

ECONOMIC AND SOCIAL RESEARCH COUNCIL END OF AWARD REPORT



For awards ending on or after 1 November 2009

This End of Award Report should be completed and submitted using the **grant reference** as the email subject, to **reportsofficer@esrc.ac.uk** on or before the due date.

The final instalment of the grant will not be paid until an End of Award Report is completed in full and accepted by ESRC.

Grant holders whose End of Award Report is overdue or incomplete will not be eligible for further ESRC funding until the Report is accepted. ESRC reserves the right to recover a sum of the expenditure incurred on the grant if the End of Award Report is overdue. (Please see Section 5 of the ESRC Research Funding Guide for details.)

Please refer to the Guidance notes when completing this End of Award Report.

Grant Reference	RES-167-25-0251-A		
Grant Title	The intra-household allocation of resources: cross-cultural tests, methodological innovations and policy implications		
Grant Start Date	13 June 2007	Total Amount Expended:	£512,262.63
Grant End Date	13 Oct. 2010		
Grant holding Institution	University of East Anglia		
Grant Holder	Dr Arjan Verschoor		
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Co-Investigators (as per project application):		Institution (current):	
Dr Vegard Iversen		Indian Statistical Institute, New Delhi	
Prof. Cecile Jackson		University of East Anglia	
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Prof. Alistair Munro		National Graduate Institute for Policy Studies, Tokyo	
Dr Nitya Rao		University of East Anglia	

1. NON-TECHNICAL SUMMARY

Please provide below a project summary written in non-technical language. The summary may be used by ESRC to publicise your work and should explain the aims and findings of the project. *[Max 250 words]*

How do families make decisions? Who decides which children get schooling? How is money from wages shared?

Information about families tends to be fragmentary: available only for small samples or for one spouse or for the household as a whole. With such limited knowledge, it's hard to make reliable policy decisions designed to promote the well-being of specific parts of the household, such as women or children.

One goal of this research was to develop new ways of getting information about how households make decisions. At its heart were simple games played for real money to test cooperation between husband and wives. Cooperating, meaning putting money into the household pool, raised the cash paid to the household by 50%. We also carried out extensive interviews with our participants about their household decision-making.

Working with local researchers, we went to eight, low income and mostly rural communities in three countries, selected to illustrate a variety of marriage practices. We also included two large cities in India and Ethiopia. In Nigeria some of our research was conducted amongst polygamous families.

Husbands and wives rarely cooperated by putting all their money into the household pool. In some locations individuals kept back the majority of their money. Who had control over how the pool was divided made little difference to cooperation, but when couples were required to work to earn the money both men and women typically worked less when the man had the final say on who got the money.

2. PROJECT OVERVIEW

a) Objectives

Please state the aims and objectives of your project as outlined in your proposal to the ESRC. *[Max 200 words]*

Our first aim is to contribute to a fuller understanding of the unequal distribution of welfare that results from intra-household allocation processes. We combined experimental methods with household surveys and ethnographic research to answer the following questions:

1. Are the assumptions and key predictions of the most influential economic models of the household valid?
2. To what extent is the allocation of resources within households goverend by norms?
3. Are such norms conducive to equality and/or efficiency?
4. How are allocation norms related to patterns of conjugality.

We therefore tested theories of intra-household allocation in a number of sites in South Asia, and East and West Africa that provide a variety of intra-household distribution regimes.

Our second aim is to improve the value of economic experiments in a development policy context. We asked the question:

5. Are experimental results (i) relevant to real-world behaviour; (ii) a good basis for policy?

We therefore confronted this issue of external validity head-on using (a) in-depth follow-up interviews to explore the parallels between experiment and ‘real life’ as perceived by the subjects; (b) socio-economic surveys to link experimental behaviour with relevant measurables such as income, assets, family structure and working practices; and (c) a field experiment, i.e. an experiment designed to be as close to a real life decision as is possible.

b) Project Changes

Please describe any changes made to the original aims and objectives, and confirm that these were agreed with the ESRC. Please also detail any changes to the grant holder’s institutional affiliation, project staffing or funding. *[Max 200 words]*

Some changes in research management, project staffing, payment arrangements for fieldwork and details of the research plan were necessary to realise our original objectives, all agreed with the ESRC:

- From February 2008 Bereket Kebede took over from Alistair Munro as PI, and the project became based at the UEA. From February 2009 Arjan Verschoor took over from Kebede as PI.
- The planned PhD studentship was cancelled and a post-doc hired instead to provide research assistance for the fieldwork. To allow for the optimal duration of the post-doc’s (part-time) contract, the project was extended by four months.
- In order to investigate regional contrasts within countries in more depth, although without compromising overall sample size, we decided to cover only three countries, India, Nigeria and Ethiopia, dropping Burkina Faso.
- Prof. Amaresh Dubey of Jawaharlal Nehru University in New Delhi replaced our lead consultant in India, Vegard Iversen, who left the project in the autumn of 2009 because of other commitments.
- The 50% overhead rule for overseas partnership institutions was waived for expenditures not related to the household survey and the experiments in Ethiopia and India, and for all fieldwork expenditures in Nigeria.

c) Methodology

Please describe the methodology that you employed in the project. Please also note any ethical issues that arose during the course of the work, the effects of this and any action taken. *[Max. 500 words]*

We have conducted research at eight sites (two urban, six rural) in three countries (India, Ethiopia, Nigeria), selected because they provide a variety of cultural and socio-economic contexts across which intra-household distribution regimes differ in relevant aspects. In each site, five villages (wards in the urban sites) were selected in the months leading up to the main fieldwork, using local informants and any available secondary data. The major selection criteria were size (we needed to recruit 80 couples from each place), being fairly typical in terms of conjugal relations for the site as a whole, and separation from the other locations to limit the possibility of cross-contamination.

We thus recruited 400 monogamous married couples per site, or 3,200 couples in total. In Northern Nigeria, we recruited in addition 80 polygamous husbands and their wives. All subjects were randomly selected from a comprehensive list of households drawn up during prior visits to each location.

In each site we ran multiple experiments using married couples to test key theories of the household. In total we had some 30 treatments, some of which were used in all sites, others only in some sites. All are variants of a household public good game, in which one or both partners have endowments and can make investments. In the baseline treatment, both partners have equal endowments, and the pool is split equally after we add 50%. Variants are obtained by modifying the baseline treatment in one or more of the following ways:

- Giving either husbands or wives control of the allocation of the pool;
- Revealing endowments publicly;
- Having subjects earn (work for) their endowments;
- Having different endowments for husbands and wives.

Alongside the experiments and using the same participants we implemented socio-economic surveys in order to link behaviour within the experiments to measurable attributes of the society in which they take place. Husbands and wives were interviewed separately. The survey instrument primarily collected information on issues related to intra-household allocations: correlates of bargaining power as suggested by the literature, distribution of tasks, responsibility for key decisions, norms regarding conjugal relations, and a number of key controls (household wealth and demographic variables, among others).

For a sub-sample of 200 married couples in total across each of our eight sites, we also conducted in-depth follow-up interviews, designed to provide a critical perspective on the experimental methods and to elucidate the forms of conjugality, for explanatory purposes, of the participants.

Finally, for the reasons given above, we ran a field experiment in one site, in Northern India, where we recruited some 500 individuals to work on an existing public works programme, some working alongside their spouses and others not, which allowed us to measure the influence of spouses monitoring each others' efforts on their productivity.

No challenging ethical issues arose during the research. Ethical approval from within the HEI was obtained, all experimental sessions ran smoothly, and subjects raised no concerns.

d) Project Findings

Please summarise the findings of the project, referring where appropriate to outputs recorded on *ESRC Society Today*. Any future research plans should also be identified. [Max 500 words]

Fundamentally, the project produced a rich and novel set of data on household decision-making in 3 countries, generated from over 7000 individuals through a set of consistent protocols. Participants showed good understanding of the experiment and generally agreed that their behaviour in the experiments reflected real life accurately.

Because of the complexity of the data set and the quality control checks that it has undergone, most of our established findings refer to the experimental data, which was the first to be obtained.

- Inefficiency. In all sites and all treatments couples rarely made the decisions that would maximize the rewards for the household as a whole. The overwhelming majority of individuals kept back something from the household pool.
- There were distinct site variations: couples in the urban locations were the most cooperative in their behaviour. In contrast, in rural Tamil Nadu, the north of Ethiopia and sites in Nigeria, the average couple put less than half their money into the pool.
- There were large differences in behaviour between north and south India. In line with previous studies the attitudes and conjugal practices revealed by our survey were substantially different in the two regions, with amongst other findings, women having more autonomy in the southern site. Meanwhile, investment in the pool was generally higher in the north.
- Comparing to the baseline, the effect of treatment varied between sites. Generally assigning responsibility to the wife was associated with lower investment by both spouses.
- In some treatments, spouses had to earn the experimental money. Both men and women were less productive when men controlled the rewards from the experiment compared to treatments in which women controlled the outcome.
- Compared to the baseline, women who had to earn their experimental money were more inclined to invest it in the household pool. For men it made little difference.
- While in general the beliefs wives and husbands had about household decision-making were similar, there were some significant differences: wives for instance were less likely to agree that men should have the final say and that women should obey elders.
- The experiments on polygynous couples revealed a similar reluctance to contribute to the family pool. When responsible for dividing up the pool, some husbands consistently gave equal shares to both wives, but the majority of husbands favoured first wives over second wives. No husbands consistently favoured second wives.

The data set will provide a source of continuing research for all the investigators. For instance, Jackson and Rao are using the qualitative data to comment on notions of cooperation and gender relations within a range of conjugal cultures. Verschoor is preparing a paper on the cross-country differences in behaviour. Kebede is using the Ethiopian site data to investigate the association between bargaining power and the rewards from the experiment. Munro is preparing some theoretical work on the hiding of income and spending by individual spouses. Meanwhile, follow-up experiments with families are being done in Japan and Colombia by Munro and Tarazona-Gomez.

e) Contributions to wider ESRC initiatives (eg Research Programmes or Networks)

If your project was part of a wider ESRC initiative, please describe your contributions to the initiative's objectives and activities and note any effect on your project resulting from participation. [Max. 200 words]

N/A

3. EARLY AND ANTICIPATED IMPACTS

a) Summary of Impacts to date

Please summarise any impacts of the project to date, referring where appropriate to associated outputs recorded on *ESRC Society Today*. This should include both scientific impacts (relevant to the academic community) and economic and societal impacts (relevant to broader society). The impact can be relevant to any organisation, community or individual. [Max. 400 words]

A complete list of the impacts summarised here is reported on *ESRC Society Today*.

The nature of our project is such that the bulk of the impacts is still to come. Our project has been time-intensive in preparing for and carrying out extremely challenging data collection in eight different sites in undeveloped parts of Africa and India, and meticulous data entry and cleaning and management, which is now complete.

Nonetheless, the first working papers reporting on analysis of the data have emerged: a Grips Discussion Paper using the Nigeria, a CBESS Working Paper the India, and a CSAE Working Paper the Ethiopia data. These three papers have so far been presented at nine research seminars and conferences, including the 2010 Economics Science Association Meeting in Copenhagen, and the 2011 American Economic Association Conference in Denver.

Additional outputs relate to the supporting methodological and conceptual research conducted as part of the project, as well as directly related empirical research, including analysis of data from the pilot study in Uganda. These include an additional twelve seminar and conference presentations, a session dedicated to experiments on the household we organised at the 2007 Development Studies Association Conference, nine in-house publications, seven peer-reviewed journal publications (in *World Development*, *Review of Income and Wealth*, *Oxford Bulletin of Economics and Statistics*, among others), and the editing of a special issue of the *Journal of Development Studies* on Conjuality, Gender and Wellbeing.

We have also dedicated some of our efforts to achieving policy impact through six targeted briefs of influential policy makers and policy analysts. Examples of these include invited presentations at the Bill and Melinda Gates Foundation to guide their interests in funding policy-relevant intra-household research, and to senior representatives of the Group at the World Bank that coordinates the World Development Report (WDR) 2012 on Gender. The last-mentioned presentation led to an invitation to produce a background paper for this WDR on our main research findings and their relevance for policy.

Last but not least, our partnership institutions in Nigeria, India and Ethiopia now have teams of supervisors and enumerators with considerable expertise in implementing economic experiments, where before such capacity was non-existent, thanks to our having intensively trained them. Expertise of this kind is still extremely rare in the developing world, and its expansion much needed.

b) Anticipated/Potential Future Impacts

Please outline any anticipated or potential impacts (scientific or economic and societal) that you believe your project might have in future. [Max. 200 words]

Our combination of ethnographic research, household surveys and experimental methods to study intra-household allocation issues is unique. Through the analysis of the data collected in this project, we expect to significantly enhance the understanding of such issues.

We have plans for literally dozens of papers using these data, through which we aim to: link anthropometric indicators to women's influence in their households; correlate household efficiency with patterns of conjugality; shed light on motives for income and consumption hiding within the household, on whether urbanisation, women earning their income, nearness of kin, etc. raises or decreases cooperation within the household; and so forth.

The paper reporting on the findings of our pilot study, which used an embryonic form of the design we eventually adopted for the main study, is forthcoming in *World Development*, the top development studies journal, which is one reason why we are confident that these papers could be published in the top journals in economics and in development studies.

We will also build on the interest already shown in our work by IFPRI, DFID and the World Bank. Finally, we intend to encourage media coverage of our key findings through the UEA's research dissemination service.

You will be asked to complete an ESRC Impact Report 12 months after the end date of your award. The Impact Report will ask for details of any impacts that have arisen since the completion of the End of Award Report.

4. DECLARATIONS

Please ensure that sections A, B and C below are completed and signed by the appropriate individuals. The End of Award Report will not be accepted unless all sections are signed.

Please note hard copies are NOT required; electronic signatures are accepted and should be used.

A: To be completed by Grant Holder

Please read the following statements. Tick ONE statement under ii) and iii), then sign with an electronic signature at the end of the section.

i) The Project

This Report is an accurate overview of the project, its findings and impacts. All co-investigators named in the proposal to ESRC or appointed subsequently have seen and approved the Report.

ii) Submissions to *ESRC Society Today*

Output and impact information has been submitted to *ESRC Society Today*. Details of any future outputs and impacts will be submitted as soon as they become available.

OR

This grant has not yet produced any outputs or impacts. Details of any future outputs and

impacts will be submitted to *ESRC Society Today* as soon as they become available.

OR

This grant is not listed on *ESRC Society Today*.

iii) Submission of Datasets

Datasets arising from this grant have been offered for deposit with the Economic and Social Data Service.

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OR

Datasets that were anticipated in the grant proposal have not been produced and the Economic and Social Data Service has been notified.

OR

No datasets were proposed or produced from this grant.