

# POPULATION STUDIES RESEARCH BRIEF

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## Does the Type of Job Matter? Differences in motives to move to the Northern Territory

### KEY FINDINGS

- The different jobs are associated with different employment structures and career expectations. They consequently attract different types of people, and these differences are likely to be reflected in different motivations for labour related migration.
- Fundamental personal career issues – career development, financial incentives, and job availability – and the attraction of the Northern Territory lifestyle were consistently important motives for all jobs.
- The greatest disparities were in variables relating to working with Indigenous people and family and social factor. Nurses and engineers consistently differed in their views of the importance of these factors, with accountants siding with engineers in regards to working with Indigenous people (not important) and nurses with regards to family and social issues (important).
- Recruitment programs need to be different for different jobs. What works for one group may be counterproductive if applied to another group.

### RESEARCH AIM

**To compare the motives for moving to the Northern Territory of accountants, engineers, and nurses.**

This research brief draws on data from surveys conducted in 2006 and 2007. The study is part of a program of demographic research funded in part by the Northern Territory Treasury, Northern Territory Department of Health and Community Services, and the Australian Research Council.

The research has been conducted by **Associate Professor Dean Carson, Professor Stephen Garnett, Kristal Coe and Kerstin Zander.**

## Background

The recruitment and retention of skilled workers in rural and remote parts of developed nations such as Australia, New Zealand, Canada, the United States, and northern Europe has proved to be a difficult and persistent policy problem, even though there is now ample research describing the factors that motivate individuals to move to, stay in, and leave rural and remote areas.

Recommendations to policy makers and employers focus on establishing a 'rural pipeline' (Murray and Wronski, 2006) of workers, flexibility of work arrangements, forms of remuneration and professional recognition, support for families or workers, access to continuing education, and housing and other benefits.

However almost all of the research has related to health professionals. There have been few studies of differences in motivations between workers in different types of jobs. This paper reports on a meta-analysis of research with three different worker populations in Australia's Northern Territory. It questions whether the type of job matters in determining the motivations of workers to come to the Northern Territory. The three populations in this study are accountants, engineers, and nurses.

These jobs were selected because research with each population was carried out in the Northern Territory within a period of less than two years. As well as being convenient, the three samples represent a spectrum of job types that the introduction links to theories of labour migration and regional economic development. Specifically, they represent extremes of Gordon's (1995) primary and secondary jobs continuum and the observation of two 'waves' of jobs in economies driven by extraction of natural resources (Auty, 2001). In Gordon's model, primary jobs usually involve long term investment by the employer in the career development of the employee. Nurses represent the primary end of the job spectrum. Secondary jobs, on the other hand, involve 'just in time' recruitment of specialists who come pre-skilled. Jobs are often based on contracts and employees leave the company rather than update their skills. Engineers represent the secondary end of the spectrum. Accountants are somewhere closer to the middle.

Natural resources economies initially focus on employment of men in jobs directly related to the extraction of the resource (like engineers). Over time, they become more labour efficient, and jobs growth in these sectors declines. The wealth is instead invested in public and community services jobs (like nurses) which are more likely (at least below the senior management level) to be occupied by women.

We would expect, therefore, that different types of jobs are related to different types of labour migration motives, but no direct comparison research has been published that focuses on rural or remote areas.

## Methods

To test these ideas, data were drawn from three surveys conducted by Charles Darwin University's School for Social and Policy Research in 2006 and 2007. The surveys were administered separately, but there were sufficient similarities in design and data handling to allow a meta-analysis. The total number of survey forms returned was 969 from nurses and midwives, 137 from accountants and 100 from engineers. Each survey included questions about the importance of various factors in respondents' decisions to come and work in the Northern Territory. These were derived from interviews about mobility with subsets of the survey population (20 engineers, 20 accountants, 111 nurses and midwives) with interview sample size being determined by the accumulated variety of variables considered as being important in driving mobility. In each survey, respondents were asked to rank the importance of each variable on a scale of 1 (not at all important) to 5 (very important). The three surveys included twenty-one identical variables in relation to reasons to come to the Northern Territory, and thirteen additional variables were included in only one or two of the three surveys. The variables are summarised in Table One.

Table One: Common and Uncommon Variables Across Three Surveys

<b>Reasons for Coming to the Northern Territory</b>	
<b>Common</b>	<b>Uncommon</b>
Prospect of career advancement	Attraction of tax benefits associated with remote location <sup>13</sup>
Financial incentives (better salary package)	Temporary secondment to NT <sup>1</sup>
Positive prior work experience in the NT	Easy access to Asia <sup>1</sup>
Expectation of job availability	Opportunity to work in offices/ clinics with good facilities and equipment <sup>23</sup>
Opportunity to work with Indigenous people	Opportunities for professional development <sup>3</sup>
Active recruitment programs offering opportunities for accountants in the NT	Opportunity for working holiday <sup>3</sup>
Expectation of access to a greater variety of work	Reputation as a good place to work <sup>3</sup>
Opportunity to work alongside experienced colleagues	Workplace benefits (e.g. return airfare to place of origin, subsidised housing) <sup>3</sup>
Satisfaction with providing an important service in an area of need	Allure of the tropics/desert <sup>13</sup>
Desire to leave my previous place of residence/ opportunities for a new start	Multicultural society <sup>13</sup>
Attraction of the natural environment	Better work/life balance <sup>13</sup>

Opportunity for new experiences	Positive NT holiday experience <sup>13</sup>
Cost of living in the NT	My partner's relocation to the NT <sup>12</sup>
Attraction of the NT lifestyle	
Climate	
Perception that this is a good place to raise children	
Existing family and/or social networks	
Educational opportunities or facilities for the family	
Familiarity with NT or similar environment	
Partner's work or career opportunities	
Opportunity to experience Indigenous culture	

<sup>1</sup> Accountants

<sup>2</sup> Engineers

<sup>3</sup> Nurses

The focus of the data analysis was on comparing responses between job groups, and assessing the degree of consistency in response within job groups. Initially, responses to each factor were considered separately. Groups were compared according to the percentage of respondents who rated each factor as important (score of 4 or 5), neutral (score of 3) and unimportant (score of 1 or 2). A simple distribution analysis was conducted within each group to assess whether the factor was generally considered important (distribution substantially skewed towards scores of 4 and 5), neutral (in this case greater than 75% of respondents scoring 3), unimportant (skewed towards scores of 1 or 2), or contested (binomial or multinomial distribution).

Following the analysis of individual variables, we conducted a factor analysis of the total set of variables. This allowed us to identify categories of reasons (i.e. a summary of similar individual variables) for moving to the NT. We compared the groups based on the broad categories as well as the individual variables.

## Results

Table Two lists each of the common motivation variables for coming to the Northern Territory, and the direction of rating for each variable applied by each group. The Table includes the percentage of respondents rating the variable as important (rating of 4 or 5), and the results of chi-square distribution test for those variables where a significant difference between group responses was observed.

Table Two: Importance of Motivations to Come to the Northern Territory

Motivation	Accountants	Engineers	Nurses
Prospect of career advancement	Important (68%)	Important (66%)	Important (49%)
Financial incentives (better salary package)	Important (57%)	Important (46%)	Important (54%)
Positive prior work experience in the NT	Neutral	Neutral	Neutral
Expectation of job availability	Important (64%)	Important (54%)	Important (74%)
<b>Opportunity to work with Indigenous people</b>	<b>Unimportant (20%)</b>	<b>Unimportant (8%)</b>	<b>Important (59%)</b>
<b>Active recruitment programs offering opportunities for me in the NT</b>	<b>Neutral</b>	<b>Unimportant (14%)</b>	<b>Contested (37%)</b>
Expectation of access to a wider range of skills	Important (54%)	Important (53%)	Important (70%)
<b>Opportunity to work alongside experienced colleagues</b>	<b>Contested (34%)</b>	<b>Contested (27%)</b>	<b>Important (45%)</b>
<b>Satisfaction with providing an important service in an area of need</b>	<b>Important (49%)</b>	<b>Contested (34%)</b>	<b>Important (68%)</b>
<b>Desire to leave my previous place of residence/ opportunities for a new start</b>	<b>Important (49%)</b>	<b>Unimportant (23%)</b>	<b>Important (47%)</b>
Attraction of the natural environment	Important (55%)	Important (55%)	Important (57%)
Opportunity for new experiences	Important (77%)	Important (83%)	Important (73%)
<b>Cost of living in the NT</b>	<b>Unimportant (23%)</b>	<b>Neutral</b>	<b>Neutral</b>
Attraction of the NT lifestyle	Important (63%)	Important (67%)	Important (62%)
<b>Climate</b>	<b>Important (52%)</b>	<b>Neutral</b>	<b>Important (51%)</b>
<b>Perception that this is a good place to raise children</b>	<b>Contested (37%)</b>	<b>Important (52%)</b>	<b>Neutral</b>
<b>Existing family and/or social networks</b>	<b>Contested (34%)</b>	<b>Unimportant (15%)</b>	<b>Neutral</b>

<b>Educational opportunities or facilities for the family</b>	<b>Contested (29%)</b>	<b>Unimportant (12%)</b>	<b>Neutral</b>
<b>Familiarity with NT or similar environment</b>	<b>Contested (39%)</b>	<b>Unimportant (25%)</b>	<b>Neutral</b>
<b>Partner’s work or career opportunities</b>	<b>Neutral</b>	<b>Unimportant (14%)</b>	<b>Important (41%)</b>
<b>Opportunity to experience Indigenous culture</b>	<b>Unimportant (21%)</b>	<b>Important (55%)</b>	<b>Important (55%)</b>
Number ‘Important’	10	9	14
Number ‘Contested’	5	2	1
Number ‘Unimportant’	3	7	0
Number ‘Neutral’	3	3	6

There were thirteen variables where a statistically significant difference in response patterns was observed. Overall, nurses considered more variables as important, and considered no variables as unimportant. There was only one variable (active recruitment programs offering opportunities for me in the Northern Territory) which was contested, but there were six variables which more than half the sample rated as neutral. Engineers (9) and accountants (10) had fewer important variables than nurses. Engineers rated seven variables as unimportant, including desire to leave my previous place of residence which was rated as important by both other groups. Engineers contested the importance of two variables (opportunity to work alongside experienced colleagues and satisfaction with providing an important service in an area of need), and were neutral towards three variables. Accountants had three unimportant variables (opportunity to work with Indigenous people, cost of living in the Northern Territory, and opportunity to experience Indigenous culture). The last of these was important to both other groups. There were five variables contested by accountants and three neutral variables.

The factor analysis identified five underlying factors from the twenty-one variables –

- Component One shows a focus on career development, with high scoring variables including financial incentives, prospect of career advancement, and access to a wider range of skills. Less important variables included family and social networks, attraction of the natural environment, and opportunity to experience Indigenous culture.
- Component Two shows a focus on working with Indigenous people, including high scores on opportunity to experience Indigenous culture, opportunity to work with Indigenous people and satisfaction with providing an important service in an area of need. Low scoring variables included climate, family and social networks, cost of living, attraction of the lifestyle, financial incentives and expectation of job availability.
- Component Three shows a focus on lifestyle related factors. The highest weighting variable was attraction of the Northern Territory lifestyle, and

other high weighting variables were attraction of the natural environment, climate, and familiarity with the Northern Territory or similar environment.

- Component Four shows a focus on family and social factors. High weighting variables included partner's work or career opportunities, perception that this is a good place to raise children, existing family and/or social networks and educational opportunities for the family. Low weighting variables included expectation of access to a wider range of skills, expectation of job availability, opportunity to work with Indigenous people and financial incentives.
- Component Five reveals an historical attachment to the Northern Territory, with high positive weighting from the variables positive prior work experience in the Northern Territory, familiarity with the Northern Territory or similar environment and existing family and/or social networks.

Nurses scored higher than both accountants and engineers on component two (working with Indigenous people). Engineers scored lower than both accountants and nurses on component four (family and social factors). Nurses scored higher than engineers on component five (historical relationship with the Northern Territory) but the distribution of scores for accountants was not significantly different to either of the other groups. All groups scored similarly on component one (career development) and component three (lifestyle).

## Discussion

The idea that the type of job might make a difference to the motivations to migrate to the Northern Territory is supported by a number of significant differences between job groups both in terms of responses to individual variables, patterns of responses across the entire variable set, and relatively consistent responses within job groups. On this latter point, there was high agreement on which factors were important among nurses, with only one variable having a multi-modal distribution. Engineers had just two contested variables, while accountants were less internally consistent with five contested variables. The contested variable for nurses was active recruitment programs for the Northern Territory. Mixed responses to this variable may be expected as some nurses would have migrated in direct response to a recruitment initiative, while others (those making moves dependent on work of their spouse, for example) would not have seen the recruitment programs as so important. The responses of the other two job groups to this variable (unimportant for engineers and neutral for accountants, reflects the different institutional arrangements for those jobs whereby recruitment processes tend to focus on specific job opportunities rather than generic work force enhancement.

Contested variables within the engineers group were more revealing. Opportunities to work alongside experienced colleagues and satisfaction with providing an important service in an area of need both appeared as high weighting variables in component one (career development). They represent a different aspect of career development than some other variables in this component – financial incentives, career advancement and so on – but the desire for one type of career development is not inconsistent with the other. The analysis reveals potentially two types of engineer in terms of the way they see their jobs as either outward and inward focused (caring about their impact on others as well as their personal remuneration) or only inward focused. Add to this

the relatively high proportion of engineers (compared with nurses) who rated expectation of access to a wider range of skills as unimportant and the suggestion emerges that there is a divergence of views among engineers themselves about the extent to which a move to the Northern Territory is about broadening the scope of their work.

Three of the five contested variables within the accountants group were to do with family status, likely reflecting a greater diversity of conditions and expectations within that job than within either of the other two jobs. The limited demographic analysis possible in this meta-analysis immediately points to gender as a potential issue here. The nursing and engineering professions are strongly gender biased, while the accountant profession is more gender neutral. Family role expectations attached to both gender and job may help explain the contested variables observed within the accountant's sample.

Respondents generally agreed that the fundamental personal career issues – career development, financial incentives and job availability – were important. These were the sorts of variables featured on component one (career development) in the principal components analysis. Scores for this component were also similarly distributed across the three job groups. The attraction of the Northern Territory lifestyle also seemed to be similarly viewed across groups both with individual variables (attraction of the Northern Territory lifestyle, attraction of the natural environment, opportunity for new experiences) and the relevant component (component three). Within group variance on these variables and components may be explained by factors other than the type of job.

The greatest disparities between job groups were in variables relating to working with Indigenous people and the role of the worker's family and social situation in determining migration. Nurses and engineers consistently differed in their views of the importance of these factors, with accountants siding with engineers in regards to working with Indigenous people (not important) and nurses with regards to family and social issues (important).

## References

- Auty, R.M. (2001), "The political economy of resource-drive growth", *European Economic Review*, Vol. 45, pp. 839-46.
- Gordon, I. (1995), "Migration in a segmented labour market", *Transactions of the Institute of British Geographers*, Vol. 20 No. 2, pp. 139-55.