

Discrete Choice Experiment (DCE): a methodology for eliciting health workers preferences

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Discrete Choice Experiment

- The Stated Preference methodologies: a large family (conjoint analysis, contingent valuation...)
- An increasingly popular methodology for eliciting HW preferences regarding rural jobs: Indonesia, Malawi, Ethiopia, Niger...

DCE: a cheap and easy survey instrument

- A sample of HW are asked to choose between «job descriptions » (arranged in about 15 pairs).
- Less than one hour per surveyed person
- A small sample (i.e. 100) is enough

Choice Set: A

Job 1		Job 2	
Place of work:	City	Place of work:	District town
Net monthly pay:	K40,000	Net monthly pay:	K30,000
Availability of material resources (equipment, drugs and other supplies):	Usually inadequate	Availability of Material Resources (equipment, drugs and other supplies):	Usually adequate
Typical workload:	Heavy: barely enough time to complete duties, works two hours extra each day	Typical workload:	Medium: enough time to complete duties, works one hour extra each day
Provision of government housing:	Basic housing Provided	Provision of government housing:	Basic housing provided
Opportunity to upgrade qualifications:	After 5 years	Opportunity to upgrade qualifications:	After 3 years

Malawi by Mangham 2007

Why DCE is better than other methodologies for eliciting preferences (1/2) ?

- A normal questionnaire on the same attributes will not get results as strong and as useful as in DCE:
 1. Because we are not good at assessing our preferences. We can rank them (to some extent), along an ordinal scale, but we have difficulties to assign absolute values to our preferences.

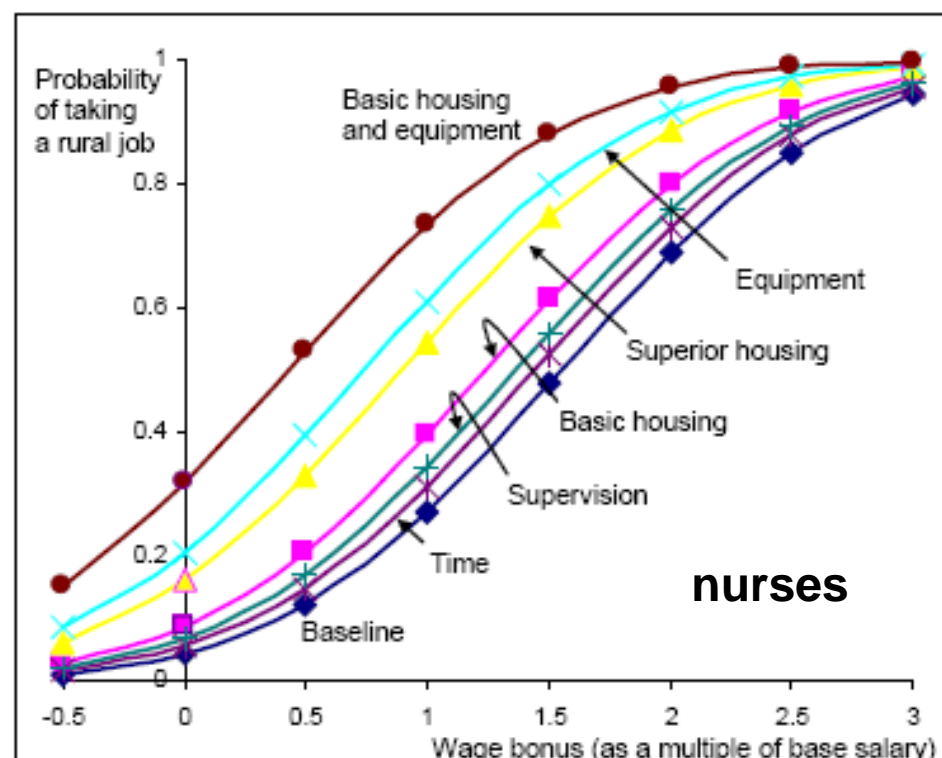
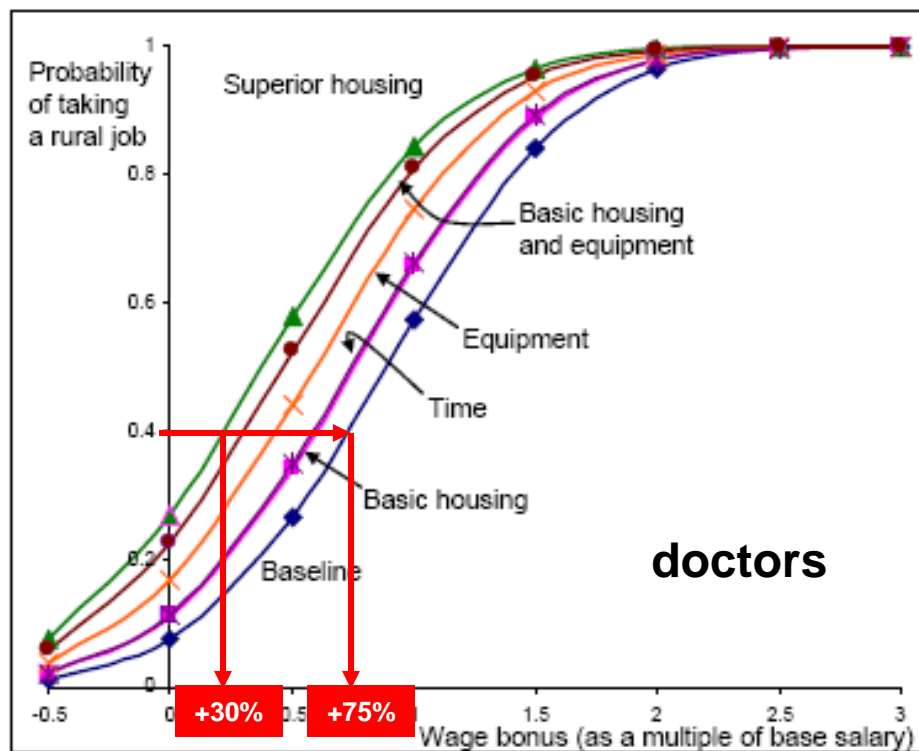
- Example:

Distance from capital city	0 km	100 kms	200 kms
Preference (ordinal) 3 strongest	3	2	1

2. Because when people are asked to rate an attribute, they will reply that « it depends ». We always make trade-offs (usually implicitly), that are difficult to measured in a normal questionnaire.

Why DCE is better than other methodologies for eliciting preferences (2/2) ?

- With a DCE, trade-offs are easily revealed and measured (in wage-equivalent):



Ethiopia by Hanson & Jack 2008

DCE: strengths and limitations

LIMITATIONS:

1. For the sake of statistical quality and practical feasibility, DCE cannot be used with too many attributes (whatever the sample size)
 - Therefore, you must already know what are the most important attributes
2. While data collection is simple, questionnaire design (e.g. fractional factorial design) and data analysis (random effects probit) can be quite tricky

STRENGTHS:

1. Extremely useful for policymakers (for designing policies type « B » and even «C»), as it measures trade-offs in preferences
2. Given that DCE in HW retention has always been used after an intervention (so far), we are not sure whether DCE stated preferences are good predictors of actual HW choices. But evidence in other DCE applications is impressive.