

POLICY BRIEF

No. 02

Wits longitudinal Study to Determine the Operation of the labour Market among its health professional graduates

WiSDOM

Wits Health Professional Cohort Study

Pro-social preferences of the WiSDOM health professional cohort at baseline

HIGHLIGHTS

- Health professional graduates in the WiSDOM cohort expressed high levels of altruism and public service motivation (PSM).
- Overall, 69.9% of graduates indicated an intention of working in the public sector after their internship and community service obligations, but only 11.4% plan to work in rural areas.
- Expressed intentions for working in the public sector and in rural areas differ significantly among the professional groups.
- Students born in rural areas were almost 5 times more likely to be attracted to rural jobs.
- This study contributes to the limited empirical literature investigating the pro-social preferences of health professionals.

INTRODUCTION

In many low- and middle-income countries (LMICs) including South Africa, the inadequate numbers of qualified health professionals in rural and other under-served areas remains a critical problem. Research on the 'push and pull' factors driving this maldistribution has focused mainly on the relative job characteristics and working conditions of different posts. There is limited research on the social values and preferences of health professional graduates underlying their job location decisions, partly because pro-social preferences are difficult to measure.

Altruism or pro-social behaviour relates to a concern for others and not only own self-interest. Health professionals as a group are expected to exhibit strong pro-social preferences - to be motivated by altruism, patient benefit and professional ethics rather than personal benefits.

Pro-social preferences are likely to play a role in the type of jobs chosen by individuals. Public Sector Motivation (PSM) is defined as a "general altruistic motivation to serve the interests of a community of people, a state, a nation or humankind". Individuals with higher PSM have been shown to be: (1) more attracted to public sector employment; (2) perform better within public organisations; and (3) are less dependent on financial incentives to improve performance. A few studies have demonstrated that health professionals with higher pro-social preferences are more likely to choose jobs in the public sector or under-served areas.

This policy brief reports on the pro-social preferences and job location intentions of final year health professional students from the University of the Witwatersrand (Wits) in Johannesburg, South Africa.

METHODS

We use baseline data from the WiSDOM study, a prospective longitudinal cohort study which aims to monitor the job choices of health professional graduates of Wits University. All graduating final-year students from the eight professional categories trained in the Faculty of Health Sciences were included in the study: clinical associates (CA), dentists (DT), doctors (MD), nurses (NS), occupational therapists (OT), oral hygienists (OH), pharmacists (PH) and physiotherapists (PT).

Baseline data collection was completed in the third quarter of 2017. After obtaining informed consent, students completed an electronic self-administered questionnaire which included questions on their demographic characteristics, education, motivation to study their chosen profession, and their future career and job location intentions.

Public service motivation was measured using the validated multi-dimensional PSM index which is made up of 4 sub-scales: attraction to public services, commitment to public values, compassion, and self-sacrifice. A standard economic experiment was used to measure altruism. The altruism experiment involves giving participants a real amount of money and asking them to share the money anonymously between themselves and someone else. A purely self-interested participant would allocate nothing to the other recipient, so the proportion of money given away provides a quantitative measure of altruism. We used three variants in which the students were paired with different recipients: another student (general altruism),

a patient (altruism towards patients), and a poor person (altruism towards the worse-off). The students received their payments in cash after the session. Payments to the other recipients were made as lump sum donations after the completion of data collection to appropriate non-governmental organisations.

Data were analysed in STATA® 14 using descriptive statistics and multiple regression analysis.

RESULTS

STUDY PARTICIPANTS

Overall, 511 students completed the baseline survey, an overall response rate of 89.5%. Socio-demographic characteristics of the WiSDOM cohort are summarised in WiSDOM Policy Brief 1. In this paper, we summarise the differences in altruism, PSM, and job location intentions among the different professional groups.

ALTRUISM

Figure 1 shows the results of the altruism experiment. Overall, the health professional students gave away nearly 40% of their money to another student, which is significantly more altruistic than other student groups studied in the literature. Oral hygiene and occupational therapy students demonstrated the highest levels of general altruism whereas clinical associates and pharmacy students were the least altruistic. Most groups gave away significantly more when the recipient was a patient (Figure 1). Dentists and nurses were most altruistic towards patients while clinical associates and pharmacists were the least generous.

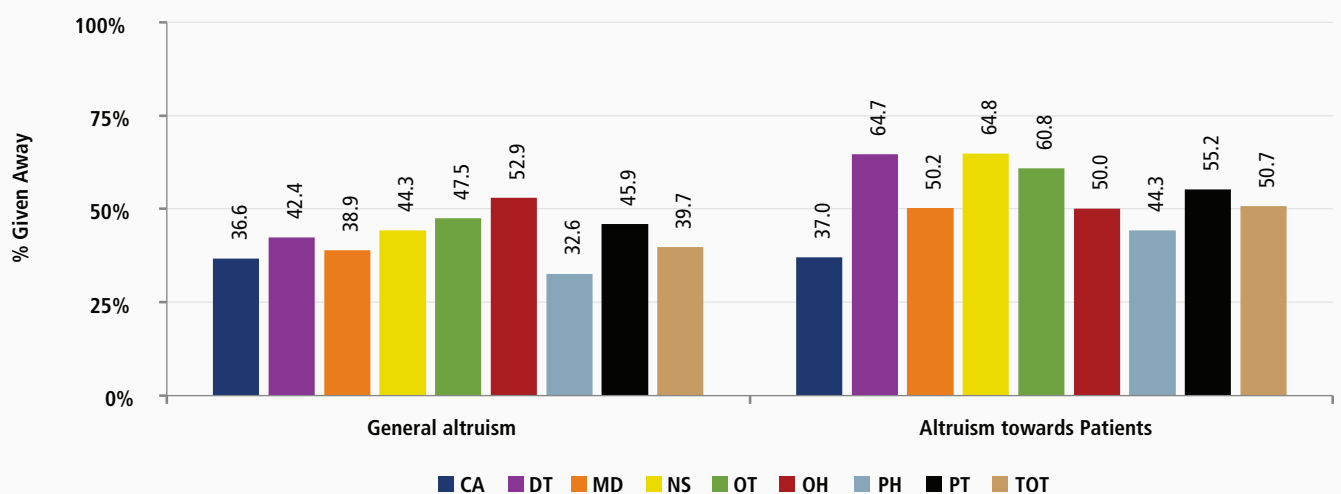


Figure 1: Altruism of WiSDOM cohort

CA: clinical associate; DT: dentist; MD: doctor; NS: nurse; OH: oral hygienist; OT: occupational therapist; PH: pharmacist; PT: physiotherapist

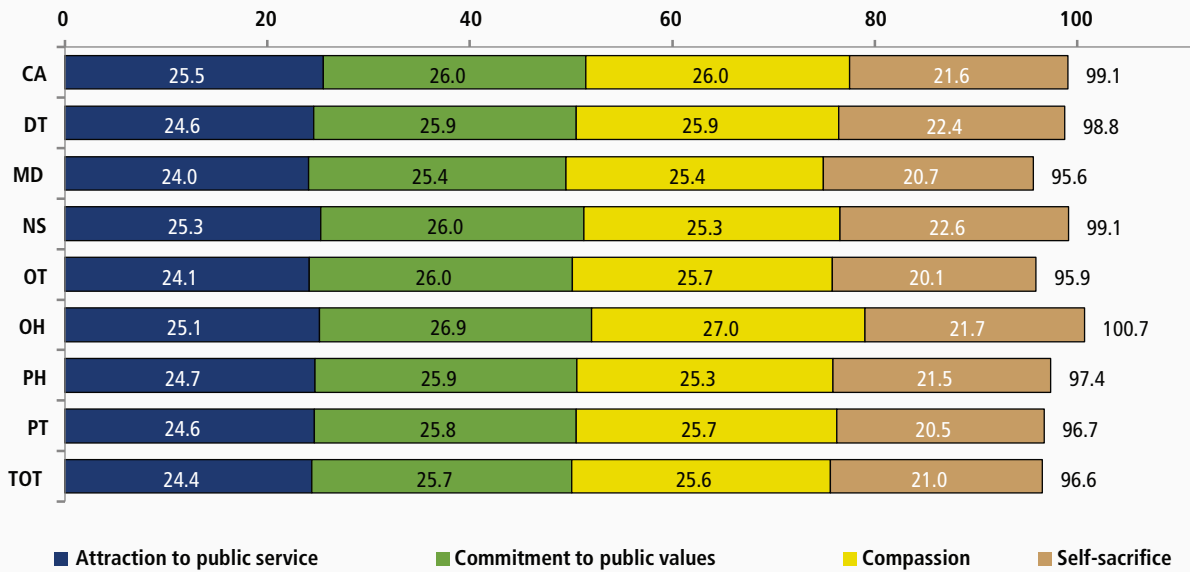


Figure 2: PSM Scores of WiSDOM cohort

PUBLIC SECTOR MOTIVATION (PSM)

The scores on the PSM index are summarised in Figure 2. Medics and occupational therapists had significantly lower scores on the PSM index, while oral hygienists and clinical associates scored the highest.

INTENTIONS TO WORK IN THE PUBLIC SECTOR

Overall, nearly 70% of the health professional students indicated an intention of working in the public sector

after completing their internship and community service obligations (Figure 3). 87.0% of occupational therapists and 81.3% of nurses planned to stay in the public sector but this was true of only 35.7% of dentists and 28.6% of oral hygienists. The high public sector retention rate for medics after community service could be related to the fact that nearly 90% of this group plan to specialise, which is only possible in the public sector.

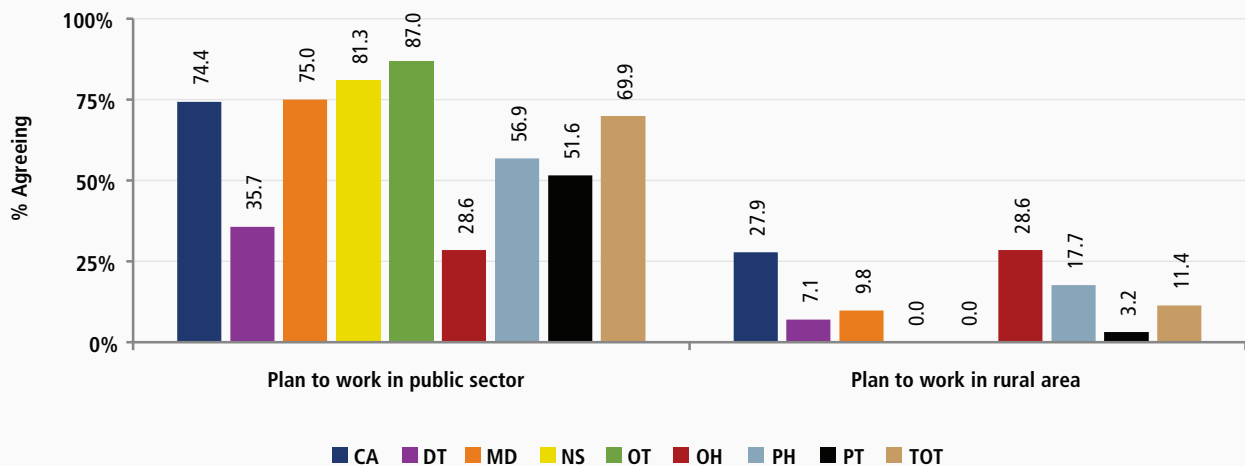


Figure 3: Future job location intentions of WiSDOM cohort



WISDOM

Policy Briefs aim to make our research accessible to participants and stakeholders by summarising the key findings and policy implications.

References available on request.

The DST/NRF SARCHI provided funding for the study

We thank all cohort members for their participation, and the numerous stakeholders at Wits University and the provincial and national Departments of Health for their support that enabled this study.

June 2018

FURTHER INFORMATION:

Prof. Laetitia Rispel on +27 (11) 717 2043
or laetitia.rispel@wits.ac.za
Dr Duane Blaauw on +27 (11) 717 3422
or duane.blaauw@wits.ac.za

<http://www.wits.ac.za/hrhsarchi/>
<https://www.wits.ac.za/wisdom/>

INTENTIONS TO WORK IN RURAL AREAS

Only 11.4% of the students indicated an intention to work in a rural area after community service (Figure 3). None of the nursing and occupational therapy students, and only 3.2% of physiotherapists, signalled such intentions. The highest proportions were for clinical associates and oral hygienists, but were still less than 30% of the group.

PREDICTORS OF RURAL ATTRACTION

We used a regression analysis to evaluate predictors of rural attraction. Among the different professional groups, clinical associates were significantly more likely to want to work in rural areas, although the confidence intervals of most groups were quite large due to small class sizes. Students born in rural areas were almost 5 times more likely to be attracted to rural jobs. Those with higher PSM scores were also significantly more likely to express an intention to work in rural areas, but this was not the case for those with higher altruism towards patients. Students who had indicated that their choice of profession was motivated by its earning potential were less likely to plan to work in rural areas.

CONCLUSION

Health professional graduates in the WISDOM cohort expressed high levels of pro-social preferences as measured in both the altruism experiment and the PSM index. In terms of future job location intentions, public sector attraction varied significantly among the different professional groups, but attraction to work in rural areas was generally low.

These findings have important policy implications for the recruitment, selection and training of health professional students in South Africa. Innovative selection strategies are required to identify and select students more likely to contribute to societal health care needs.

Ongoing follow-up of the WISDOM cohort will confirm if the job intentions stated at baseline relate to actual job choices in the future.