

What motivates junior doctors to teach medical students?

Renata Chapman[1], Annette Burgess[2], Susan McKenzie[3], Craig Mellis[4]

Corresponding author: Dr Renata Chapman renata.chapman@sydney.edu.au

Institution: 1. Sydney Medical School - Central University of Sydney, 2. Sydney Medical School - Education Office University of Sydney NSW, 3. Sydney Medical School - Central University of Sydney, 4. Sydney Medical School - Central University of Sydney

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Abstract

There is a growing demand for “near peer” teaching in the delivery of medical curriculum.

Experienced senior physicians are increasingly more occupied with competing demands on their time and expertise. As a result, junior medical staff (1-4 years after graduation) are taking on more teaching responsibilities.

The aim of this study was to gain an understanding of the motivations of junior doctors to teach medical students. While many studies have dealt with motivations of senior clinicians and specialists in their fields, there is no data on the reasons why the junior doctors teach.

161 junior clinicians teaching at our clinical school completed questionnaires (response rate 90%). Most tutors (41%) were interns (first year after graduation) and over half of them (55%) had completed a formal Teachers Training program.

We found the main motivation to teach was to improve their own knowledge (80% strongly agreed) and enjoyment (72% strongly agreed). Other, less powerful motivating factors were: teaching would assist with their academic career (especially the more junior tutors); it was a duty to profession; result of inspiration by their own teachers or mentors; and because they felt responsible for the students.

By developing an understanding of junior clinicians’ motivation to teach, we may be able to promote a continued interest in teaching amongst both current and new junior medical staff.

Keywords: Near peer teaching, Motivation to teach

Introduction

While clinical teaching (“bedside teaching”) is at the very core of medical education, providing this teaching is becoming increasingly difficult. We are in an environment of shorter hospital stays, rising numbers of medical students, progressively more complex required standards of supervision and competing demands on the time of experienced senior clinicians. Consequently, peer teaching (or “near peer” teaching) has become an increasingly important and well accepted method of delivering the medical curriculum. Since our hospital-based tutors do not receive any payment from the University for teaching, and there are no formal contractual requirements with the hospital to teach – there are no obvious incentives for these clinicians to teach. There have been studies on the motivation of senior physicians [1,2], general practitioners[3] and specialists in their fields [4,5], but there is a notable absence of data on the reasons why busy, trainee junior doctors take on teaching commitments.

By developing an understanding of junior clinicians’ motivation to teach, we may be able to promote a continued interest in teaching and increase the recruitment and retention of our clinical teachers.

Methods

In total, 180 junior medical officers, who currently teach students at our clinical school, were asked to complete a questionnaire to determine their motivations to teach students.

They were asked to answer demographic questions including age, gender, years since graduation, speciality chosen, questions regarding their previous experience with teaching and attendance at the previous formal teaching course.

There were also eleven closed items questions (Figure 1), specifically addressing their motivation to teach.

In assessing the responses we used a 5 point Likert scale, with values ranging from 1-5:

| |
|---|
| 1. I really enjoy teaching students |
| 2. I teach because I believe it is my duty to the profession |
| 3. I feel that teaching students allows me to improve my own knowledge |
| 4. I teach because it will help me in my academic career |
| 5. I teach because I have been inspired to teach by my mentors |
| 6. I teach because it is a requirement of my employment contract |
| 7. I teach because I feel responsible for the students learning outcomes |
| 8. The teaching I had as a medical student has inspired me to want to teach |
| 9. I teach because I was asked to help by my friend(s) and could not refuse |
| 10. I teach because it allows me to be seen and my opinions to be heard |
| 11. I teach to engage with younger people |

Figure 1. Closed items addressing the motivation from the questionnaire

Statistical methods:

We calculated means and standard deviations in Microsoft Excel, both for the overall data set and for various partitions of the data, and presented these in graphical form. The error bars on each graph show the 95% confidence intervals, calculated as $\pm 1.96\sigma/\sqrt{n}$ (where σ is the standard deviation and n the number of samples). We also calculated correlation co-efficients (Pearson's r values) between the scores and the age of the participants using the Excel CORREL function.

The study was approved by the Human Research Ethics Committee of The University of Sydney.

Results

Demographics

In total, 161 tutors completed the questionnaire (response rate 90%). Of the respondents, 52% were female ($n=84$) and the median age of tutors was 28 years.

Work experience covered a range of specialties including Obstetrics and Gynaecology (17%), Surgery (17%) an Intensive care (6%), with the most common being Medicine (60%).

Most tutors were interns (first year post graduation) (41%), followed by residents (second and third year after graduation) (35%), and registrars (fourth year after graduation) (23%).

Just over half (55%) had previous teaching experience and had completed the Teacher Training course (12 hours in total, dealing with formal teaching methods, assessment and mentoring). The majority of responders completed the teaching course as post-graduates (76%), the others as students (24%).

As illustrated in Figure 2, for the majority of JMOs, the main motivation to teach was to improve their own knowledge (80% strongly agreed) and enjoyment (75% strongly agreed).

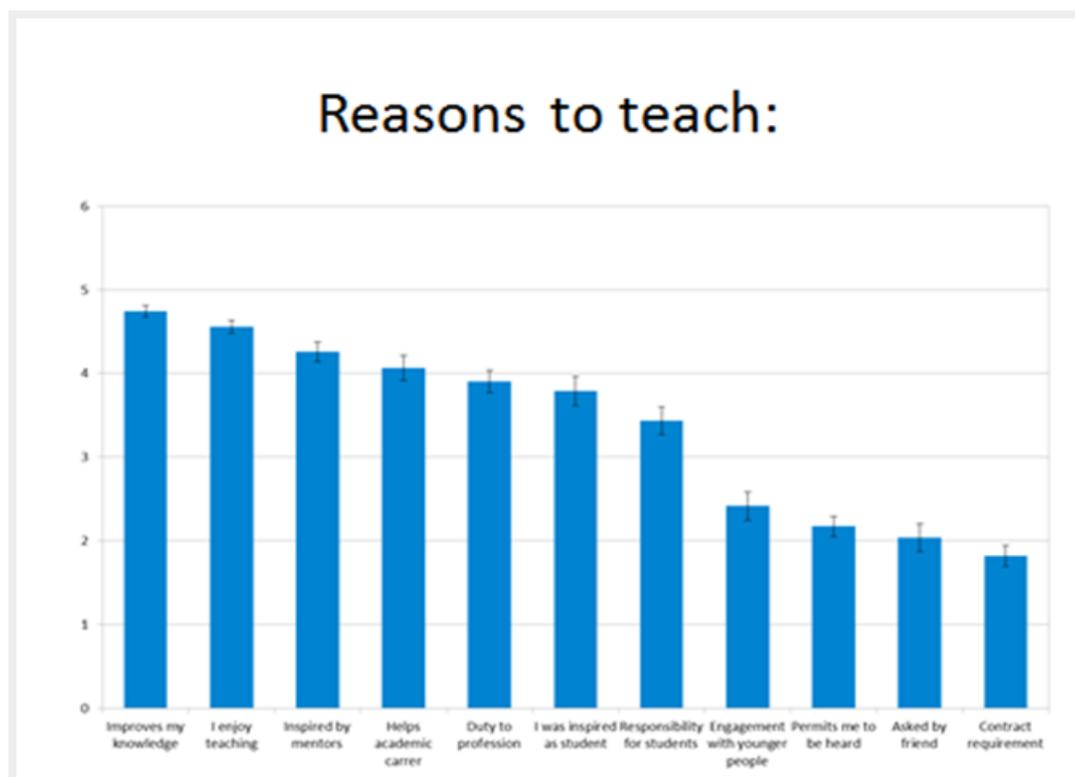


Figure 2. Reasons to teach

Other, less powerful motivating reasons for teaching by our young doctors were: teaching would assist with their academic career; it was a duty to profession; result of inspiration by their own teachers or mentors; and because they felt responsible for the students.

The factors with the least influence on these young doctors' decision to teach were: contract requirement; giving them opportunity "to be heard"; or doing it at a friend's request.

We found no significant differences when analysing the reasons for teaching in different gender or age groups (Figure 3.).

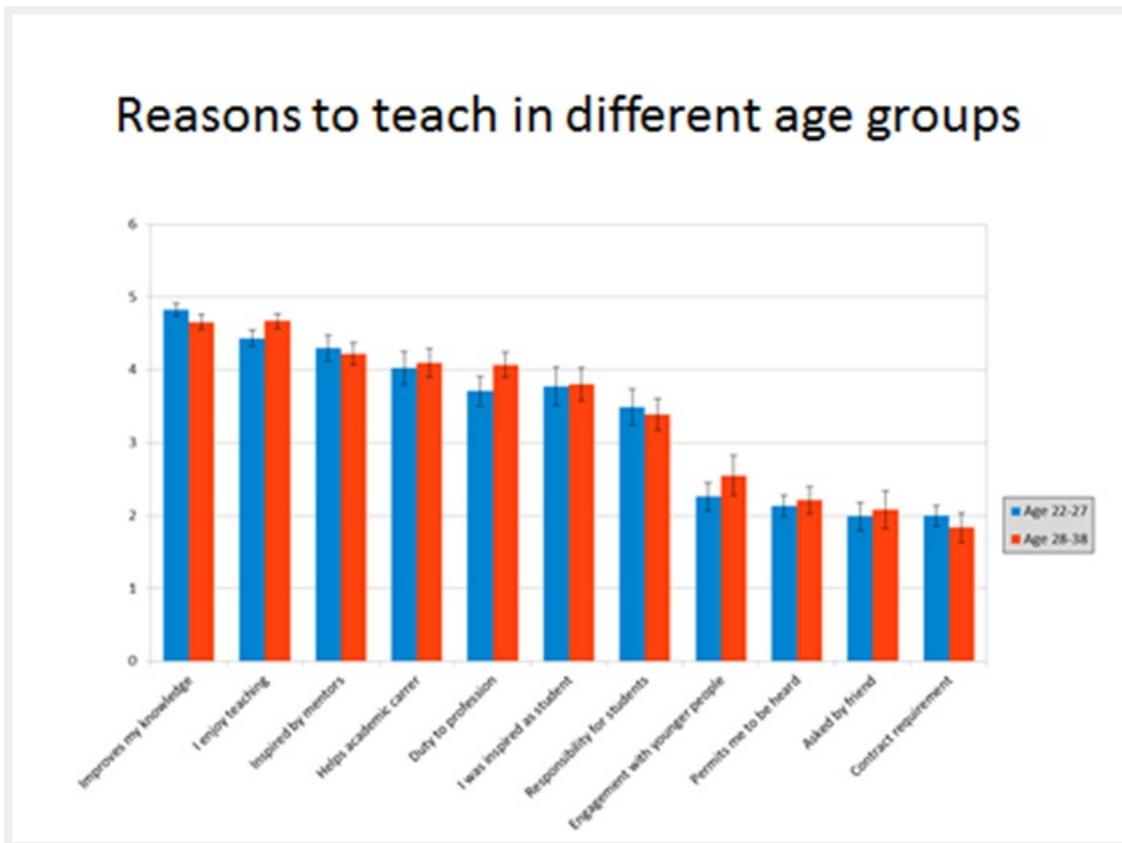


Figure 3. Reasons to teach in younger(22-27years) and older (>28years) age groups

When comparing the reasons for teaching in different stages of training and in different specialities we found that assisting in the academic career was the most important motivation to teach for residents (second and third year after graduation) and for the young surgeons (Figures 4 and 5).

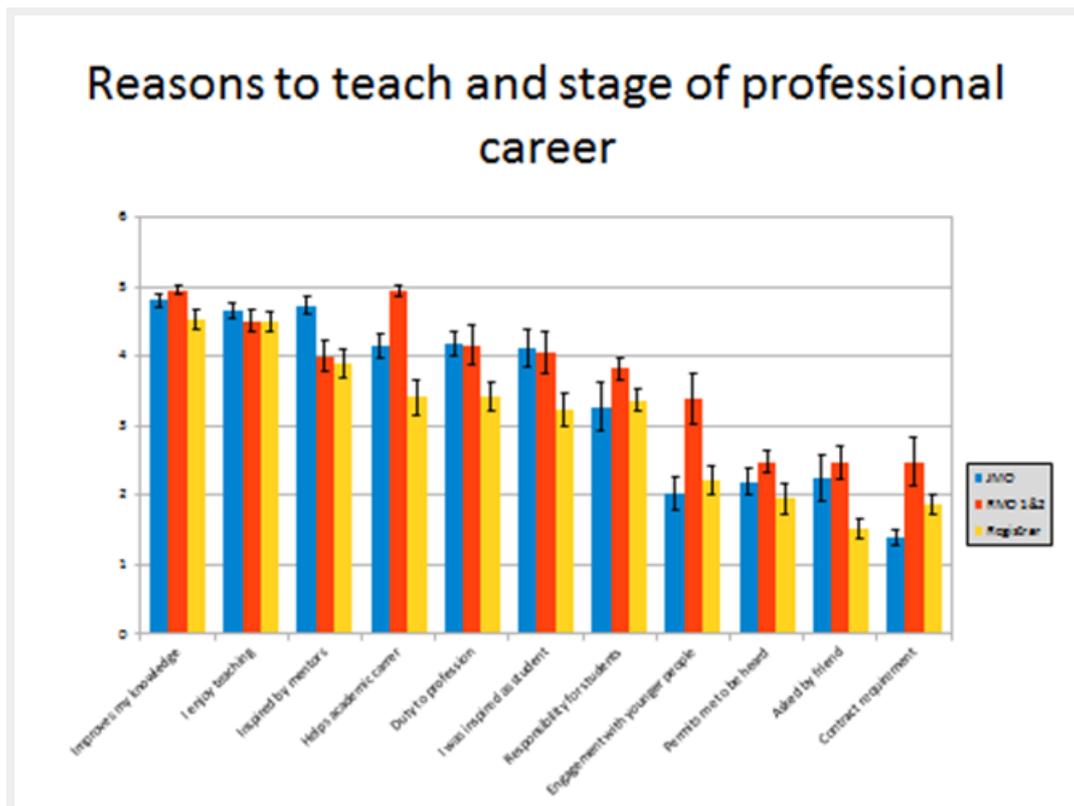


Figure 4. Reasons to teach in different stages of professional career

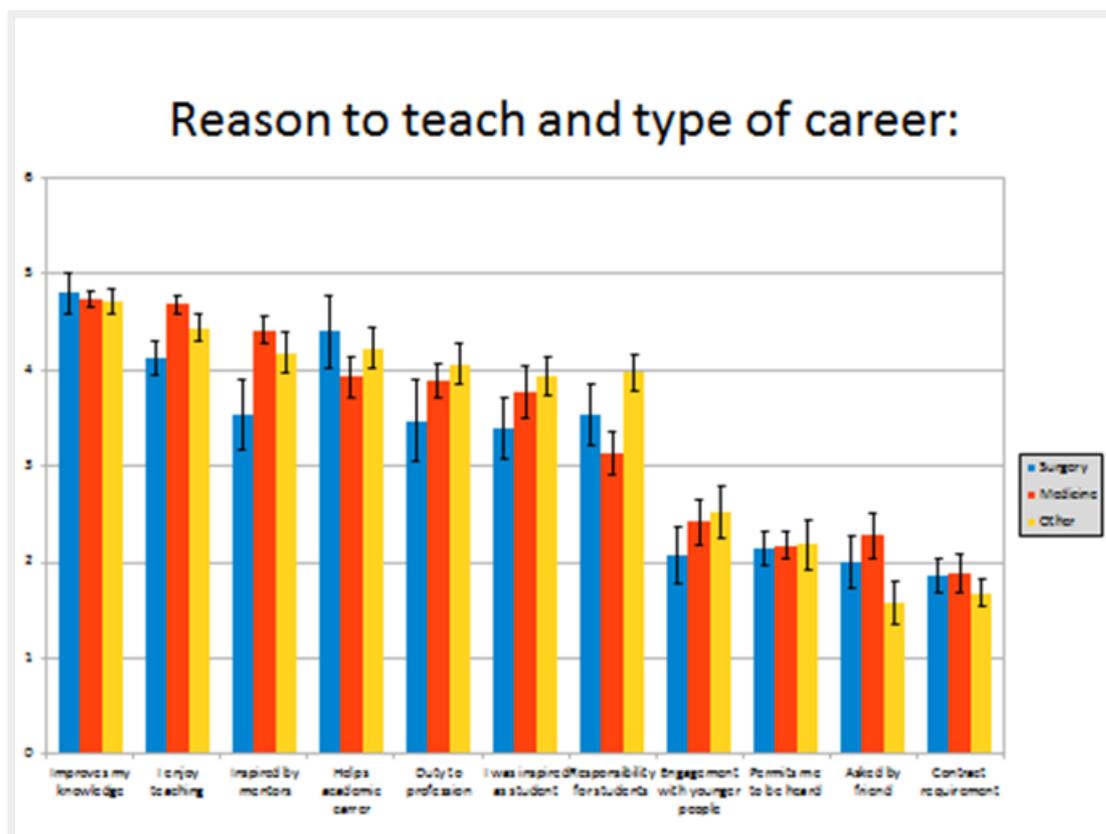


Figure 5. Reasons to teach and type of career

Interestingly, when comparing the reasons for teaching in those who previously participated in a formal teaching course to those who did not have any formal teaching training; the former were more likely to have been “inspired by their mentors during their studies”; motivated to teach to “help with their academic career”; asked by friend and “permits me to be heard” (Figure 6).

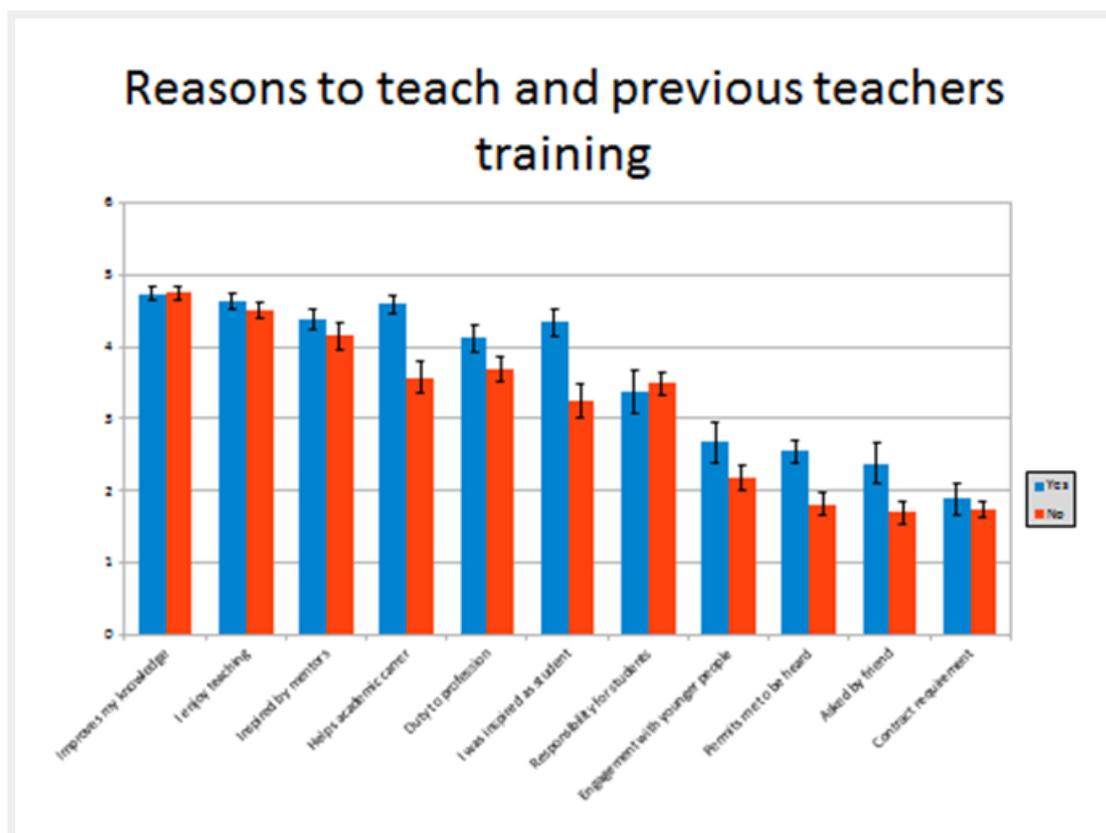


Figure 6. Reasons to teach and previous teachers training

Discussion

This study sought to better understand junior doctors' motivation to teach medical students. The main factors influencing motivation to teach medical students in our group of young clinicians were very similar to those of the senior physicians [1, 2], general practitioners [3], paediatricians [4] and surgeons [5], as described by other authors. These were intrinsic issues, such as altruism, intellectual satisfaction, improving personal skills and truth seeking.

The concept of motivation is complex and has been approached by researchers in a number of ways. Self-determination theory (SDT) [8], which has been used in sport, psychotherapy and more recently medical education, suggests that intrinsic factors can have a greater impact on an individual's motivation than extrinsic factors. SDT proposes that the three key elements associated with intrinsic motivation are autonomy, competence and relatedness. Autonomy refers to one's sense of choice; the ability to make choices increases one's desire for success or accomplishment [9]. Competence refers to the acquisition of proficiency within a specific field [8]. An optimum level of challenge within tasks, as well as reflective practice, promotes motivation towards higher levels of expertise [8]. Relatedness refers to one's sense of community with others who have similar goals [10]. A sense of connectedness may be fostered by working with others from the same professional community [11].

Our findings support the Self-Determination Theory (STD) of motivation and confirm the findings of others that, in the absence of external rewards, intellectual satisfaction and improving personal knowledge and skills are the main reasons why clinicians teach students [6,7,12,13,14].

The junior doctors who previously participated in a teaching course were more likely to have been inspired by their mentors during their studies and were more motivated by their academic career. Interestingly, in our study we did not find significant differences in their level of enjoyment of the teaching, as opposed to many other studies, which suggest that clinicians are much more likely to be involved in teaching when they have formal qualifications as teachers [2,6,13,14].

We found a trend for the youngest participants of the study to enjoy teaching less than the older age groups. Likely explanations for this finding are: the busy time-tables of interns on the wards, more preoccupation with clinical work, and as suggested by other authors, lack of confidence in teaching because of their own knowledge gaps [6,12,13,14].

Interestingly, when comparing the reasons for teaching in different stages of training and in different specialities we found that assisting in

one's academic career was the most important motivation to teach for resident medical officers 2 and 3 years after graduation as well as for the young surgeons. This confirms our informal observation that many of our young tutors increase their participation in teaching when they are about to apply for a university clinical academic title or for vocational training programs, including physician training, but especially surgical training.

While acknowledging the limitations of this study, with limited number of responses and rather general nature of the questions asked, we believe that exploration of junior doctors' motivation to teach is essential to achieving sustainable teaching personnel, high standards of education for our medical students and personal satisfaction for our clinicians.

Take Home Messages

The main motivations for the young doctors to teach students were: their desire to improve their own knowledge and the enjoyment derived from teaching. Prior participation in a teaching course increased tutors teaching skills and confidence in teaching, thus increasing their satisfaction.

The results of our study support Self-determination theory (SDT), which suggests that intrinsic factors like autonomy, competence and relatedness can have a greater impact on an individual's motivation than extrinsic factors. Enjoying the teaching, increasing their own knowledge, developing professional career and sense of connectedness with the medical community were powerful factors motivating our young clinicians to teach medical students, despite no financial incentives or contract requirements.

Gaining a better understanding of young clinicians' motivations to teach may assist in improving the recruitment and retention of our clinical teachers for the benefit of all involved in medical education.

Notes On Contributors

A/Professor Renata Chapman is a Medical Educator at the Sydney Medical School - Central, University of Sydney

Dr Annette Burgess is a Senior Lecturer at the Education Office, Sydney Medical School, University of Sydney

Ms Susan McKenzie is a Lecturer at the Sydney Medical School -Central, University of Sydney

Professor Craig Mellis is a Professor of Medicine, Sydney Medical School - Central, University of Sydney

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Appendices

“Near peer” procedural skills teaching



Declaration of Interest

The author has declared that there are no conflicts of interest.