Medical Students’ Motivations for Studying Medicine: Changes and Relationship with Altruistic Attitudes, Expectations, and Experiences of Learning at University

Maoyi Xu

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<th>Full Form</th>
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<tr>
<td>SCT</td>
<td>Social Cognitive Theory</td>
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<tr>
<td>SDT</td>
<td>Self-Determination Theory</td>
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<tr>
<td>UK</td>
<td>United Kingdom</td>
</tr>
<tr>
<td>GPA</td>
<td>Grade Point Average</td>
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<tr>
<td>SATAC</td>
<td>South Australia Tertiary Admission Centre</td>
</tr>
<tr>
<td>ATAR</td>
<td>Australian Tertiary Admission Rank</td>
</tr>
<tr>
<td>UMAT</td>
<td>Undergraduate Medicine and Health Sciences Admission Test</td>
</tr>
<tr>
<td>UoA</td>
<td>University of Adelaide</td>
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<tr>
<td>CBL</td>
<td>Case-Based Learning</td>
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<tr>
<td>PBL</td>
<td>Problem-Based Learning</td>
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CONFERENCE PRESENTATIONS ARISING OUT OF THIS THESIS


Australian and New Zealand Association for Health Professional Educators Conference. Melbourne, Australia, 24<sup>th</sup> - 27<sup>th</sup> June, 2013. Poster presentation. M. Xu, M. O’Keefe, C. Laurence. ‘First year at medical school: changes in motives, comparison of expectations and experiences’.


ABSTRACT

Background

Altruism is regarded as a core attribute of medical practice and an important motivation for medical students to study medicine. Medical students’ motivations for studying medicine have also been found to have an impact on multiple aspects of their learning at medical school. These are important areas of investigation because medical students are expected to graduate with the professionalism which prepares them for providing care to patients, and a commitment to continuous learning of skills and knowledge. To date there has been little longitudinal research into changes in medical students’ motivations for studying medicine during medical school and factors that affect motivational changes. This study aims to explore medical students’ motivations for studying medicine before and during medical school, and its relationships with altruistic attitudes and expectations/experiences of learning at university.

Method

The study was conducted within the University of Adelaide undergraduate entry medical program. The medical applicants completed the entry baseline questionnaire at the application stage for 2012 and then the entry follow-up questionnaire 12 months later in 2013 (as second year medical students). Meanwhile, the fourth year medical students completed the fourth-year baseline questionnaire in the middle of their fourth year in 2012 and then the fourth-year follow-up questionnaire 12 months later in 2013 (as fifth year medical students). Not everyone who completed the baseline questionnaires completed the follow-up questionnaires, and vice versa. The questionnaires included a socio-demographic section and Likert items concerning the reasons for studying medicine, altruistic attitudes, and expectations/experiences of learning at university.

Results

Baseline responses from medical applicants and fourth year medical students showed that desire for helping others and the enjoyment of interacting with people were the most important reasons for studying medicine, followed by scientific curiosity. Four
factors of reasons for studying medicine were identified through factor analysis: people-orientation, science-orientation, job status/security, and external pressure. Those medical applicants who rated people-orientation as more important tended to have significantly higher levels of altruistic attitudes, and to consider ready access to staff and interaction with other students to be significantly more important. The medical applicants who rated science-orientation as more important were in greater agreement about the likelihood of continuing study after graduation. Similar relationships were found among the fourth year medical students.

Comparison between baseline and follow-up responses showed that the second year medical students considered people-orientation and science-orientation significantly less important than the medical applicants, while job status/security and external pressure were significantly more important as reasons for studying medicine than for the medical applicants. However, job status/security and external pressure made only a small contribution overall to student motivations for studying medicine. Importantly, medical students’ altruistic attitudes declined significantly after the first year. The first year university experiences also differed significantly from expectations at the application stage in various aspects, such as access to staff, interaction with other students, attending lectures, and activities outside university. These discordances were also detected in the paired baseline and follow-up responses. In contrast, few significant changes in reasons for studying medicine and altruistic attitudes, or differences in experiences of learning at university, were found after the fourth year at medical school.

**Discussion**

This study finds that altruism is the most important reason for studying medicine and it persists in later years at medical school, despite its decline during the first year. The first year at medical school is a critical year of adjustment. The changes in altruistic attitudes and mismatches between expectations at the application stage and first year experiences may reflect the adaptation to university. This study suggests that medical schools should aim at maintaining and enhancing first year medical students’ motivations for studying medicine. Medical schools should also consider assisting students in their professional socialisation and their transition from secondary schools to medical schools.
THESIS DECLARATION

I certify that this work contains no material which has been accepted for the award of any other degree or diploma in my name, in any university or other tertiary institution and, to the best of my knowledge and belief, contains no material previously published or written by another person, except where due reference has been made in the text. In addition, I certify that no part of this work will, in the future, be used in a submission in my name, for any other degree or diploma in any university or other tertiary institution without the prior approval of the University of Adelaide and where applicable, any partner institution responsible for the joint-award of this degree.

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