

Supplementary Appendix

Theoretical background to analysis

DCEs are theoretically based on random utility theory where independent rational actors act to maximise their individual utility [28]. We assume participants will choose the job that maximises their individual benefit or utility which depends on the attributes such that:

$$U(\text{Job A or Job B}) = \beta_1 * \text{Relationship} + \beta_2 * \text{Safety} + \beta_3 * \text{Punishment} + \beta_4 * \text{Promotion} + \beta_5 * \text{Education} + \beta_6 * \text{Incentive} + \varepsilon$$

Where:

Relationship = The relationship with the local community;

Safety = Whether there were active security guards and CCTV;

Punishment = The presence of disciplinary action for poor attendance;

Promotion = Good attendance considered in promotion and transfer decisions;

Education = Good attendance rewarded by bonus points for placement in further education;

Incentive = Incentive payment attached to the post.

For the opt-out choice, all attributes were coded as 0 such that $U(\text{No job taken}) = 0$.

Model fit statistics for latent class models

Table S1 - Number of latent classes	2	3	4	5
Log-likelihood function	-3198.77	-3059.78	-3010.29	-2972.52
Pseudo R ²	0.212	0.246	0.259	0.268
AIC	6427.5	6165.6	6082.6	6023
AICc	6535.8	6331.5	6306.2	6304.4
BIC	6520.8	6308.5	6275.2	6265.4
Size of the smallest group (proportion of sample)	39.9%	20.8%	13.9%	7.5%
Size of the smallest group (estimated respondents)	123	64	43	23

AIC: Akaike information criterion

AICc: Akaike information criterion with a correction for finite sample sizes

BIC: Bayesian information criterion

Estimated characteristics of latent class groups

Table S2 – General characteristics of estimated groups	Group 1	Group 2	Group 3
Average age	34.2	33.2	33.1
Proportion aged over 40	10.77%	7.84%	11.35%
Proportion female	47.69%	50.00%	43.26%
Completed Postgraduate training	15.38%	14.71%	12.77%
Proportion with 2 or more kids	47.69%	48.04%	33.33%
Proportion who rated their financial situation over the past year as good or very good	63.08%	54.90%	51.06%
Proportion who responded professional network was important to promotion	32.31%	32.35%	28.37%
Proportion who responded personal network was important to promotion	20.00%	18.63%	26.95%
Proportion who responded political network was important to promotion	32.31%	32.35%	36.88%
Proportion that experienced any challenge in their previous rural post	98.46%	98.04%	100.00%
Proportion member of a professional association	71.88%	68.32%	79.14%
Proportion who served their full rural placement without interruption	80.00%	67.00%	76.81%

Mixed multinomial results excluding respondents with postgraduate training

Table S3 – Results mixed multinomial logit model for sample excluding those with postgraduate education		McFadden's Pseudo R ² = 0.27	
Variable	Coefficient	Standard error	P-value
Constant for not accepting either job	1.28***	0.16	<0.01
Supportive community	.97***	0.06	<0.01
Presence of security	.67***	0.05	<0.01
Disciplinary action for poor attendance	-.64***	0.07	<0.01
Good attendance considered in promotion and transfer decisions	.67***	0.06	<0.01
Good attendance rewarded with bonus points for placement in higher education or training	.82***	0.07	<0.01
Incentive payment for posting (per 1% of base salary)	.06***	<0.01	<0.01
Estimated standard deviations for random parameters			
Constant for not accepting either job	2.6***	0.17	<0.01
Supportive community	.64***	0.06	<0.01
Presence of security	.56***	0.05	<0.01
Disciplinary action for poor attendance	.34***	0.10	<0.01
Good attendance considered in promotion and transfer decisions	0.3***	0.10	<0.01
Good attendance rewarded with bonus points for placement in higher education or training	.17	0.11	0.11
Incentive payment for posting (per 1% of base salary)	.03***	<0.01	<0.01