Medical Specialty Prestige and Lifestyle Preferences for Medical Students

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Abstract

In the context of doctor shortages and mal-distributions in many Western countries, prestige and lifestyle friendliness have emerged as significant factors for medical students when they choose a medical specialty. In this study, we surveyed two samples of Australian medical students and had them rank 19 medical specialties for prestige ($N = 530$) and lifestyle friendliness ($N = 644$). The prestige rankings were generally consistent with previous ratings by physicians, lay people and advanced medical students, with surgery, internal, and intensive care medicine ranking the highest, and public health, occupational, and non-specialist hospital medicine ranking lowest. This suggests that medical students have incorporated prevailing prestige perceptions of practicing doctors and the community. Lifestyle rankings were markedly different from prestige rankings, where dermatology, general practice, and public health medicine were ranked the most lifestyle friendly, and surgery, obstetrics/gynaecology and intensive care were ranked least friendly. Student lifestyle rankings differed from physician and author-generated rankings, indicating that student preferences should be considered rather than relying on ratings created by others. Few differences were found for gender or year of study, signifying perceptions of prestige and lifestyle friendliness were consistent across the students sampled. Having access to and understanding these rankings will assist career counsellors to aid student and junior doctor decision-making and aid workforce planners to address gaps in medical specialty health services.

Keywords: Australia; medical specialty rankings; prestige; lifestyle friendly

There are doctor shortages and mal-distributions in many Western countries, including the USA (Cooper, Getzen, McKee, & Laud, 2002), the UK (Young & Leese, 1999) and Australia (Productivity Commission, 2005). The USA has shortages of generalist and specialist physicians, including GPs, surgeons, and primary care paediatricians (Cooper et al., 2002), while Australia has a chronic and growing shortage of GPs (Joyce, McNeil, & Stoelwinder, 2006) and emerging shortages in orthopaedic and ENT surgery, obstetrics, pathology, radiology and geriatric medicine (Australian Competition and Consumer Commission and Australian Health Workforce Officials' Committee, 2005). The factors that drive doctors' career choices remain unclear, with both internal influences, such as personality (Borges & Savickas, 2002), work and personal values (e.g., wanting to contribute to community well-being; Midttun, 2007) and drives (e.g., to fulfil status, financial and lifestyle needs; Hancock, Steinbach, Nesbitt, Adler, & Auerswald, 2009), and external forces, such as level of debt, and availability and length of training (West, Drefahl, Popkave, & Kolars, 2009), implicated in career decision-making.

Occupational prestige is the personal value most considered to affect the career choice of medical students (Norredam & Album, 2007) and non-medical labour market entrants generally (Zhou, 2005). Aasland, Revik, and Wiers-Jenssen (2008), for example, indicated that "specialist status is a crucial component" to medical specialty choice (p. 1833), and Azizzadeh et al. (2003) found prestige to be the most important predictor for students choosing surgery. Additionally, personal values encompassing lifestyle preferences have become more important for all employees generally (Dorsey, Jarjoura, & Rutecki, 2005), which is reflected in a growing preference for doctors to work more manageable hours (Evans, Goldacre, & Lambert, 2000). Thus, understanding the perceived hierarchy of medical specialties according to prestige and lifestyle has important implications for medical career counsellors and workforce planners. Few studies have investigated medical

specialty prestige rankings (Norredam & Album), and no studies were identified that reported student-generated rankings based on lifestyle. The current study used two samples of Australian medical students to derive specialty rankings based on these two dimensions.

Prestige rankings refer to the hierarchical rating of occupational specialties in terms of their perceived respect, admiration or regard (Norredam & Album, 2007). While doctors tend to be rated highly when occupations generally are considered (Shenkar & Yuchtman-Yarr, 1997), there are also perceived prestige differences amongst medical specialties, with, for example, surgery typically rating highly and administrative medicine rating lowly (Norredam & Album). Prestigious occupations often bring material rewards and influence for occupants; thus, prestige is an important consideration when deciding on a career path (Phillips et al., 2009). Several studies have created author-generated rankings (Aasland et al., 2008; Album, 1991, cited in Norredam & Album), and we identified five studies in the past two decades that had study participants rank specialties according to prestige. These rankings were by non-medical college students (Rosoff & Leone, 1991), physicians (Album, 1991; Album & Westin, 2008; Hinze, 1999; Wiers-Jenssen & Aasland, 1999), ancillary health professionals (Wiers-Jenssen & Aasland), and final year medical students (Album & Westin). No study asked early medical students, who are beginning to manage and plan for their medical career, to provide prestige rankings. This is a significant gap in the literature, as medical students will consider occupational prestige when making decisions about which specialty pathway to follow. The current study aimed to fill this gap by having medical students rank a list of medical specialties in terms of prestige.

Medical lifestyle rankings refer to the rating of specialties in terms of their potential for work/life balance, which includes the availability of practice-free time that can be spent with family and friends, and on leisure pursuits (Dorsey et al., 2003). Many physicians continue to work long and irregular hours (Bureau of Labour Statistics, 2009), and medical

students are increasingly considering how friendly their chosen specialty will be to their lifestyle when making decisions regarding their future (Pugno, McPherson, Schmittling, & Kahn, 2001). Newton, Grayson, and Thompson (2005), for example, found that for USA medical students, lifestyle considerations (predictable work hours, time with family, leisure) were as important as potential income when considering a career specialty. Newton et al. distinguished among high, medium and low lifestyle friendly medical specialties, with, for example, radiology and dermatology included in their lifestyle friendly cluster, psychiatry and GP as intermediate, and surgery and obstetrics/gynaecology rated as unfriendly. These categories, however, were created indirectly by clustering specialties based on the extent to which lifestyle was a consideration in the choice of the specialty, and the categories did not rank specialties relative to others. We found no study that generated a medical specialty ranking based on lifestyle friendliness. Thus, the present study sought to remedy this gap in the medical career decision-making literature by having medical students rank specialties in terms of lifestyle friendliness.

Method

Participants

Participants were students in their first, middle, and final years of their medical degree. We had complete responses from 530 students who ranked medical specialties for prestige. These were 348 women (65.7%) and 182 men, whose mean age was 23.6 years ($SD = 4.9$). There were 97 first year (18.3%), 131 final year (24.5%), and 302 students from the middle years of their degree (57%). We had complete responses from 644 students who ranked medical specialties for lifestyle friendliness: 418 women (64.9%) and 226 men; mean age = 23.9 years ($SD = 5.3$); 92 first years (14.3%), 129 final years (20%), and 423 from the middle years (65.7%). See Procedure for response rate. Students were drawn from 11 Australian medical schools located across seven Australian states/territories, and

represented both undergraduate and graduate entry programs. Most students (88.2%) were Australian citizens, with the remainder being fee-paying international students.

Materials

Ranking Medical Specialties. For prestige, we asked the following question: “We are interested in the level of prestige that YOU associate with different medical specialties. Please rank the following list from Most Prestigious (1) to Least Prestigious (19). One way of doing this is to rank your top six most prestigious specialties (1-6), then rank your bottom six (14-19), and last rank your middle seven (7-13) specialties”. We provided an alphabetical list of specialties drawn from the Australian national medical schools data base, which is the Australian government’s primary tool for collecting data on medical students (Medical Deans Australia and New Zealand, 2009). For lifestyle friendliness, we used the same question and same list of specialties, and asked students to rank the specialties “from Most Lifestyle Friendly (1) to Least Lifestyle Friendly (19)”. Lower scores indicate more prestige and lifestyle friendliness, respectively.

Procedure

The two questions were administered as part of a longer web-based survey designed to assess career intentions of Australian medical students. Both questions were indicated as optional on the survey, which accounts for not all students completing both. Students were recruited via email and flyers that were distributed by the medical schools. This meant we were unable to calculate a response rate, as we were unsure of the exact number of students who were made aware of the study. Those who completed the survey were entered into a lotto style draw for the chance of winning a store voucher. The study was conducted in 2009 under the auspices of the authors’ ethics committee.

Results

Results are reported as mean scores of rankings for prestige (Table 1) and lifestyle friendliness (Table 2), with both rank ordered from most to least prestigious/lifestyle friendly. Surgery was considered the most prestigious specialty, followed by internal, intensive care, anaesthesiology and emergency medicine. The least prestigious were public health, occupational, non-specialist hospital practice, rehabilitation, and medical administration. There were trivial differences between males and females (males considered anaesthesiology and obstetrics/gynaecology more prestigious than females), and across years (first years considered ophthalmology more prestigious than middle and final years, and middle years considered it more prestigious than final years; first and middle years considered dermatology more prestigious than final years). As might be expected, there was less variance (based on examination of standard deviations), and thus, more agreement, at the two ends of the rankings, compared with the middle. The mean *SD* for the four top prestigious specialties was 3.2; for the bottom four this was 3.4; and for the middle four (ophthalmology, paediatrics/child health, dermatology, radiology) the mean was 4.0.

Dermatology was rated the most lifestyle friendly specialty, followed by GP, public health, occupational health and pathology; the least friendly were surgery, obstetrics/gynaecology, intensive care and emergency medicine. Females perceived surgery to be less friendly than males, and there were few differences across years (first years considered medical administration less friendly than middle and final years, and middle years considered it less friendly than final years; first and middle years considered obstetrics/gynaecology more friendly than final years, and middle years considered it more friendly than final years). Based on mean *SD* for the top, middle and bottom rankings, there was more agreement at the top and bottom of the hierarchy, compared to the middle (mean *SD* = 3.8, 4.8 and 3.8, respectively).

Tables 1 and 2 here

Discussion

Specialty rankings provided by these multi-year medical students were generally consistent with rankings provided by practicing physicians (Album, 1991; Album & Westin, 2008; Hinze, 1999), lay people (Rosoff & Leone, 1991) and final year students (Album & Westin), with specialties such as surgery and anaesthesiology ranking highly and dermatology and rehabilitation medicine ranking towards the bottom. However, there were notable differences, with, for example, the current students ranking gynaecology and ophthalmology in the top third, compared to practicing physicians in Album and Westin's study, who rated these in the middle third. Zhou's (2005, p. 92) comment relating to occupational rankings generally, that "occupational prestige [is] stable and consistent over time and societies" can also be considered to apply within medical specialties. This suggests that medical students, even those in the first year of their medical degree, have incorporated the prestige perceptions prevalent in practicing doctors and the lay population. The variation amongst the studies is likely to be accounted for by different medical practices across countries and over time, and the different methodologies and listings used to assess ratings.

Explanations for variation in prestige rankings have been based on active/passive dimensions (active specialties are considered more prestigious as they use more sophisticated technology), patient characteristics (e.g., specialists who work on the upper body and with younger patients have more prestigious occupations; Norredam & Album, 2008), and gender (women dominated specialties have less prestige; Hinze, 1999). However, there is more support in the general occupational prestige literature for explanations that associate greater prestige with more income, longer training periods, more restricted entry and greater influence (Zhou, 2005). Surgeons in Australia, for example, who were rated high on prestige, are paid more than dermatologists, have longer, more

demanding training periods, and have fewer training places on offer (meaning that entry to the specialty is more restricted).

The picture was quite different for the lifestyle friendliness rankings. Specialties with more opportunities for pre-scheduled appointments and fewer on-call arrangements (e.g., dermatology, GP, public health medicine) were ranked highly, whereas specialties that were less controllable in terms of being able to manage the flow of work (e.g., surgery, obstetrics/gynaecology, intensive care medicine) were ranked lowly. Schwartz et al. (1990) provided a list of author-rated medical specialties based on how lifestyle friendly they were (using two categories of controllable vs. uncontrollable lifestyle), and tested these against a list of specialty characteristics (e.g., length of residency, academic focus, types of patients). They found that lifestyle rated specialties were lower on perceived work hours and night call-outs, and higher on opportunity for avocational activities than uncontrollable specialties. Other studies have used these ratings, for example, to assess the effect of gender and controllable lifestyle on choice of medical specialty (Dorsey et al., 2005). While there was general consistency between the Schwartz et al. ratings and the ratings from the present study, there were notable exceptions. Schwartz et al., for example, rated GP (the US equivalent of family practice) as uncontrollable, whereas our students saw this as the second most lifestyle friendly specialty. Schwartz et al. also rated emergency medicine as controllable, whereas our students ranked this fourth from bottom. Developing an “objective” measure of lifestyle friendliness for medical careers based on a standard set of criteria (e.g., similar to those used by Schwartz et al.) would be helpful, as it would allow for comparisons between student perceptions and real-world experiences, which, based on the current study, do vary. In the meantime, caution is needed when using physician or author-generated ratings or listings of specialties based on lifestyle friendliness. Future studies need to consider student perceptions of this characteristic, and policy makers need

to be aware that students' perceptions differ from rankings assessed by experts. This latter point is especially important as it is the students' perceptions that will influence their career decision-making.

The current study demonstrated that lifestyle friendly rankings can be identified for medical specialties in the same way as for prestige rankings. Consistent with the prestige rankings, we found few differences in lifestyle rankings based on gender or year of study, indicating a general consensus by the students. Gender consistency in preferences reflected other research (e.g., Gjerberg, 2002), which suggests males and females have similar preferences, but have different opportunities to enter into and complete particular specialist training. Lifestyle rankings may differ across countries, in the same way that there are (minor) variations across countries for prestige rankings, which may reflect variations in actual medical structures and/or methodologies and lists used for ranking. However, understanding that prestige and lifestyle perceptions differ among students, and that these perceptions can be ordered hierarchically, will assist those providing counselling and advice to medical students deciding on a specialty path. Helping medical students choose a career pathway consistent with their values will generate a better fit between students and their work environments and lead to more satisfying and productive medical careers (Eliason & Schubot, 1995). The current study will also be useful to those recruiting medical students to particular specialties, and will aid medical workforce planners to address gaps in medical specialty services. Finally, the results need to be considered in the context of the limitations of the study. Both ranking questions were optional for our respondents, meaning that the sample may not be representative of Australian medical students generally. Specifically, as we were unable to calculate a response rate, we do not know the proportion of students who responded compared to those who were advised about the study. How well the results will generalise will need to be tested on other samples of medical students.

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Table 1
Prestige Rankings; N = 530

Medical Specialty	Total Sample			Females (N = 348)			Males (N = 182)		
	Rank	M	SD	Rank	M	SD	Rank	M	SD
Surgery	1	2.53	2.64	1	2.60	2.59	1	2.40	2.73
Internal Medicine/Adult Medicine	2	4.21	2.96	2	4.22	2.90	2	4.20	3.07
Intensive Care Medicine	3	5.13	3.00	3	5.10	2.97	3	5.20	3.06
Anaesthesiology ^a	4	5.85	3.38	4	5.49	3.03	6	6.53	3.88
Emergency Medicine	5	5.97	3.34	5	5.78	3.39	5	6.35	3.22
Obstetrics/Gynaecology ^a	6	6.90	3.15	6	6.51	2.93	8	7.64	3.42
Ophthalmology ^a	7	7.12	4.29	8	7.53	4.38	4	6.33	4.02
Paediatrics/Child Health	8	7.33	3.00	7	7.24	2.88	7	7.52	3.22
Dermatology	9	9.74	4.77	9	9.59	4.71	9	10.04	4.88
Radiology	10	10.61	3.80	10	10.70	3.72	10	10.45	3.94
General Practice	11	11.29	3.87	12	11.52	3.87	11	10.85	3.85
Psychiatry	12	11.39	3.97	11	11.20	3.83	12	11.74	4.21
Rural Medicine	13	12.43	4.10	13	12.45	4.08	13	12.40	4.13
Pathology	14	12.65	3.24	14	12.69	3.19	14	12.58	3.35
Medical Administration	15	14.12	5.15	15	14.20	5.10	15	13.95	5.25
Rehabilitation Medicine	16	14.67	3.01	16	14.65	2.94	16	14.71	3.14
Non-specialist Hospital Practice	17	15.24	3.61	17	15.25	3.62	17	15.22	3.61
Occupational Medicine	18	15.96	2.51	18	16.10	2.46	18	15.69	2.58
Public Health Medicine	19	16.16	3.00	19	16.17	3.07	19	16.15	2.87

Note: ^a significant gender differences (As specialty scores were not independent, we used t-tests with Bonferroni corrections, $p = .05 \div 19 = .0026$, rather than multivariate tests).

Table 2
Lifestyle Friendliness Rankings; N = 644

Medical Specialty	Total Sample			Females (N = 418)			Males (N = 226)		
	Rank	M	SD	Rank	M	SD	Rank	M	SD
Dermatology	1	3.84	3.16	1	3.92	3.09	1	3.71	3.30
General Practice	2	4.97	4.49	2	4.64	4.33	2	5.58	4.73
Public Health Medicine	3	6.19	3.97	3	5.88	3.94	3	6.78	3.98
Occupational Medicine	4	7.11	3.71	4	6.82	3.68	7	7.65	3.71
Pathology	5	7.29	3.71	5	7.11	3.59	6	7.61	3.91
Radiology	6	7.43	4.06	6	7.35	3.95	5	7.58	4.26
Ophthalmology	7	7.67	4.12	8	7.81	4.02	4	7.42	4.31
Rehabilitation Medicine	8	7.77	3.78	7	7.61	3.66	8	8.06	3.97
Psychiatry	9	8.88	4.06	9	8.93	4.01	9	8.79	4.15
Anaesthesiology	10	9.06	5.14	10	9.17	4.93	10	8.85	5.50
Medical Administration	11	9.33	5.44	11	9.42	5.44	11	9.17	5.46
Non-specialist Hospital Practice	12	10.82	4.49	12	10.55	4.53	12	11.33	4.37
Paediatrics/Child Health	13	11.78	3.41	13	11.70	3.39	13	11.92	3.46
Internal Medicine/Adult Medicine	14	12.84	3.58	14	12.96	3.51	14	12.60	3.71
Rural Medicine	15	13.17	5.28	15	13.39	5.17	15	12.76	5.46
Emergency Medicine	16	14.34	4.62	16	14.41	4.46	17	14.20	4.90
Intensive Care Medicine	17	14.45	3.20	17	14.62	3.02	16	14.12	3.50
Obstetrics/Gynaecology	18	15.28	3.67	18	15.44	3.63	18	14.98	3.73
Surgery ^a	19	16.93	3.51	19	17.27	2.89	19	16.30	4.36

Note: ^a significant gender differences (Bonferroni $p = .0026$).