisfaction are a function of the perceived relationship between what one wants from one's job and what one perceives it as offering or entailing.<sup>15</sup> Authors of another study stated "satisfaction and dissatisfaction are, for the most part, unrelated and not complementary functions, rather than negatively related poles of a single bipolar continuum".<sup>16</sup>

A review of available literature reveals that those working in a primary health care role find several common variables most attractive. These include caring for patients, successful management of difficult cases, relationships with patients and families, being needed and for some, doing well financially.<sup>2,13,14,17</sup> This study reflects these results as relationships and interactions with patients were reported as the most attractive features of working as an osteopath. Less attractive variables for the participating osteopaths included salary and hours worked, which again is consistent with previous research.<sup>13</sup>

Friedlander<sup>16</sup> expressed "there are significant differences between the importance that an employee ascribes to various job characteristics as a source of satisfaction, as opposed to these same job characteristics, as a source of dissatisfaction". This study supports Friedlander's findings as not only did practitioners report their relationships with patients were the most attractive element of working as an osteopath, but patients who are difficult to manage, was the single most frequently occurring stressor in osteopathic practice. Furthermore, when osteopaths did encounter patients who were difficult to manage it resulted in the highest mean level of stress caused by

any of the twenty-seven given variables. Overall, 'patients who are difficult to manage' was the most powerful stressor in participating recently qualified Australian osteopaths.

The same issue of 'patients who are difficult to manage' was not identified as either a frequently occurring, or even sporadic, cause of stress for 296 general practitioners in an identical survey.<sup>2</sup> It could be postulated that the limited experience of the recently qualified osteopath is at least part of the explanation for rating patients who are difficult to manage as the most frequently occurring variable causing stress.

A study of recent dental graduates identified that participants were encouraged to develop an idea of "perfectionism" within their training and they consequently developed a sense of frustration at the distance between that standard and the day-to-day reality of private practice.<sup>10</sup> This finding may also apply to recently qualified osteopaths. Perhaps the graduate has grown accustomed to dealing with a certain type of patient, and little time constraint, during their training and when thrust into the "real world", with a high patient load and variety of patients, the graduate finds it difficult to adjust. This may be attributed to being inexperienced with business in the "real world".

The relatively high level of stress reported by participants regarding 'earning enough money in practice' is consistent with other studies.<sup>2,13,14</sup> In this study, 'earning enough money in practice' was the variable that produced the second highest level of stress. However, it was not frequently reported to contribute to occupational stress by osteopaths overall. While 'earning enough money in

practice' is a powerful contributor to occupational stress when it does occur, it occurred relatively infrequently. This finding could possibly be related to unrealistic financial expectations before graduation compared with the reality of private practice. In a study of medical physicians it was reported that employees were increasing their patient load to maintain, what they perceived as, adequate income.<sup>5</sup> In the same study, it was postulated that financial pressures to maintain a particular lifestyle, lead to working long hours and so constitute self-imposed stress. As 'salary' and 'hours' were perceived as the least attractive variables from a list of five in this study, it is plausible that the same pattern is occurring within this population of osteopaths.

The secondary aim of this study was to compare sources of occupational stress and job satisfaction among those osteopaths working as employees, subcontractors and principals.

The population of employees was small (6%) in this study therefore it was difficult to meaningfully compare any of their results to those of the subcontractors and principals.

The most frequently occurring sources of stress were similar for the subcontractors and principals. Three of the top four most frequently occurring stressors, were shared by both groups. These were 'patients who are difficult to manage', 'time pressures to see patients' and 'intrusion of work on social life'.

The second part of this research project investigated results comprised of data from experienced (equal to or greater than 5 years in practice) osteopaths. The results from that study reveal the following differences and similarities.

Experienced osteopaths were more likely to be the principal osteopath within the practice (87%). This differs from the findings of recent graduates where only 38% were working as the principal osteopath. This may be due to recent graduates working in an associate position and learning the intricacies of clinical practice under the guidance of the principal. As the graduate gains more experience and confidence they start to build their own practice resulting in them ultimately becoming principals.

Perhaps the most significant finding is the difference between recent graduates and experienced osteopaths in terms of average numbers of hours worked, and patients seen, in one week. On average, the experienced osteopaths work fewer hours (41% working 30hrs or less per week, compared to 35% of recent graduates) and see more patients (54% experienced osteopaths are seeing  $\geq 41$  patients compared with 31% of new graduates). This difference may be related to why experienced osteopaths report 'too much work to do in a limited time' as the variable causing them the highest level of stress. The same variable was ranked as the second most frequently occurring variable contributing to occupational stress in this group. For experienced osteopaths, 'too much work to do in too limited time,' was the single most powerful stressor in clinical practice. 'Earning enough money in clinical practice', and 'threat of litigation' both caused relatively high levels of

stress to experienced osteopaths when they occurred, however, as with recent graduates results, these variables occurred relatively infrequently.

'Patients who are difficult to manage' caused the fifth highest level of stress in experienced practitioners however occurred relatively infrequently. This is in direct contrast to recent graduates who reported this as the variable causing the highest level of stress, as well as, the variable occurring most frequently. This difference suggests that as the osteopath becomes more experienced, they develop better skills to manage difficult patients and/or place less responsibility on themselves for the patient's condition.

The most frequently occurring stressors for experienced osteopaths reflect the additional responsibilities associated with being the owner of a small business. They included 'time pressures to see patients', 'too much work to do in too limited time', 'administration of practice and staff', 'phone interruptions during consultations' and 'paperwork in osteopathic practice'. This result may be explained by the broader range of demands placed on the experienced osteopath, who owns the business, compared to the recent graduate who is more likely to practice as a subcontractor within someone else's practice.

Ninety three percent of experienced osteopaths were found to be satisfied to some degree with their profession, which is identical to the 93% of recent graduates who reported satisfaction within their profession. This was encouraging as overall the results showed the vast majority of all osteopaths practicing in Australia, regardless of experience or length of time in practice, are satisfied to some degree within the profession.



The variables reported as being attractive to experienced osteopaths are also similar for recent graduates. 'Relationships and interactions with patients' was recognised by 91% of experienced practitioners as an attractive variable working as an osteopath, 80% reported both 'challenges/variation of work in clinical practice' and 'owning your own practice/ having the potential to own your own practice' as an attractive variable and 'hours' and 'salary' accounted for 65% and 62% respectively as attractive variables.

The extent of empirical research in this area is very small and has tended to focus on American primary health care professionals. Therefore literature for comparative review on this topic was limited to those results provided by health care professionals, working in private practice in countries with similar publicly funded health care systems, for example United Kingdom, Canada and New Zealand.

Possible limitations of this study include the relatively small number of participants whose results may not necessarily reflect those of the profession at large. Also, only six employees responded to the survey which does not accurately represent the sub-population within the profession. Therefore accurate comparisons between the three sub-groups (subcontractors, employees and principal osteopaths) could not be made.

It is recommended that future research focus on exploring each of the areas that are the main sources of stress for both groups in order to gain a more comprehensive understanding of these stressors. In addition it would be

helpful to investigate what strategies have been used by osteopaths to address these factors.

## CONCLUSION

This sample of recently qualified Australian osteopaths demonstrated high levels of job satisfaction with their professional practice and reported sources of occupational stress akin to those reported by other health care professionals.

The specific variable identified as most frequently causing stress within recent graduates in osteopathic practice, across all employment types (subcontractors, employees and principals) was, 'patients who are difficult to manage'. This differs from results reported by experienced osteopaths. Experienced osteopaths most frequently reported time pressures, (to see patients and too much to do in a limited time), as the most frequently occurring stressors in osteopathic practice. This suggests that the longer the osteopath spends in practice, the better equipped he/she is able to deal with patients who are difficult to manage. Hence, experienced practitioners place greater weighting on other sources of occupational stress.

Other variables that most frequently contributed to occupational stress in recent graduates included time pressures to see patients and paperwork in osteopathic practice.

It is encouraging to find that even in the variables causing the highest level of occupational stress among recently qualified graduates, the resultant mean level of stress imposed on the practitioners is never beyond a mild to moderate level. The finding that 'relationships with patients' is the most

attractive factor working as an osteopath may suggest that even though some patients may be 'difficult to manage' and frequently a source of occupational stress, the positives of this interaction between practitioner and patient may outweigh any perceived negatives.

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